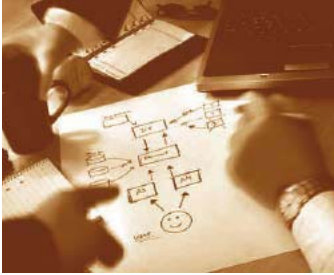

Chapter 5

Lessons learned: searching for new ways to solve old problems

5

Lessons learned: searching for new ways to solve old problems



In the new area of social innovation we have seen the emergence of a new business model, which could even be considered a sector of its own, in which social-purpose organizations adopt the organizational forms and follow the trends of business. One of the fastest growing trends is the competition among organizations with similar programs to deliver more efficient, effective and sustainable solutions. With increasingly more and more actors dedicated to solving social and environmental problems, there is now a greater concern with differentiating these programs and making them more visible in an environment of rapidly expanding social action. The competition for financial and human resources has moved into the field of social innovation, while it is becoming more difficult to get funding and to hire trained and specialized personnel. According to the book *Play to Win: The Nonprofit Guide to Competitive Strategy* by Daniel La Piana and Michaela Hayes, nonprofit organizations should be encouraged to compete based on their performance so that the investors who fund their programs can choose from among the best. It is evident that these organizations are resorting to practices and business models to maximize the social impact of their programs and that there is an actual "market" taking form in which social organizations compete. Social actors are increasingly people qualified to do their jobs, encouraging competition in getting financing and other non-financial resources required to implement their projects. Paradoxically, this competition among actors has the positive effect of galvanizing the sector while it also requires more collaboration among them in order to develop ideas and implement them more successfully.

Another trend of a markedly businesslike character in the field of social innovation, one which was spotlighted at the 12th meeting of the Future Trends Forum, is the growing specialization of social action projects. Social innovation is now offering what are called market-based solutions, in many cases to meet the demand at the bottom of the pyramid (BOP), i.e., people living in poverty and with low purchasing power. This change in supply encourages the social actors—who are using their products, services and models to target very specific segments of the population—to reduce costs, exploit economies of scale and focus on a more limited but more specialized range of activities. Social actors should not be thinking in terms of how to respond to what these people *need*, but how to respond to what they *want*. Many initiatives have failed precisely because they have seen the poor as "beneficiaries" of social action, rather than "consumers" who seek to accede to a different lifestyle, to buy a house or car, or set up their own business. Who would have guessed that cell-phone sales in countries like India would be so profitable?

In sum, the idea is to find new ways to solve old problems. The next section focuses on the latest trends and programs in social innovation in the context of the [Millennium Development Goals](#). More than half way to the 2015 deadline set for achieving them, we have a long road to travel before fully achieving the eight key goals established by United Nations in conjunction with 23 other international

organizations. A variety of programs are included, led by all kinds of social actors from around the world. Perhaps the most outstanding trend is that the very people who need help are making their own decisions and assuming responsibility for their lives instead of relying on humanitarian aid, and independently developing sustainable improvements for their own lives. Given the UN warning that in 2009 the number of hungry people will exceed one billion for the first time,⁵⁸ today more than ever the time has clearly come to unleash the power of social innovation.

a. The Fight against Poverty and the Commitment to Development

"Give a hungry man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime."

Proverb

The nature of social action is changing and charity is giving way to financing for entrepreneurs in developing countries. Thus, in places like Africa, where billions of dollars are spent on humanitarian aid projects, the message "trade, not aid" is gaining more and more support. Among the conclusions of the [World Economic Forum](#) on Africa held in Cape Town in June 2009, it was stressed that although the global recession has had less impact on Africa than predicted, the governments of the continent should "take advantage of the opening for reform that the financial crisis has created" and "listen more closely to private business and its needs, and use those recommendations to create a more favorable investment climate."⁵⁹

Entrepreneurs in developing countries are growing in number. Throughout this publication we show that social and environmental programs are increasingly the initiatives of social actors from the poor countries themselves, and there is no better vantage point than that of people who confront daily the harsh reality that they seek to redress. Support for entrepreneurs in developing countries, "teaching them to fish," results in the creation of sustainable local economies. In this respect, women can play an outstanding role. In recent years, studies by the United Nations and the World Bank have shown that women entrepreneurs are more likely than men to contribute to community development, and therefore are better candidates to lead support programs. In the words of pop star and activist Bono: "Give a man a fish, he'll eat for a day. Give a woman microcredit, she, her husband, her children and her extended family will eat for a lifetime."⁵⁸

Developing countries' excessive reliance on charity from developed countries is anything but sustainable. While it is true that efforts have shifted over the past two decades to programs more in line with self-sufficiency, what are really going to shape solidarity in the 21st century are two trends: the application of market solutions to social problems and the increasing importance of social entrepreneurs from developing countries. These business practices are the way to urban development and the sustainability of local economies in a context of unprecedented population growth in cities and poor resource management that is causing poverty to spin out of control. According to experts from the Future Trends

⁵⁸ "El número de hambrientos superará este año los mil millones por primera vez," [elmundo.es](#) (20/09/2009).

⁵⁹ "Is trade, not aid, the answer for Africa?" [guardian.co.uk](#), (25/05/2009).

⁶⁰ <http://www.socialentrepreneurcoach.com/resources/women-entrepreneurs-culture.html>.

Forum: "Population growth and changing models of agricultural production will increase pressure on cities. Slums and urban poverty will be the general trend, and ensuring public health and hygienic conditions will become a priority."

Market solutions to serving the BOP

In the field of social innovation, serving the BOP means delivering products and services to four billion potential consumers living on less than two euros a day. The idea of serving these people commercially is championed by authors such as C.K. Prahalad, professor at the [Ross School of Business](#) (University of Michigan) and recognized as one of the foremost management experts in the world. His line of thought suggests that these low-income people can be the engine of the next stage in trade and global prosperity, and a source of innovation that benefits both rich and poor countries (see [11th Future Trends Forum publication, *Competing in Challenging Times: New Rules and the Role of Innovation*](#)). "An alternative and complement to traditional government expenditures, aid and philanthropy, market-based solutions give low-income people better access to socially beneficial products and services that genuinely improve the quality of their lives and livelihoods."⁶¹

According to this line of thought, the problem of extreme poverty is reinforced by the exclusion from the market economy of the people living at the bottom of the pyramid and thus the solution would be to include them in it. In addition, other circumstances come into play that make this group worthy of our attention: their basic needs are not met, they lack access to formal subsistence markets and often are forced to pay higher prices for lower quality products or services, since the available supply is far from adequate in terms of market competition. If we overcome the obstacles to meeting their basic needs for potable water, sanitation services, energy supplies, housing, financial services and communications, then welfare, productivity and income levels will rise, thus allowing people to find their way out of poverty. Likewise, involving the BOP in the formal economy is a sine qua non condition for the generation of wealth for families and for the country's economic growth. Finally, the inefficiency and monopolized markets that characterize the economies in the countries where BOP population segments predominate create barriers to access and lead to lack of investment, so it is crucial to remedy this situation by creating market opportunities for the private sector.

Indeed, fourth-sector private enterprise has been largely responsible for meeting the demand for higher quality products and services at the BOP. The main problems encountered in trying to do this are: the lack of supply of, the difficulty of access to and the unaffordability of products and services for low-income people (see figure 15). According to the proponents of market-based solutions, private companies are best able to overcome these obstacles and adapt supply to the specifics of this group. These companies are responsible for identifying opportunities, developing innovative business models and the right products, and, above all, investing in BOP markets. Meanwhile, it is up to government to

⁶¹ *Emerging Markets, Emerging Models: Market-Based Solutions to the Challenges of Global Poverty*, Monitor Group (March 2009).

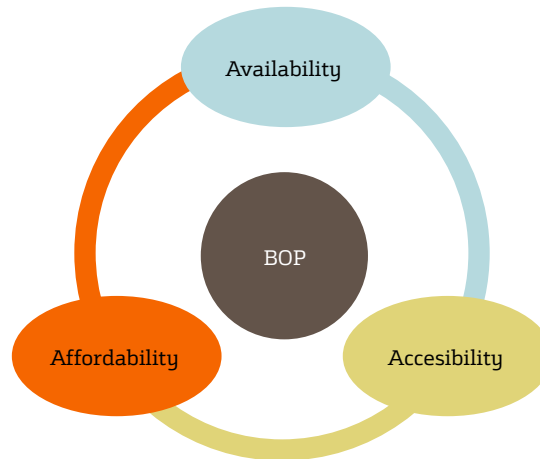


Figure 15: Main barriers to serving the BOP.

Source: Christine Auclair and Alban Jackohango, *Bottom of the Pyramid Approaches for Urban Sustainability*, Private Sector Unit, UN-HABITAT.

implement the necessary trade and regulatory reforms to allow the private sector to play a more active role in serving this market.

However, which BOP markets has the private sector traditionally focused on? According to the book *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*,⁶² "multinational companies have been leading the way, especially in the food and consumer products sectors. Likewise, major national companies have proved to be among the most innovative in meeting the needs of BOP consumers and producers, especially in sectors such as housing, agriculture, consumer goods and financial services." Nevertheless, many sectors have run into political and financial barriers to success in developing countries, i.e., private urban water supply systems, the electricity supply sector, etc.

According to the experts from the Future Trends Forum, improved access to telecommunications has had a major impact on developing countries. Some even ventured to estimate that each dollar spent on such infrastructure ultimately generates 10 to 100 dollars. They stated that cell-phone use in rural areas is an amazing phenomenon that drives growth, the impact of which is yet to be seen: "The arrival of fiberoptic broadband in Africa presents an opportunity to light up the 'dark continent.'" Cell phones ultimately have uses other than those first intended. Not limited to being a means of private communication, their low cost and long range have enabled social entrepreneurs operating in developing countries to conduct their daily business activities, and even access funding, as we will see below. Evidence of this is that from 2000-2005, the number of cell phone subscribers in developing countries increased fivefold, to nearly 1.4 billion.⁶³

⁶² Hammond, A.L. et al., *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*, World Resources Institute, International Finance Corporation, 2007.

⁶³ Hammond, A.L. et al., *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*, World Resources Institute, International Finance Corporation, 2007.

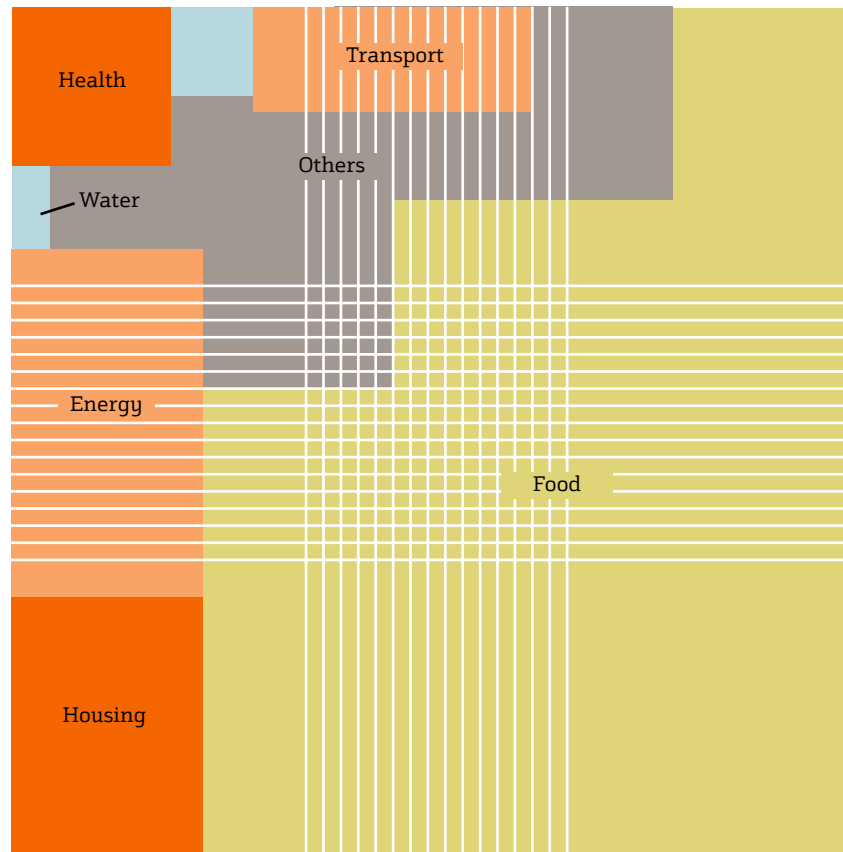


Figure 15: Estimated BOP market by sector (\$5 trillion).
Source: Hammond, A.L. et al., *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*, World Resources Institute, International Finance Corporation, 2007.

Returning to the fundamental barriers to serving the BOP, the study *Emerging Markets, Emerging Models: Market-Based Solutions to the Challenges of Global Poverty*, conducted by [Monitor Group](#), describes several business models that have been successful in overcoming the access, supply and price barriers that stifle demand for products and services from the BOP. Furthermore, the study deals largely with business models that have been, or can be, reproduced successfully at scale.

The pay-per-use model enables BOP consumers to pay less for each use of a product, service or facility. Thus, the user does not have to pay a large sum of money for consumer durables such as solar lamps, water pumps, heaters, etc., given that it is easier to pay a fee each time you use them. In India, activated carbon water filters⁶⁴ are sold at 900-1,500 rupees (\$18-30), with replacement parts for a period of three to six months costing about 400 rupees (\$8). The [Byrraju Foundation](#) has succeeded in cutting these high costs for drinking water

⁶⁴ Activated carbon filters trap certain particles (organic substances, dissolved gases, chlorine, etc.), many of which produce unwanted odors and/or tastes in the air and water.

by about half by creating community filtration centers that sell purified water in 12-liter containers for 1.5 rupees (\$ 0.03), which covers the daily average household needs for clean water without having to buy an individual purifier.⁶⁵

The second model is called "no-frills service," which seeks to meet the needs of the poor at very low prices by cutting out the extras while keeping the quality high enough to make the service more beneficial to the user than the alternatives. The model is generating profits thanks to high turnover due to greater use of fixed capital and specialization of services. [Vaatsalya](#) works on building and managing hospitals and clinics in rural areas, bringing basic services in pediatrics, gynecology, surgery, physiotherapy and dialysis to where they are most needed, and offering them at affordable prices. This model is not confined to health but is also in great demand from BOP consumers for education and financial services. In India particularly there is a strong market for private services because, although the government often provides these services for free, people prefer private alternatives for their quality of service. However, we should note that, given the nature of the services it supplies, for ensuring business sustainability this model is overly dependent on recruiting, training and holding onto qualified personnel. We should add that in these cases marketing is difficult to manage because it relies on word-of-mouth and personal recommendations.

The third model is called "paraskilling" and complements the previous one insofar as it divides business processes into simpler tasks that can be performed by low-skilled workers. India's Microfinance Industry (MFIs) and [Aravind Eye Care](#) have both implemented this reengineering process to boost the productivity of professionals by giving the most repetitive tasks to less qualified people. The result in the first case was a model that has been possible to reproduce to the point of constituting an industry in itself, with over 14 million borrowers in India and future expansion in Bangladesh. In the second case, doctors perform 2,400 operations a year, compared with the average of 300 in Indian clinics.⁶⁶

The last model offers a solution to the eternal problem of distribution, with a special focus on the problems of reaching rural areas. The experts from the Future Trends Forum agree that social innovation should not be limited to inventing new products or services, but in many cases it must find effective ways of delivering those products and services, whether new or existing, to a majority of the needy population. Indeed, many business plans have failed miserably solely due to their lack of a distribution strategy. To overcome this problem, there is another business model for reducing costs and expanding reach: sharing distribution channels. This is done using existing platforms or networks whose channels were created for another purpose. This practice usually involves a partnership between the two organizations in which both benefit. For example, cooperation between [FinComún](#), a private financial institution with social aims in Mexico, and Grupo [Bimbo](#), one of the Iberian Peninsula's largest baked-goods groups, has enabled [Bimbo](#) to take advantage of [FinComún](#)'s credit expertise, while the latter uses [Bimbo](#)'s distribution methodology and network. The financial institution's agents go out in [Bimbo](#)'s delivery trucks and get information about the payment history of group's

⁶⁵ *Emerging Markets, Emerging Models: Market-Based Solutions to the Challenges of Global Poverty*, Monitor Group (March 2009).

customers.⁶⁷ As the goods are delivered, the FinComún agents offer loans to customers with a good credit history.

The implementation of these innovative business models is still not very widespread in countries with BOP populations. While it is true that they represent real business opportunities linked to social change and economic sustainability, there are still no sectors that attract large businesses and achieve scalability. However, the need or desire of BOP populations to adopt consumption patterns similar to those of the developed world is an engine of social innovation. Having discussed how to reach these new consumers, below we examine the situation from another perspective. As mentioned earlier in this chapter, the conditions of supply in developing countries are changing not only due to the activities of companies from developed countries but also due to those of their national, or domestic, counterparts. A new type of social entrepreneur has emerged, one whose recognition comes not from having an MBA or a successful career, but solely from the need for change in his or her community. As C.K. Prahalad says: "If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up [...]."⁶⁸

New social entrepreneurs and the microcredit debate

In an open discussion forum on the SocialEdge website called *Are the Only Innovations in Social Entrepreneurship Anglo-Saxon?*⁶⁹ 68 participants discussed the fact that the vast majority of recognized social entrepreneurs come from English-speaking countries. The reasons are varied: social entrepreneurs in developing countries lack the financial, social and media resources to make themselves known; most of the publications related to the topic are in English, such that this language is currently the lingua franca in the social innovation world; and, finally, these entrepreneurs do not receive specialized training, so although they escape poverty on the strength of their companies, in many cases they go unnoticed.

But the achievements of these anonymous social entrepreneurs are gaining more and more recognition. Although their efforts are not achieving the desired level of scalability, they are contributing very significantly to the welfare of their communities, with a significant impact on their immediate surroundings. Most experts from the Future Trends Forum agree that social entrepreneurs in poor countries are so by necessity, not by vocation or choice. One commentator says, "the people here [developed countries] are looking for problems to solve. In our [developing] countries the problems look [for] us."⁷⁰ These are people who do not want to rely on charity, but instead find a sustainable way to make a living and whom, with the necessary tools and resources, are able and willing to use them to serve their communities. One of the vital resources for these entrepreneurs is microfinance, which enables poor borrowers who lack access to traditional loans to finance job-creation projects. Since the now-famous Grameen Bank was founded in 1976 to provide credit to the poor in Bangladesh, the microcredit sector has continued to grow, providing a financial lifeline for people who can lead social and

⁶⁶ *Emerging Markets, Emerging Models: Market-Based Solutions to the Challenges of Global Poverty*, Monitor Group (March 2009).

⁶⁸ Christine Auclair and Alban Jackohango, *Bottom of the Pyramid Approaches for Urban Sustainability*, Private Sector Unit, UN-HABITAT.

⁶⁹ <http://www.socialedge.org/>.

⁷⁰ <http://www.socialedge.org/discussions/social-entrepreneurship/archive/2009/05/04/are-the-only-innovations-in-social-entrepreneurship-anglo-saxon>.

economic change from "within." The World Bank estimates that there are about 7,000 microfinance institutions serving some 16 million poor people in developing countries. Some commercial banks have also established microfinance funds. Indeed, as noted, there are websites that exploit the social network so that people willing to donate money for innovative social programs can contact entrepreneurs around the world. The UN declared 2005 the International Year of Microcredit. Events like this seem to dispel doubts about the importance of this financial instrument in fighting poverty. However, an article in the *Stanford Social Innovation Review* posits the following two scenarios: "(1) A microfinancier lends \$200 to each of 500 women so that each can buy a sewing machine and set up her own sewing microenterprise, or (2) a traditional financier lends \$100,000 to one savvy entrepreneur and helps her set up a garment-manufacturing business that employs 500 people."⁷¹

Certainly this suggests that in one case women probably earn only a subsistence income to support their families, and moreover must compete with others in the same market niche, while in the other case a garment factory can achieve economies of scale, incorporate the latest technologies in manufacturing and instill organizational techniques to the benefit of their workers. In the midst of the "microcredit fad," some experts hasten to defend job creation and increased worker productivity rather than investing in microfinance.

On one hand, microcredit certainly provides financing for segments of the population that traditional banks shun. Some organizations that provide microcredit also offer, in addition to loans, education, training and health care. They have been especially beneficial to women in developing countries, who have attained greater economic and social power thanks to the opportunities to create their own businesses. On the other hand, one study claims that, "Microloans are more beneficial to borrowers living above the poverty line than to borrowers living below the poverty line. This is because clients with more income are willing to take the risks—such as investing in new technologies—that will most likely increase income flows. Poor borrowers, on the other hand, tend to take out conservative loans that protect their subsistence, and rarely invest in new technology, fixed capital, or the hiring of labor."⁷² In addition, some commercial banks, in contrast to nonprofit organizations that offer the same service, supply microcredit at high interest rates, which causes even greater indebtedness among social entrepreneurs. We should also note that microfinance "frees" governments from having to assume certain economic responsibilities and implement growth strategies necessary to spur development in their countries.

Cases of scalability in social enterprises that contribute to poverty eradication are practically nonexistent. Such entrepreneurs have not received specialized training and lack the capital necessary to operate on a larger scale and achieve efficiency. It took Mo Ibrahim, a British national born in Sudan, who founded the telecommunications company [Celtel](#) (a subsidiary of the Zain Group), a university education and extensive work experience in multinationals—opportunities certainly beyond the means the average social entrepreneur in a developing

⁷¹ "Microfinance Misses Its Mark," *Stanford Social Innovation Review*, 2007.

⁷² "Microfinance Misses Its Mark," *Stanford Social Innovation Review*, 2007.

country—to set up a company that was bought for 3.4 billion dollars in 2005 and currently operates in fifteen African countries.⁷³

In conclusion, microcredit is an important social innovation that has had a very positive impact, especially on the empowerment of women. There is no doubt that it “helps the poor during cyclical or unexpected crises, and thus reduces their vulnerability.” In Spain, MicroBank, the social bank of [la Caixa](#), has lent 332 million euros to 52,000 borrowers in its first two years of operation. It has also helped create 16,000 jobs. Of its total microcredits, 54.5% went to help families with financial difficulties and 32% to set up new or sustain existing businesses. However, as outlined above, we should not look to microcredit as a panacea for the eradication of poverty.

b. Environmental Protection

“The cheapest source of energy is the energy never used.”
World Economic Forum⁷⁴

In late summer of 2009, Ban Ki-moon, the UN secretary-general, warned that “the Arctic is warming faster than anywhere else on Earth. It may be ice-free by 2030.” Already we are seeing an increase in sea levels, which by the end of the century could rise between 50 centimeters and two meters, endangering people living on islands, in coastal areas and river deltas, among other places. Ban lamented that despite this fact we see continuing “inertia” in the fight against climate change, as evidenced by the “limited progress in the climate negotiations” at Copenhagen.⁷⁵

Climate change, the threat to energy security, scarcity of water, loss of biodiversity and the extinction of species, overfishing, destruction of the ecosystem, toxic waste, deforestation, nutrient and nitrogen fixation overload, urban sprawl—all of these environmental challenges figure in the endless list of issues being talked about by politicians, experts and global representatives. Environmental protection has grown from being a matter regulated solely by the governments of developed countries in the 1960s to a demand from insurers and consumers pressuring companies to be environmentally responsible in the 1990s, finally to be seen today as a true challenge for humanity. In short, environmental sustainability, one of the eight Millennium Development Goals, is an issue that concerns the whole of society because it understands that it is imperative to meet “the needs of the present without compromising the ability of future generations to meet their own needs.”⁷⁶

Politicians worldwide have added environmental issues to their agenda of international diplomatic relations. Over the years there has been a series of meetings of developed countries, in the context of the Kyoto Protocol, and more recently at the Copenhagen Climate Council, and gradually other countries have joined the commitment to develop common global standards. In this regard, attention is beginning to focus on the BRIC economies (Brazil, Russia, India and China), given the steep rise in energy demand they represent, and on other

⁷³ Hammond, A.L. et al., *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*, World Resources Institute, International Finance Corporation, 2007.

⁷⁴ *Growing opportunities: Entrepreneurial Solutions to Insoluble Problems*, Allianz, DuPont, Skoll Foundation, SustainAbility.

⁷⁵ “Ban Ki-moon advierte de que el Ártico puede quedarse sin hielo en 2030,” [elmundo.es](#) (3/09/2009).

⁷⁶ Brundtland Commission. Report of the UN World Commission on Environment and Development, November 1987
<http://www.un.org/documents/gares/42/ares42-187.htm>.

emerging economies that have significant economic growth figures, such as South Africa, Mexico, Indonesia or South Korea. A headline from July 2009 about the meeting in L'Aquila (Italy) read: "The emerging countries join the wealthy G8 to combat climate change and close Doha."⁷⁷ The rich countries of the G8 and emerging countries of the G5 (Brazil, China, India, Mexico and South Africa) agreed on the goal to limit the rise in global average temperature to two degrees centigrade (3.6° F). Although emerging countries have not been as specific as the G8 in its stated commitment to cut CO² emissions by 80% by 2050 compared to 1990, the meeting indicates that these two groups of countries are coming closer to an agreement in the fight against climate change.

A New Ranking of the World's Most Innovative Countries is a report by the Economist Intelligence Unit seeking to classify 82 countries from around the world in terms of their capacity to innovate. Governments consider innovation to be essential for economic growth; companies see it as a tool to gain competitive advantage. Thus a high score in this ranking has both macroeconomic and microeconomic implications. The most interesting part of the report is the weight given to environmental innovation, 25%, in the overall innovation index. The index is calculated according to each country's data, namely: environmental policies, market opportunities, competition and foreign investment policies, foreign trade, taxation, finance, labor market and infrastructure. The top three in terms of the environmental innovation index for the years 2004-2008 were Denmark, Singapore and Finland. The Nordic countries are well known for their innovative spirit, especially in implementing environmental programs. Thus it is not surprising that they rank among the top ten in the overall innovation index. As a point of interest, Spain is 20th in the environmental innovation index.

Concern for the environment has also spread to the business world. Companies try to minimize the environmental impact of their operations and make their decisions on corporate social responsibility part of their business culture. The experts from the Future Trends Forum believe it is important to note that more and more companies are considering social (and by extension environmental) change as an essential part of the strategic decisions of their organizations, rather than simply limiting their area of concern to corporate social responsibility. Private enterprise is a true engine of social and environmental innovation because it has financial resources that are not limited to traditional sources of capital, along with the organizational capacity to turn innovation into tangible change. Traditionally, we associate the idea of social innovation projects with companies and/or social entrepreneurs in developed countries. However, we see a growing trend towards the emergence of social agents in developing countries that incubate, develop and implement successful social innovation projects. To drive these changes, there are very specific business models dedicated to the cause of environmental innovation. In particular, the concept of "sustainopreneurship" refers to starting up businesses to address sustainability issues, setting strategic objectives with regard to the environment and using innovation to achieve them. To many experts, while governments have neither the will nor the capacity to foster innovation by themselves, the private sector is a clear source of the

⁷⁷ <http://www.rtve.es/noticias/20090709/los-paises-emergentes-unen-los-ricos-del-g-8-para-luchar-contra-cambio-climatico-cerrar-doha/284349.shtml>.

creativity and innovation needed to achieve sustainable environmental programs: in other words, "business with a cause," which turns global problems like climate change and other environmental protection issues into business opportunities through innovation in the field of sustainability.

Finally, in both developed and developing countries consumers have become more demanding with regard to "green" products and services. Indeed, consumers in developing countries are getting so involved that, for example, 85% of consumers in Indonesia said they had bought a product or service specifically because it was produced in a responsible manner (see 11th publication of Future Trends Forum - Bankinter Foundation of Innovation, *Competing in Challenging Times: New Rules and the Role of Innovation*). The Natural Marketing Institute has identified different market segments based on the impact of the sustainable actions of companies in their purchasing decisions, among which two stand out as particularly responsible from the environmental point of view: LOHAS (Lifestyles of Health and Sustainability) and naturalists, which together account for 38% of US consumers. The former follow a "healthy and sustainable lifestyle" and do not just shop "green" but also support related programs and are active partners in environmental protection. The latter belong to the segment likely to purchase food products labeled "natural" or "organic" but do not have any further political commitment to the environment, nor do they buy other types of ecological products.

Innovative environmental programs

The range of environmental programs is very broad, and thus below we deal with a series of programs that, far from being traditional ecosystem conservation projects, stand out as being innovative, creative, technological and scalable.

Welcome to the world of cleantech

In recent years, the cleantech sector has experienced significant growth thanks to growing media focus on energy security and climate change. As was the case with the big pharmaceuticals sector, where spending on traditional R&D was no longer profitable and innovation began coming from biotechnology, in the energy sector the trend is for big business to let other smaller businesses with new and innovative ideas about sustainable energy take the lead. The term "cleantech" is a registered trademark of the pioneering [Cleantech Venture Network](#) (CVN), defined as "a diverse range of products, services, and processes that are inherently designed to provide superior performance at lower costs, greatly reduce or eliminate environmental impacts and, in doing so, improve the quality of life." CVN works in the following programs: energy generation and storage, energy infrastructure, energy efficiency, transport and logistics management, water purification, air quality, recovery and recycling of materials, and environmental IT, among others. Similarly, [General Electric](#) (GE) has launched its Ecomagination campaign, which aims to meet the customers' demands for more energy-efficient products and to promote more sustainable growth for GE itself. In

the words of the company, "Ecomagination reflects GE's commitment to invest in a future that creates sustainable innovative solutions to environmental challenges at home and at work; as well as delivers valuable products and services to customers while generating profitable growth for the Company." Four years after its launch, the GE campaign has shown that "being green" is profitable: the company has increased its portfolio of Ecomagination products from 17 in 2005 to over 80 today. Earnings in 2008 totaled \$17 billion, representing an increase of 21% over the previous year.

The cleantech trend has also spread to the emerging countries. In India, companies in this sector raised a total of \$131 million in the second quarter of 2009, an increase of 167% over the previous quarter.⁷⁸ Although the figures in the sector had fallen significantly in recent months, these latest results are a sign of some sort of turnaround. The transportation sector, specifically vehicles, biofuels and batteries, is one of the main focuses of cleantech investment, thanks in part to governments' concern about the automotive sector and economic incentives. For the solar energy sector, however, the news is not good, with investment at its lowest level in the last three years.

In search of the green city

Integrated planning and design of cities can help reduce emissions through the implementation of exceptional practices applied at scale. There are many projects that advocate the so-called eco-cities as a way to restore biodiversity to the heart of the cities and reverse the trend of urban sprawl. The idea centers on the design of cities and buildings according to a plan in accordance with human needs and "access by proximity" rather than the current disorder derived from excessive use of cars, wasteful consumption and the destruction of the natural environment.⁷⁹ Some of the measures they seek to encourage in these eco-cities include: restricting or prohibiting parking, solar orientation of buildings to conserve energy, restoring nature with landscaped terraces and roofs, and creating pedestrian streets and walkways or shopping areas designed to reduce travel. In this sense, we should recall that a Coca-Cola ad in the summer of 2009 urged Spaniards to consume locally bottled drinks in order to reduce CO₂ emissions resulting from distribution.

Economic growth in Asia and the Middle East goes hand in hand with booming urban development. However, control of environmental impact is often minimal, making it necessary to invest in energy efficiency to reduce the negative impact. If, for example, we take the case of China, where it is predicted that 400 million people will migrate from rural to urban areas in the next thirty years⁸⁰, eco-cities, responsible and efficient from the environmental point of view, are a very attractive solution. Moreover, the country would be helping to meet international standards on CO₂ emissions. Finally, this constitutes a huge niche market for companies involved in social innovation and environmental sustainability. In Singapore, the company [City Developments Limited](#) (CDL) has designed and built buildings recognized as the most energy efficient not only in the country but throughout Asia.

⁷⁸ "Indian cleantech companies raised a total of \$131 mln last qtr," Reuters India (2/07/2009).

⁷⁹ <http://www.ecocitybuilders.org>, <http://www.ecocitiesproject.org.uk/>, <http://www.eco-cities.net/>.

⁸⁰ *Growing opportunities: Entrepreneurial Solutions to Insoluble Problems*, Allianz, DuPont, Skoll Foundation, SustainAbility.

CDL has expanded its operations to seventeen countries in Asia, Europe, North America and Australia, with over 200 subsidiaries and associated companies.

At the other extreme are those projects that aim to curb the damage already caused by unplanned urban growth. [Waste Concern Group](#) is a social business enterprise dedicated to waste management and recycling in Bangladesh. The group comprises a nonprofit organization in collaboration with a number of private companies that provide business vision and technological capabilities. The group's work has been acknowledged with numerous awards from the United Nations Development Program, Ashoka and the [Schwab Foundation for Social Entrepreneurship](#). The [Cleantech Innovation Institute](#) aims to convince the taxi business in Toronto (with the idea of extending the idea across Canada and then the US) to start using hybrid vehicles, and thereby reduce their emissions by 70%. In a year, a taxi runs up ten times the mileage of an average vehicle. So, astoundingly, if 200,000 taxis switch to hybrid vehicles it will have the same effect as replacing 2,000,000 private cars.⁸¹

Boosting scale in environmental innovation

In this study we have noted how the difficulty of successful social innovation lies in achieving the scalability of innovations, rather than creating a product or service. Environmental Defense is a nonprofit organization based in New York that is making a name for itself precisely by helping hundreds of companies (McDonald's, FedEx, Wal-Mart) to operate on a more environmental sound basis and, subsequently, to expand the scale of their innovations to achieve changes in practices across the sector.⁸²

Another example of a project that began as a solution to a local challenge and is expanding to other parts of the world relates to the management of a scarce resource, namely water. The water supply in Singapore became unsustainable when, after declaring its independence from Malaysia in 1965, it was agreed that the latter would extend water lines to Singapore. This excessive dependence prompted Singapore to seek innovative alternatives for its water supply. One of the most successful parts of the project involves water recycling plants that provide drinking water by treating waste and salt water. The biggest company involved in managing these plants, [Hyflux](#), has expanded its presence to China, started operating in Middle East markets and has expansion plans for Southeast Asia and Africa, in addition to becoming public and being listed on the Singapore Exchange. This [Hyflux](#) case is a good example of how a shortage creates the imperative to find a sustainable solution, which leads to an innovation model that ends up becoming a global business.⁸³

⁸¹ *Growing opportunities: Entrepreneurial Solutions to Insoluble Problems*, Allianz, DuPont, Skoll Foundation, SustainAbility.

⁸² Heather McLeod Grant & Leslie R. Crutchfield, "Creating High-Impact Nonprofits," Stanford Social Innovation Review, 2007.

⁸³ *A New Mindset for Corporate Sustainability*, A White Paper sponsored by BT and Cisco, 2008.

In the chapter on the scalability of social innovation, we said that in addition to opening new branches, one way for a business to achieve greater impact was by forming alliances with other organizations. This is the case of the joint venture between Grameen Bank and [Danone](#) aimed at environmental protection through the development of solar energy and biogas, as well as ecological and innovative

packaging of the latter's products. Furthermore, the alliance enabled [Danone](#) to enter the Bangladesh market, which otherwise would have presented too many difficulties, and to offer dairy products at affordable prices, and thus cover the nutritional needs of growing children.⁸⁴

The importance of environmental awareness

Concern for the environment is the order of the day: at home, at work, in schools, etc. We are being bombarded daily with messages about using energy-saving light bulbs, reusable shopping bags, paper and plastic recycling and, in general, any "green" product or service that meets the standards of environmental sustainability; so much so that there are websites and blogs such as <http://www.orbitaverde.com/> and <http://simplegreencleaning.com/> with information about household cleaning products and services that do not pollute the environment and that avoid the health risks associated with toxic cleaning products. Our society has never been more aware of the consequences of environmental degradation and climate change. With the headlines full of hurricanes, tsunamis and other natural disasters, people are aware of the negative impact of their own daily activities. In the field of social innovation, there are projects aimed at shedding further light on the environmental issues we must address quickly in order to make our lives sustainable. In the case of Hurricane Katrina in New Orleans, the Rockefeller Foundation supported the development of the Unified New Orleans Plan (UNOP) focused on bolstering flood protection, rebuilding affected neighborhoods, providing affordable housing, expanding public services and working to achieve advanced education and health systems.⁸⁵

At Ashoka Spain, several social entrepreneurs have created programs to raise public awareness about environmental causes. Jordi Pietx has come up with new methods of land conservation in Spain in which, in addition to the government, private owners, municipalities and civil society in general can actively exercise their responsibility to conserve land and biodiversity. To do so, he has designed the technical, legal and participatory tools needed to help establish voluntary agreements between landowners and environmental bodies for land management and conservation. Likewise, Antonio García Allut has developed a comprehensive and systemic model that makes the existence of small-scale fishing communities viable, turning the fisherman into a marine environment manager and acting on the causes and factors that are endangering the existence of traditional fishing communities. To this end, he set up the company Lonxanet (www.lonxanet.com), a new direct distribution system that sells seafood directly to individuals and restaurants throughout Spain, offering the fisherman higher prices than other distributors. Furthermore, to increase the product value of traditional fishing, Lonxanet has implemented a traceability system (from capture to final consumers), and has brought in other social and economic sectors, such as the catering industry, to create the Red de Restaurantes por la Conservación del Ecosistema Marino (Restaurant Network for the Conservation of the Marine Ecosystem). In both cases, the involvement of communities has led to a change in the mindset of stakeholders.⁸⁶

⁸⁴ The role of social entrepreneurship in solving sustainability challenges, *Skoll Foundation*, November 2006.

⁸⁵ "Smart Globalization: Benefiting More People, More Fully, in More Places," The Rockefeller Foundation 2007 Annual Report.

⁸⁶ <http://www.ashoka.es/comunicadosprensa>.

Similarly, the [Green Belt Movement \(GBM\)](#) was founded in 1977 by the National Council of Women in Kenya. This might have turned out to be just another project aimed at restoring the natural environment by helping to plant and care for trees in "green belts" in urban and rural areas of the country, if not for its innovative work in raising awareness. Over the past ten years, the movement has organized more than 6,000 community groups with the aim of promoting local mobilization and improved welfare through environmental activities.⁸⁷ Internationally, [Young Global Leaders of the World Economic Forum](#) have set up workgroups to raise awareness about climate change, promote private-sector participation in identifying business opportunities and publicize best practices for changing consumer behavior. During the 2007 annual meeting of the World Economic Forum in Davos, they launched the Love Campaign along with *Book of Love*, a manifesto addressing world business and political leaders which outlines how to achieve environmental victories in order to reduce the negative consequences of climate change.⁸⁸

c. Social cohesion

In social innovation circles there is a debate about the difficulties of achieving social cohesion in different societies in the world. However, in an increasingly globalized world, it makes perfect sense to speak of "global cohesion," especially if one considers that the eighth Millennium Goal is to achieve a global partnership. As explained in an article from late 2007 entitled "Towards Global Cohesion,"⁸⁹ multilateralism has been gaining momentum because countries are moving gradually towards a consensus among all global representatives, instead of imposing their will unilaterally. Indeed, the United Nations was originally founded as a multilateral institution with a mission of averting international conflict, although its scope has since expanded to a diversity of issues, economic, social, cultural and environmental in nature, all at the global scale.

We might say that the UN and all the satellite agencies operating around it act as agents of social innovation in themselves. On one hand, they aim to solve the varied problems that fracture social cohesion at the international level: terrorism, organized crime, the scarcity of global resources, environmental degradation, climate change, the failure of the international economic system, and armed conflict. On the other hand, discussion and decision-making in international affairs are no longer the exclusive preserve of politicians and diplomats. They now involve NGOs, which are better at identifying environmental and humanitarian problems and finding more effective solutions. Governments and international agencies are increasingly demanding the help of NGOs in running their projects. Corporations are also being called on to get involved for their skills and service orientation. In short, we are seeing a move towards building a globalized civil society with the active participation of all the actors that comprise it.

In any event, the UN's aim to promote a global partnership as one of the Millennium Goals is embodied in its commitment to achieve good governance, social development and the reduction of poverty, at the national and international

⁸⁷ Sarah H. Alvord, L. David Brown y Christine W. Letts, *Social Entrepreneurship Leadership that Facilitates Societal Transformation*, Harvard University.

⁸⁸ <http://earthlovemovement.org>.

⁸⁹ "Towards Global Cohesion: Gray Southon Examines the Role of the United Nations in Global Development," *New Zealand International Review*, November 2007.

level. It also aims to meet the special needs of the least developed countries, relieving heavily indebted countries by canceling official bilateral debt, and providing official development assistance. In addition, it has set a series of goals relating to cooperation with pharmaceutical companies in developing countries to provide affordable access to essential drugs, as well as partnerships with the private sector to give them access to the benefits of the new technologies.⁹⁰

In most developed countries it is assumed that the norm is to live under a social contract between government, business and workers, ensuring a basic level of social and economic security. Now, in the early twenty-first century, we are beginning to feel the effects of a growing fracture in this contract, as the slightest disturbance causes sharp rises in unemployment, medical costs exceed workers' ability to pay, companies often cut social benefits and government is no longer able to curb inequalities. Sadly, a growing number of families are seeing one or more members lose their jobs, can barely make ends meet and are ultimately forced to turn to charity. The short-term consequences of the crisis are compounded by a structural problem: the struggle against job discrimination of particularly vulnerable persons, i.e., immigrants, internal migrant populations, people with disabilities, ethnic minorities (in Europe, mainly the Roma), recently released inmates, young adults in legal internment programs, former drug addicts and in general anyone who belongs to a group at risk of exclusion.

Far from this social reality live the developing countries. In many of them, there is no economic and social security to speak of, nor any regulatory framework that lays the foundation for a stable and sustainable economic system. Nor do they have the social cohesion required for the emergence of positive synergies between economic growth and social equity in the context of productive modernization.

In either case, in the socially developing and developed countries alike, solving the structural problems that impede social integration is crucial to the implementation of models that contribute to social welfare and promote economic activity for the development of disadvantaged communities. It is therefore necessary to encourage participation and vocational integration among excluded groups. Here, the goal of strengthening politically participatory and inclusive democracy is particularly important.

Direct vocational integration for excluded groups

We often hear that "work is ennobling." This statement is absolutely true insofar as work develops our intellect and physical and mental skills. Work makes people feel better about themselves, in the knowledge that they are providing for their families' livelihoods and contributing to the overall welfare of society. Moreover, unemployment is a source of other problems that only compound the situation causing even more unemployment and, in a worst case scenario, creating a vicious circle. Thus among its conclusions, a report by ECLAC (Economic Commission for Latin America and the Caribbean) entitled *Panorama social de América Latina 2008* states that "underemployment, school dropout rates, unequal opportunities,

⁹⁰ <http://www.un.org/spanish/millenniumgoals/global.shtml>.

urban segregation and a lack of spaces for expression are aggravating the circumstances of youth violence in Latin America."⁹¹

Providing employment for socially excluded groups is the goal of many organizations. The beneficiaries tend to be people who are at a disadvantage relative to the rest of society: immigrants, ethnic minorities, disabled people, young single women with family responsibilities, homeless people, people in drug rehabilitation, young adults who have dropped out of school, or unemployed people far removed from the labor market. Following the tenets of social innovation, we should mention some of the projects whose aim is to create innovative business models that are sustainable over time and that contribute to the employability of these groups. For example, the Brazilian organization SACI Network ([Rede SACI](#); Solidarity, Support, Communication and Information) is "an electronic network that facilitates communication and diffusion of information about the disabled to stimulate social immersion, improve quality of life and the improved exercise of their citizenship rights for individuals with mental, hearing, visual or physical disabilities." The organization aims to make disabled persons' lives better by providing them with access to information and communication technologies.⁹²

In other cases, the work of organizations, in addition to protection and orientation, focuses on vocational training and labor intermediation. These projects seek to work hand-in-hand with business, receiving job offers and shortlisting candidates to meet them. The [Minnetonka](#) company, also working in Brazil, has been implementing a project since 2004 to help combat poverty by creating employment and income while contributing to environmental conservation by minimizing waste generated by its leather footwear manufacturing business. As part of the program, the company empowers people over the age of forty, with a low level of education, unemployed and/or mothers with dependent children, i.e., the very group of people facing the greatest difficulties in finding jobs in an area where, following the closure of many leather footwear manufacturers, there is an oversupply of workers with this profile. These people make leather ribbons from the factory waste. The truly innovative aspects of this project are that the people work at home so they can hold a job and meet their family responsibilities, and that the concept is so simple that it is easy to reproduce on scale, in any location and with different types of waste materials. It benefits all parties involved: the company, which no longer has to pay to dispose of waste; the community, by reducing pollution; and the workers who make an income for their households.

Unfortunately, the prospects of incorporating excluded groups in the job market diminish significantly during an economic downturn like the current one, while the number of people in need of social benefits rises. In Spain, the focus is on a class of newly poor uncovered by the crisis: the charity organization [Cáritas](#) reports that 40% of households may fall into a situation of vulnerability in the coming months, the most affected being unemployed middle class people with children.⁹³ These are families in which the main breadwinner is a man without qualifications who just lost his job and who due to his age, around forty, cannot

⁹¹ "Desempleo y frustración de expectativas exacerbaban la violencia juvenil," www.eclac.cl (12/12/2008).

⁹² <http://www.eclac.org/dds/Innovacionsocial/e/experiencias.asp?tema=6>.

⁹³ "La crisis destapa la clase de los nuevos pobres," publico.es (28/10/2008).

find other work. Furthermore, most of these people are paying off a mortgage and just scraping by, with no spare income to put into savings, and who have already exhausted family support and unemployment benefits. The crisis has hit Spain especially hard, leading the OECD to predict that unemployment, due to profound structural problems in the country's labor market, will reach around 20% in 2010.⁹⁴

Cáritas says that its organization is being overwhelmed by requests for help from people who are not habitual users of social services. What is the solution to the growing demand for assistance? Many experts propose remedying more immediately the problems of the half million families living in severe poverty, while promoting change in the social model in order to rethink the social and economic welfare system because "the solution to poverty is a problem of State."

Empowering women to work

The situation of many women in developing countries deserves special mention. C.J. Hayden is a writer whose books such as *Get Clients Now!* and *Get Hired Now!* have helped social entrepreneurs to develop business projects that have made a difference from a social perspective. Her main focus is on empowering women in disadvantaged communities. She states that, "Without a culture that supports entrepreneurship, women don't perceive it as an option. Learning to fish requires something even more basic than bait, nets, or an adequate supply of fish. It requires that there be water. An entrepreneurial culture is the body of water that must exist in order for fishing to begin."⁹⁵ This author identifies three fundamental dimensions to building a culture that supports women entrepreneurs in developing countries: education and training, access to support and information networks, and family and community support.

Given that women in many developing countries have access to little or no formal education, the success of a program to develop future entrepreneurs depends largely on the possibility of providing entrepreneurial training to enable them to manage their businesses successfully. Quite frequently, this is not a matter of offering a specialized education, but of covering training needs, with a focus on accounting, budgeting, supervision, sales and the legal requirements for starting a business. Many training programs also include technical skills for more specific businesses, such as making handicrafts or obtaining information locally about the supply of materials, inventory or skilled workers. One of the most comprehensive programs targeting women and girls in countries like Paraguay, Brazil, Liberia, Ethiopia, Kenya, India, Bangladesh and China is that of the **Nike Foundation**. This program includes a wide range of innovative projects to meet the safety, health and educational needs so as to ensure the welfare of women and girls in an environment where basic infrastructure falls short. **Nike Foundation** sees its job as finding "diamonds in the rough" then "testing, polishing and bringing them up to scale" by providing the necessary resources and financial support. Its projects include a collaboration with BRAC to provide microcredit to young women in rural areas of Bangladesh to start small businesses that they can combine with their education. In India, Drishtee, a social enterprise founded by Acumen Fund, offers

⁹⁴ "La OCDE advierte de que el paro en España rozará el 20% en 2010," *elpais.es* (16/09/2009).

⁹⁵ <http://www.socialentrepreneurcoach.com/resources/women-entrepreneurs-culture.html>.

women the opportunity to operate kiosks in rural India, out of which they run digital photo studios and sell computer and English courses, and pay less for the license to operate the kiosk.

Institutional support is another key to incorporating women in the workplace. As of 2010, the UN will have a new agency dedicated to promoting and defending the rights of women, as announced by the General Assembly of September 2009.⁹⁶ Also of growing importance is the support coming from social networks that are proving that we can "create a society where women and girls are equal participants and agents of social change."⁹⁷ **Women's Net** carries out projects of this sort, among which is the use of cell phones in Uganda to share information via SMS about ending violence against women and, in the future, on AIDS.

Finally, it is worth noting that having outside support does little good if one ultimately does not also have the backing of the local community. In Ecuador, Proyecto Regional Randimpak: Mujeres Indígenas Construyendo Su Futuro (Randimpak Regional Project: Indigenous Women Building Their Future) was founded in 2002 with the goal of "reducing poverty through comprehensive development led by women in rural areas of the Centro Andina micro-region, with environmentally friendly management and an emphasis on upgrading production and marketing."⁹⁸ With this aim in mind, the project works to promote the creation and consolidation of women's organizations in the communities and the implementation of actions to bolster women's leadership in certain areas. For example, women in these areas have succeeded in taking an active role as certified fish-farmers who multiply the impact of their work by supporting other women, which breaks with the tradition of discrimination in this trade. As a rule, social innovation programs must ensure that these women's families see the benefits of their work or the return on the investment in their business in order to motivate women to seek work opportunities.

Internauts of social cohesion

In May 2005 during the elections, women in Kuwait mounted a protest, secretly using BlackBerry handhelds stowed under their burqas to send emails to demand their right to vote. **Facebook** and **Rock the Vote** (a nonprofit organization that seeks to get young people involved in political processes) joined forces in 2006 to help young people in the United States to register to vote on the social network. In Iran, the social networking site **Twitter** provided the means to mobilize the massive protests following the disputed elections in the summer of 2009.

Social networks are influencing the way in which the global society interacts and are having an impact in its communities. Things have changed significantly since the African blog **Kabissa, Space for Change in Africa** posited the question "Does Africa Use Social Network sites?" while commenting on a map published by *Le Monde* online⁹⁹ showing preferences by country regarding the use of social networks (see Figure 17). Although at present only 14 of the 50 African countries have members in social networks, the figures speak for themselves: South Africa

⁹⁶ "La ONU tendrá una agencia especializada en la mujer," *elmundo.es* (15/09/2009).

⁹⁷ <http://www.womensnet.org.za>.

⁹⁸ <http://www.eclac.cl/ddds/InnovacionSocial/e/proyectos/ec/randimpak/>.

⁹⁹ http://www.lemonde.fr/technologies/infographie/2008/01/14/reseaux-sociaux-des-audiences-differentes-selon-les-continentes_999097_651865.html.

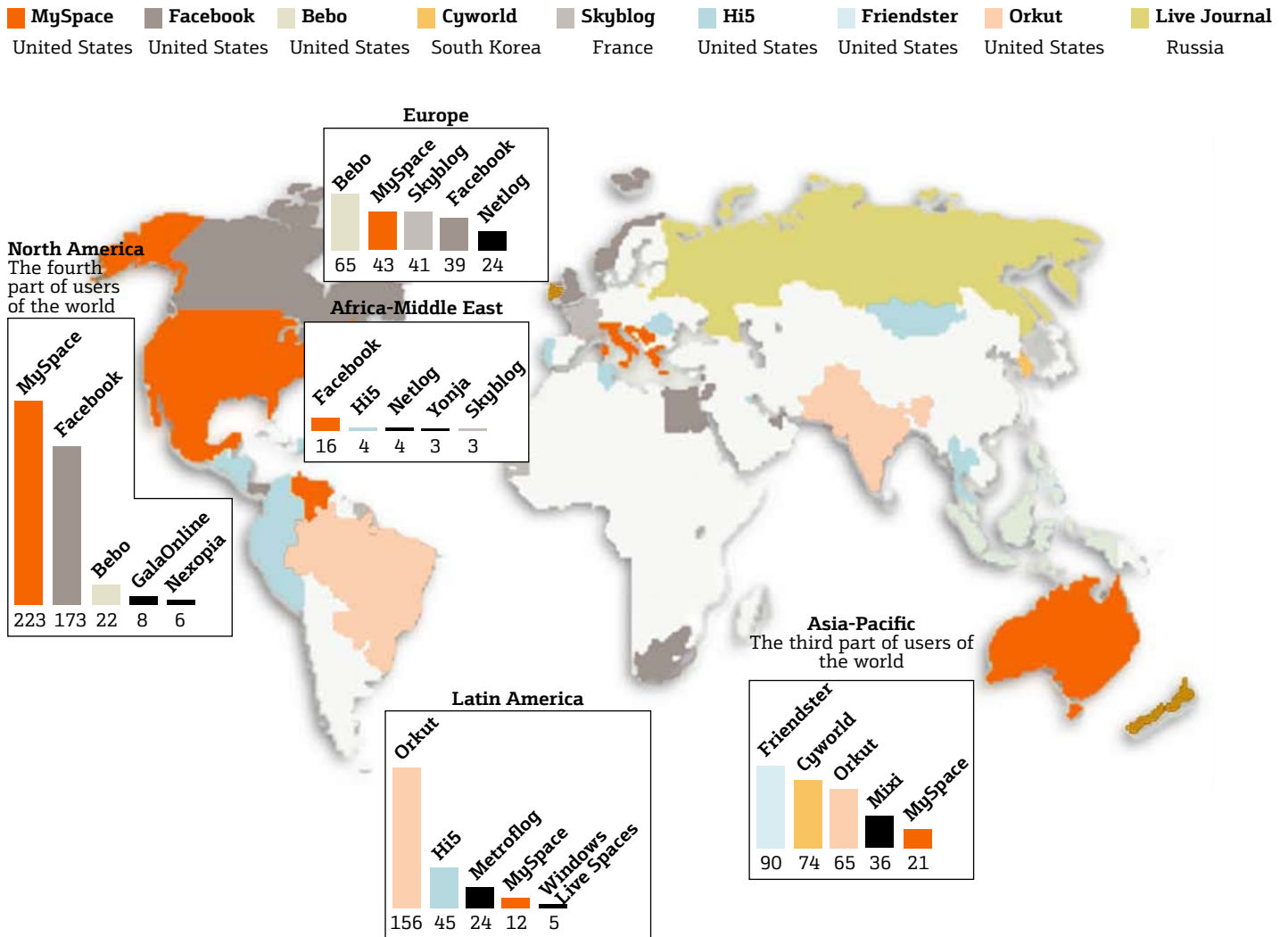


Figure 17: Each continent has different preferences with regard to social networks. Source: *lemonde.fr* (January 2008).

has 1.1 million members on Facebook, Egypt 800,000, Morocco 369,000, Tunisia 279,000, Nigeria 220,000, Kenya 150,000 and Mauritania 60,000.¹⁰⁰

One reason why people in developing countries are not more engaged with social networks is the fact that 76.5% of the world's population, mainly in developing regions and rural areas, does not have Internet access. However, mobile technologies in these countries are expanding faster than Internet and landlines. The most widely used application by far in these countries is SMS, but due to its cost, some places are seeing rapid growth of GPRS and 3G instant messaging

¹⁰⁰ <http://www.web2fordev.net/>.

services such as [MXit](#), developed by a South African university. However, these services also require Internet access. This explains the creation of Goose, a social network that requires no Internet connection. It uses GSM networks and DTN technology, combined with Bluetooth local connectivity to "take advantage of the users' social interactions [...] to forward information." In fact, the newest model is able to identify available secure carriers for continuous transmission of messages. Social innovation, once again, harnesses technology to reach any place at any time, fostering unprecedented global interaction.

d. The right to health

Nine years ago, the member states of the United Nations and 23 international organizations agreed to fight the scourges of extreme poverty, hunger, illiteracy, and disease that afflict a large portion of the world's population. Under the heading of the Millennium Development Goals, eight key goals were set for 2015. Four of them are directly related to health: eradicate extreme poverty and hunger, reduce child mortality, improve maternal health, and combat AIDS. Progress so far has been slow but steady. However, the current economic crisis, occurring in the second half of the projected term, has stalled additional progress and even unraveled some of the successes achieved to date.

According to the 2009 report, from 1990 to 2005, the number of people living on less than US\$1.25 a day fell from 1.8 billion to 1.4 billion. Yet by the end of 2009, an estimated 55 to 90 million more people than projected before the crisis will be living in conditions of extreme poverty.¹⁰³ Likewise, the scant progress made on child nutrition from 1990 to 2007 is not enough to meet the target set for 2015 and will probably be further hampered by higher food prices and the economic turmoil.¹⁰⁴ As a result of all the foregoing, the resources allocated to health programs may also be compromised, due to both decreased aid from developed countries, which must tend to domestic issues, and the decreased capacity of the most disadvantaged countries to mobilize internal resources in pursuit of development. To make matters worse, their export income has also been heavily affected by the recession.

Health is a right to which everyone should be entitled. Unfortunately, the statistics show the opposite to be true. According to the [Global Forum for Health Research](#),¹⁰⁵ people die in larger numbers because of where they happen to live in the world. The chances of dying between the ages of 50 and 60 are five times greater in Africa than in Europe. Moreover, poor people die in larger numbers than rich people, and young people in low- and middle-income countries die from largely preventable causes. These data underscore the idea of a vicious cycle between poverty and disease. Poor people suffer from more—and more serious—diseases, a fact that is compounded by their limited access to healthcare. Even when healthcare is available, the cost of using it exacerbates these people's poverty, thereby further feeding the vicious cycle. Healthcare in these countries has a long way to go. The public sector offers a limited, fee-based service without fixed or preset prices, while the qualified private sector tends to be concentrated in certain

¹⁰³ http://www.un.org/spanish/millenniumgoals/pdf/MDG_Report_2009_SP_r3.pdf.

¹⁰⁴ http://www.un.org/spanish/millenniumgoals/pdf/MDG_Report_2009_SP_r3.pdf.

¹⁰⁵ "Global Forum for Health Research, Helping Correct the 10/90 Gap," presented at Forum 9 in Mumbai, held September 12-16, 2005.

towns, providing a likewise limited and expensive service. In these countries, informal health services offered by community physicians who lack adequate facilities, etc., are widespread. These services are more accessible both geographically and financially; however, they, too, are quite limited and, in some cases, are even more painful than more advanced medicine,¹⁰⁶ as they often cater to folk beliefs or superstitions.

Notwithstanding the above, the problems arising from an inefficient healthcare system are not only found in developing countries. Due to rapidly aging populations, social-security systems have taken on increasing importance in developed countries, where the health needs of seniors, the disabled and working families are not always fully met. The ailing real-estate market, lost jobs and savings, and increasing tax burdens, among other factors, could jeopardize national budgets for insuring the pensions of people approaching retirement age. As noted earlier, we must start with the idea that health is something to which everyone should be entitled. Based on this premise, one might assume that the problems to be tackled by developed and developing countries are quite different. Although there is a tendency to believe that the causes of mortality vary dramatically between developed and developing countries (as exemplified by the dichotomy between preventable life-style diseases, such as obesity, in the West and diseases of poverty, such as malnutrition, elsewhere), aside from the ongoing scourge of AIDS, more and more similarities can be found between them. The UN estimates that, by 2010, the leading cause of death in the world will be cancer, which is on the rise in developing countries.¹⁰⁷ Experts attribute this to increased tobacco use and the adoption of other bad habits traditionally associated with developed countries in emerging and developing countries. According to John Seffrin, president of the American Cancer Society, today, India and China are home to more than 40% of the world's smokers. Seffrin has projected that, if current trends hold, one billion people will die this century of smoking-related causes. Tobacco companies have met with major advertising success in developing countries and are earning high returns on their investments there. Even countries such as Tanzania have seen spikes in mortality rates due to high blood pressure and smoking, which is changing the preconceived notion that these pathologies are directly related to status and socioeconomic class. Unfortunately, data seems to suggest that by 2030 some 75 million people throughout the world will be living with cancer.¹⁰⁸

A variety of programs to promote good health have quickly emerged in response to this situation. The organization [Table for Two](#) aims to fight hunger in developing countries and obesity and other lifestyle diseases in developed ones. [Table for Two](#) was founded in Japan, but has sponsors in countries as diverse as Canada, Mozambique, Switzerland, Belgium, Mexico, Bangladesh, Jordan and the United States. The cafeterias and restaurants at participating companies agree to serve healthy meals in developed countries that meet certain stipulated nutrition requirements. A 20-cent (US\$) donation is made for each meal bought, either by the company itself or the employee who buys it. This donation is then used to serve 20-cent school meals in developing countries. The participating schools are

¹⁰⁶ "Global Forum for Health Research, Helping Correct the 10/90 Gap," presented at Forum 9 in Mumbai, held September 12-16, 2005.

¹⁰⁷ <http://www.elmundo.es/elmundosalud/2008/12/09/oncologia/1228854697.html>.

¹⁰⁸ "WHO: Cancer to be world's top killer by 2010," *usatoday.com* (12/9/2008).

responsible for monitoring and regularly reporting on the distribution of the meals and the health of the school children to whom they are provided.

The "10/90 Gap": proof of unequal spending on health

The lack of necessary funds to develop and implement global health programs has become an endemic problem. Many experts have noted that there is not enough funding to meet the Millennium Development Goals for health. In response to Round 8 of the Global Fund in 2008, 97 countries have requested a total of US\$6.4 billion in new grants, three times as much as in previous rounds.¹⁰⁹ However, simply advocating for additional funds to invest in health is no guarantee of success, unless more efficient and rational use is made of available resources.

The term "10/90 gap" refers to the conclusion reached by the Global Forum for Health Research, which, twenty years ago, estimated that only 10% of the world's expenditure on health R&D is applied to health problems affecting the poorest 90% of the world's population, while the remainder is devoted to preventable diseases that, in many cases, are related to Western lifestyles, as explained above.

Some studies¹¹⁰ dispute this estimate, claiming that "A large proportion of illnesses in low-income countries are entirely avoidable or treatable with existing medicines or interventions. Most of the disease burden in low-income countries finds its roots in the consequences of poverty, such as poor nutrition, indoor air pollution and lack of access to proper sanitation and health education." According to the [World Health Organization](#) (see Figure 18), 45% of the disease burden in the poorest countries is associated with poverty, yet almost all deaths associated with these diseases are either treatable with existing medicines or could have been prevented in the first place.

% of deaths caused by/in	High mortality low-income countries	Low mortality low-income countries	High-income countries
Infectious and parasitic diseases	34,1	24,8	2,1
Respiratory infections	9,9	8,0	3,7
Perinatal and maternal conditions	8,4	6,8	0,4
Nutritional deficiencies	1,3	1,1	0,0
Tropical diseases	0,5	0,3	0,0
Total 'poverty-related' diseases	54,1	40,7	6,2

Figure 18: Mortality Due to Diseases of Poverty.
Source: *World Health Report 2002*.

¹⁰⁹ Prerna Banatia and Jean-Paul Moatti, "The positive contributions of global health initiatives," November 2008.

¹¹⁰ *Diseases of poverty and the 10/90 Gap*, Philip Stevens, Director of Health Projects, International Policy Network, November 2004.

As noted above, the fact that the nature of the diseases affecting developed and developing countries is converging must also be taken into account. Both types of countries are witnessing the spread of increasingly similar diseases. Substantial R&D resources are being allocated to developing treatments for cancer, cardiovascular disease, neuropsychiatric disorders, and diabetes. While these diseases are traditionally associated with developed countries, they increasingly affect the poorest parts of the world, too.

In short, this brief overview of global health shows that much remains to be done if the Millennium Development Goals are to be met. The experts at the Future Trends Forum argue that social innovation is the key to many of the challenges we currently face, from R&D programs to find cures for diseases to new distribution methods to ensure that products and services reach the least accessible populations with the greatest need for healthcare. Innovation in global health programs should emerge from public-private-civil society partnerships, the promotion of favorable policy based on institutional support, the development of new business models, and the necessary technology.

Cooperation and business models: new forms of innovation in healthcare

One of the most promising trends in innovation in business models for healthcare is public-private partnerships. These partnerships are considered the "vehicle for developing medicines that there is little to no market incentive to develop." Elizabeth Ziemba, president of [SHARED](#), a nonprofit organization dedicated to increasing access to medicine in developing countries, discussed the possibility of using such partnerships to bridge the gap between the financial cost of the global disease burden and the research dollars allocated to it in a contribution to a WHO report.¹¹¹ Ziemba claimed that sixteen partnerships for developing medicines had been identified, with US\$1 billion in available funding, primarily from private organizations such as the [Gates Foundation](#). She continued, "the relatively small proportion of funding from governments [...] translates into the private sector setting the parameters of public policy issues." The aim in bringing together public and private-sector efforts is to allow the private sector's traditional management skills and business vision to improve the administration of funds. As prime minister, Tony Blair sparked debate on the effectiveness of public-private partnerships when he proposed using them in British hospitals and schools, as he believed that they were the most efficient way of running such institutions.¹¹² Unions, however, were skeptical of the private sector's capacity to manage traditionally public areas and accused the government of trying to privatize public-sector jobs. In contrast, advocates of such partnerships maintained that many hospitals and schools would not be built at all were it not for private funding, as public funding is sometimes simply not enough. Moreover, the agreements governing these types of partnerships tend to lay down a series of quality requirements, as well as penalties for any failure to meet them.

The Mumbai-based "Dial 1298 for Ambulance" project is an example of the opposite case, that is, of a private company that receives public funding to expand

¹¹¹ *Priority Medicines for Europe and the World*, World Health Organization (November 2004).

¹¹² "What are Public Private Partnerships?" *BBC News* (02/12/2003).

its services to other cities. The private company [Ziqitza Healthcare Ltd](#) (ZHL) was founded by a group of friends who had experienced the trauma of lacking access to emergency care firsthand. They started out with a single ambulance. Today, their fleet has grown to forty, and they plan to expand their services to at least ten cities over the next ten years. Although ZHL is a for-profit company, it uses sliding-scale fees, such that patients transported to free beds at public hospitals are not charged, whereas patients requesting transport to private hospitals pay Rs 1,500, about half the usual cost. The company has received funding from the US-based nonprofit Acumen Fund.¹¹³ On the whole, the experience shows that a private-public-civil society partnership can be a resounding success in a country that spends less than 1% of its GDP on health.

Many global health programs stem from innovative business models and not necessarily from the aforementioned partnerships. Olyset Net is the most effective and innovative mosquito net on the market: it lasts five years and sharply reduces malaria rates. It was invented by [Sumitomo Chemical](#), a Japanese company that has granted a royalty-free license to a Tanzania-based company to manufacture it, generating turnover of more than US\$30 million and creating thousands of jobs.¹¹⁴

The race for innovation in healthcare: the rise of the emerging countries

Throughout this chapter on global health programs, attention has been called to a few of the many projects being conducted in developing countries. The growing participation of countries with higher poverty rates is an indisputable reality, especially with regards to the so-called "emerging countries," which have seen spectacular economic growth accompanied by investment in areas that have traditionally been dominated by developed countries, such as R&D and technology. Indeed, nine of the top twenty-five countries in terms of total patents issued in 2003 were precisely such developing countries, and this figure is on the rise.

Although the United States has always led in innovation, developing countries are starting to catch up by opening research centers and technology parks that draw experts from around the world. Biopolis is a biomedical R&D center in Singapore, which has established itself as a major technology hub, working in collaboration with government agencies, venture capital firms, international pharmaceutical companies, academic institutions, and laboratories. An article in *Science*¹¹⁵ provided several specific examples of the contributions of emerging or developing countries in the field of health, showing that they do indeed have the necessary technological capacity and resources for it: China is the world's leading penicillin manufacturer; the [Serum Institute](#), in India, is the world's leading manufacturer of

¹¹³ "India wakes up to the need for ambulances," *livemint.com*, *The Wall Street Journal* (08/30/2007).

¹¹⁴ Global Health: A Global Agenda Kiyoshi Kurokawa, MD Professor, National Graduate Institute for Policy Studies, Tokyo Science Advisor to the Cabinet of Japan (May 2008).

¹¹⁵ "Global Forum for Health Research, Helping Correct the 10/90 Gap," presented at Forum 9 in Mumbai, held September 12-16, 2005.

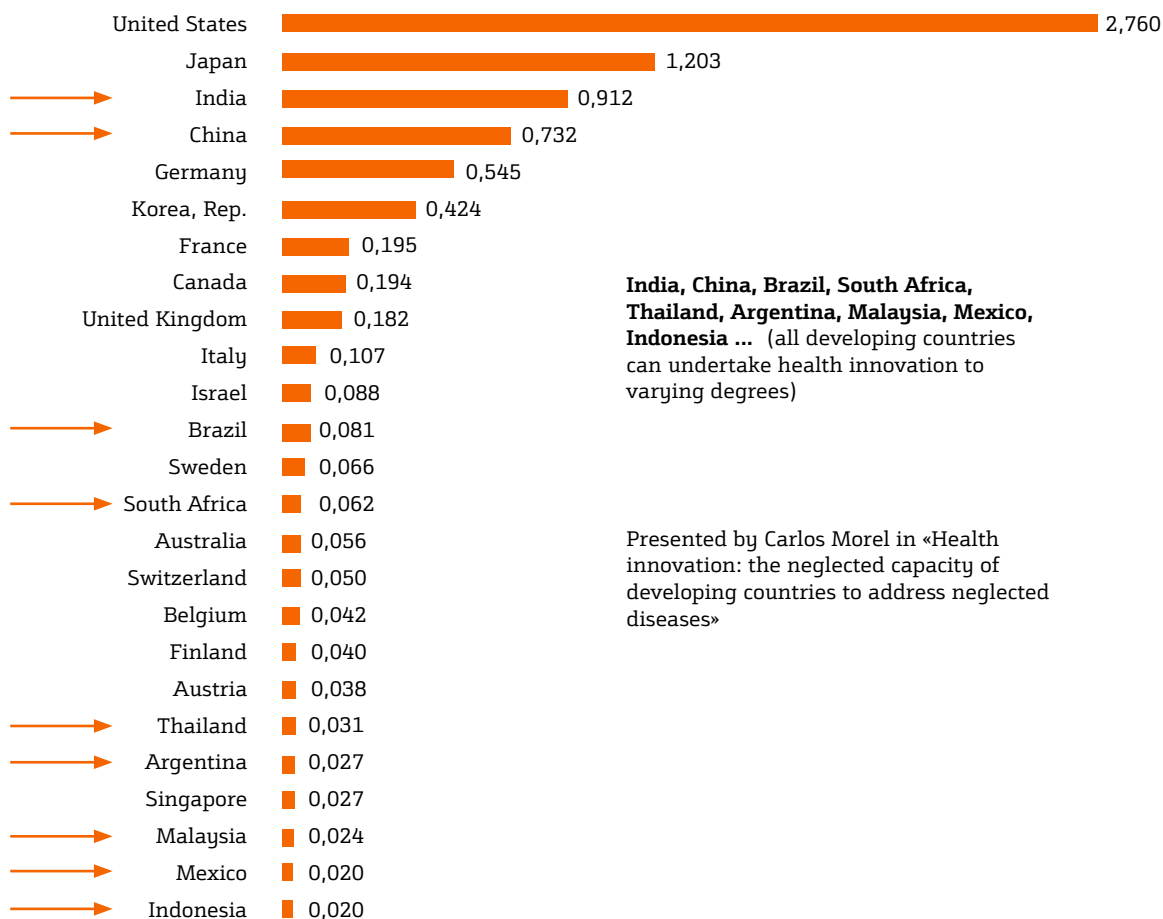


Figure 19: Innovative Developing Countries: Top Twenty-Five Countries by Total Patents Issued in 2003 (adjusted for GDP and per capita).

Source: "Global Forum for Health Research, Helping Correct the 10/90 Gap," presented at Forum 9 in Mumbai, held September 12-16, 2005.

diphtheria-pertussis-tetanus vaccine; and over 60% of the United Nations Children's Fund's vaccine requirements are met by Brazil, Cuba, India, and Indonesia. Likewise, 67% of Indian drug exports and 74% of Brazilian drug exports go to other developing countries, while 63% of Ugandan drug imports and 54% of Tanzanian drug imports come from other developing countries.

¹¹⁵ «Global Forum for Health Research, Helping Correct the 10/90 Gap», presentado en el Forum 9 en Bombay, celebrado entre el 12-16 de septiembre de 2005.

¹¹⁶ <http://www.animalangelsfoundation.com/>.

Innovation in health in developing countries can also be seen in creative projects such as the [Animal Angels Foundation](http://www.animalangelsfoundation.com/), an award-winning Mumbai-based organization devoted to providing animal-assisted therapy to patients with psychiatric disorders, behavioral problems, or physical disabilities or illnesses, among others.¹¹⁶

The truth behind the child mortality figures

So, if treatments exist for most of the health problems in developing countries, why have mortality rates remained so high? Simply put, it is because the real problem is access, not innovation.¹¹⁷ First, there is the ongoing debate about intellectual property law, which provides incentives to pharmaceutical companies to conduct R&D and create new medicines, yet, at the same time, places them at a disadvantage, as they must then sell their products at higher prices to recoup their initial investments. Then there is the fact that governments of low-income countries spend more on their militaries than on making healthcare available to those most in need. Finally, many times, the problem is distribution. The Future Trends Forum experts repeatedly pointed out that too many water purifiers have never gotten past the stage of being merely innovative products, because the problems associated with their distribution were never studied. In this sense, it is crucial not to approach the innovation process solely in terms of the final product, but also with an eye to ensuring access, both from a financial perspective and with regard to distribution in remote areas.

After three years of marketing tests, [Procter & Gamble](#) realized that, unless it managed to make its household water purification system PUR more accessible, the product would be a commercial failure. It thus began to sell it at cost in partnership with nonprofit organizations that distribute it through their humanitarian relief networks.¹¹⁸ In a similar vein, [Essilor India](#) has developed a van fitted with the necessary ophthalmological equipment to facilitate eye examinations and diagnoses, as well as to manufacture and deliver eyeglasses, in rural areas. The company's technicians collaborate with nonprofit partners such as [Sankara Nethralaya](#) and Aravind Eye Hospital.¹¹⁹ Both cases show how distribution channels, or the lack thereof, can often be an impediment to success.

Other times, the obstacles have more to do with cultural barriers, above all when dealing with health and physical integrity issues. The [Instituto de Defensa Legal](#) (Institute of Legal Defense, IDL), a Peruvian NGO, developed and implemented—with considerable support from the [United Nations Children's Fund \(UNICEF\)](#)—a model of community advocates, made up of members of the local community who are trained to address the problem and to provide support for victims when reporting abuse and throughout the ensuing legal process.¹²⁰

¹¹⁷ "Global Forum for Health Research, Helping Correct the 10/90 Gap," presented at Forum 9 in Mumbai, held September 12-16, 2005.

¹¹⁸ <http://knowledge.insead.edu/Bottompyramid.cfm>.

¹¹⁹ <http://knowledge.insead.edu/Bottompyramid.cfm>.

¹²⁰ <http://www.eclac.org/dds/InnovacionSocial/e/proyectos/pe/defensorias/>.

e. The commitment to education

It is an undeniable fact that children in poor countries are less likely to attend school. The situation is even worse among inhabitants of rural areas, members of ethnic and linguistic minorities, the disabled, and children affected by armed conflicts. The reasons for the low level of schooling in developing countries include: the lack of education regulations making attendance compulsory; the shortage of public resources to finance education; the need for all members of poor families to contribute to the family economy; discrimination against girls and

certain ethnic groups; language barriers in countries where multiple languages or dialects are spoken; difficulties providing education in rural regions; war and post-conflict situations; and systems' inability to cater to students with special needs.

Education systems in developing countries are characterized by poor, often politicized management, a high rate of teacher absenteeism (often due to AIDS), and a degree of corruption that prevents the necessary funding and resources from arriving.

Moreover, the governments of these countries often devote the limited resources they do have to priorities other than meeting citizens' basic needs and demands. For instance, many spend more on their militaries than on education. However, their goal should be to raise awareness and to support the implementation of major, scalable, sustainable and comprehensive education plans by forging partnerships with different stakeholders primarily aimed at eliciting greater participation from the private sector. Through the creation of such an ecosystem, which rewards cooperation and is endowed with more financial resources, more funds could also be allocated to education and literacy programs. This, in turn, would translate into more widespread dissemination of new technologies among communities. Improvements in agricultural technology, for example, have led to increased per-capita food production and lower food prices, even as the world's population has grown dramatically. In the long term, the use of new technologies boosts economic growth, providing individuals and the state with the means to improve basic infrastructure, such as that used to provide clean drinking water. This, in turn, leads to improvements in public health, and a healthier population is better able to engage in economic activities, thereby generating increased income, which can then be spent on education and health.¹²¹ This is but one example of how closely interwoven education, health, and poverty really are.

Notwithstanding the above, developing countries hardly have a monopoly on education problems. Education systems in developed countries suffer from overcrowded schools and safety issues, parents who are not actively involved in their children's education, problems integrating immigrant children, unmotivated faculty, poor teaching quality, and a failure to adapt to job-market needs and global competition.

Two of the UN's eight Millennium Development Goals are to, "Achieve universal primary education" and "Promote gender equality and empower women." It is no secret that a country's economic growth begins with education. More than 100 million children of primary-school age are not in school, with Africa and South Asia registering the most alarming figures.¹²² Under the Millennium Development Goals, the target is to "ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling." By extension, the program also seeks to eliminate gender disparity at all levels of education by no later than 2015. This is because girls are disproportionately affected by the lack

¹²¹ *Diseases of poverty and the 10/90 Gap*, Philip Stevens, Director of Health Projects, International Policy Network, (November 2004).

¹²² "Toward universal primary education: investments, incentives, and institutions. Achieving the Millennium Goals," (2005). <http://www.unmillenniumproject.org/documents/Education-complete.pdf>.

of access to education. This is particularly true in sub-Saharan Africa and Southeast Asia, which are home to 83% of all out-of-school girls.¹²³

According to the [United Nations Development Program's](#) (UNDP) *Human Development Report 2007/2008*, "Since the first *Human Development Report* was published in 1990 there have been spectacular—if spectacularly uneven—advances in human development. The share of the population living in developing countries on less than US\$1 a day has fallen from 29% in 1990 to 18% in 2004. Over the same period, child mortality rates have fallen from 106 deaths per thousand live births to 83 and life expectancy has increased by 3 years. Progress in education has gathered pace. Globally, the primary school completion rate rose from 83 percent to 88 percent between 1999 and 2005." Indeed, some countries stand out for their astonishing progress in education. Vietnam, for instance, has managed to halve its poverty rates and achieve universal primary education well in advance of the 2015 target. Mozambique has likewise significantly reduced poverty and increased school enrollment, in addition to improving its child and maternal mortality rates.¹²⁴

Nevertheless, much remains to be done if all education systems are to meet the Millennium Development Goals for education. To this end, the battle must be waged on two fronts: ensuring access to education from an early age and improving the quality of the system. Discussed below are two strategies for tackling these challenges, namely: promoting child enrollment in school and creating better educational institutions.

School attendance: prerequisite for development

One of the priorities for developing countries and certain low-income communities in other parts of the world is to provide incentives for families to send their children to school, especially girls, who often suffer from discrimination. To achieve this, first, school fees can be reduced or eliminated. In countries such as Uganda, Tanzania, or Bangladesh, this measure led to the enrollment of millions of children, in some cases even doubling the number of children in school. In contrast, Malawi's initial attempt at eliminating school fees failed, as the 1.2 million students who subsequently enrolled exceeded the capacity of the country's schools. As a result, many students eventually dropped out, causing school completion rates to fall virtually back to their pre-reform levels.¹²⁵ Clearly, this measure must be taken in conjunction with others to increase the available resources to absorb the new demand.

Second, financial or healthcare incentives can be offered on the condition that children attend school. The organizations Progresca (Mexico) and [Food for Education](#) (Bangladesh) offer cash and food, respectively, to encourage children to attend class regularly. The [World Food Program](#) has confirmed the effectiveness of such measures, showing that they serve both as income supplements for parents and to help alleviate chronic hunger and malnutrition among children. Free vaccinations, treatment for parasites, and vitamin supplements can also

¹²³ "Toward universal primary education: investments, incentives, and institutions. Achieving the Millennium Goals," (2005). <http://www.unmillenniumproject.org/documents/Education-complete.pdf>.

¹²⁴ *Human Development Report 2007/2008*, United Nations Development Program (UNDP).

¹²⁵ "Toward universal primary education: investments, incentives, and institutions. Achieving the Millennium Goals," (2005). <http://www.unmillenniumproject.org/documents/Education-complete.pdf>.

encourage parents to send their children to school. At the same time, children who are treated for certain conditions have been shown to perform better.

The [Barefoot College](#) began to train young people and illiterate women in India as solar engineers in the 1990s. As of December 2007, some 8,700 solar units had been installed, providing solar power to 574 villages, as well as 870 schools. Today, the [Barefoot College](#) also runs 549 night schools, where it offers classes to children who cannot attend school during the day because they have to help their parents at home. The university's adult education program includes training on rainwater harvesting and the construction of piped water systems. Courses are also offered on handicrafts to provide homebound women with a means of earning income. The [Barefoot College](#) moreover offers health services and advice on hygiene issues. It has always understood that, for any education program to succeed, the issues of basic services, health, and unemployment must be addressed.

Third, programs must be created to target specific groups that do not tend to receive the same attention as other students, including girls, disabled students, and children from countries in conflict. For example, in many countries, girls are clearly discriminated against and are subject to unequal and even, at times, degrading treatment. They often do not feel that they are in a safe environment. According to the *Por Ser Niñas* [For Being Girls] report by the NGO Plan España, presented in the Spanish Chamber of Deputies, a total of 65 million girls worldwide do not go to school, while another 10 million are married off before the age of 12. The report moreover concludes that an extra year of education for girls entails a 10-20% increase in their income, thereby helping them to escape extreme poverty.¹²⁶ Better education and employment for women can moreover have a dramatic impact on reducing birth rates and thus, in the long term, on reducing global warming and the growing destruction of natural habitats. Likewise, more accessible, better quality schooling can raise environmental awareness.¹²⁷ The Oprah Winfrey Leadership Academy for Girls, in South Africa, supports the development of a new generation of women leaders able to use their education and leadership skills to transform their communities and countries. The nonprofit organization, which is sponsored by the famous American talk show host, allocated more than US\$ 40 million to founding the academy, which provides education to talented girls from disadvantaged backgrounds. However, these types of programs must be supplemented by programs to promote the equitable distribution of housework, rather than solely providing incentives for young girls to complete their basic education. Child victims of armed conflicts likewise need a specific action plan to encourage their return to school. "UNICEF and the [World Food Program](#) have cooperated to implement large-scale Back-to-Peace, Back-to-School campaigns in a variety of postconflict situations, including in Afghanistan, Angola, Liberia, and Sierra Leone."¹²⁸

Finally, it should be noted that, according to several studies, including the *Informe de Inclusión Social en España 2009* [Report on Social Inclusion in Spain 2009] issued by the Caixa Catalunya Obra Social program,¹²⁹ parents' level of education

¹²⁶ "10 millones de niñas en el mundo son casadas antes de cumplir los 12 años," *elmundo.es* (09/22/2009).

¹²⁷ "Toward universal primary education: investments, incentives, and institutions, Achieving the Millennium Goals," (2005). <http://www.unmillenniumproject.org/documents/Education-complete.pdf>.

¹²⁸ "Toward universal primary education: investments, incentives, and institutions, Achieving the Millennium Goals," (2005). <http://www.unmillenniumproject.org/documents/Education-complete.pdf>.

¹²⁹ "El nivel educativo de los padres, clave en el logro escolar de los hijos," *elmundo.es* (09/22/2009).

is critical to children's academic performance. Parents in developing countries often fail to send their children to school precisely because they themselves never received an education. Likewise, some parents cannot become actively involved in their children's education because they are illiterate or lack the necessary knowledge or skills. One common example of this phenomenon is that of immigrant parents whose children must be integrated into the education systems of developed countries. Several programs have emerged to address this need to educate parents as well, including [Homework Hotline](#) and the [Parent Empowerment for Family Literacy Program \(PEFaL\)](#). The former is a service available in the United States that offers free phone tutorials to parents who have problems helping their children with their homework. With funding from the [Dell Foundation](#), the program has been expanded to eight counties and, moreover, offers school supplies to the most disadvantaged students. The latter is a program carried out in Romania that aims to develop and strengthen parents' capacity to support their children's education.

The challenge of improving education systems

Improving educational institutions is a pending issue in both developed and developing countries. In addition to poor school management, communities are often not sufficiently committed to the education of future generations. To this end, communities must undertake, at the local level—and even at the national level—to develop a legal and institutional framework and to support education as one of the foundations of progress. Finland, which boasts one of the world's best education systems, could serve as a model for other countries. First, teachers are considered a cornerstone of education and are thus well compensated, offered continuing education, and constantly encouraged to share their knowledge. They are supported by the state, which invests heavily in the resources they need. Compulsory education is free under the Finnish system and includes not only teachers' salaries, but also the full range of school supplies, from books to pencils. This full funding likewise includes the country's few private schools. Finnish students can study up to four languages and do not compete with each other: instead, they support their slower classmates, while the teachers make sure that no one is left behind.

Which proposals and education models are best suited to tackle this challenge? First, attention should be called to the charter school movement in the field of education. The charter school model has caught on quickly in countries such as the United States. Charter schools are created through the transfer of certain powers from the government to social entrepreneurs, allowing them to take over traditionally public institutions. Thus, the state ensures that the money from its coffers is efficiently spent by outsourcing schools' administration to private organizations, which run them in accordance with innovative and sustainable programs. In short, this model uses private sector know-how to improve school management.

Advocates of the charter school model claim that the benefits are substantial: personalized attention for students, greater access to technology, continuing

education for the school's faculty and staff, increased parent involvement, lower costs, and the availability of private funding alternatives in the form of donations, loans, and the installation of vending machines on school premises. Of course, the model also has its critics. Because these schools are more closely scrutinized, they tend to have zero-tolerance policies with regard to problem students. They also reject students who have difficulties in order to prevent them from bringing down the overall results, thereby increasing community segregation.

However, the schools claim that they have cut truancy rates. Moreover, these socially entrepreneurial institutions argue that, thanks to their standardized, simplified curriculums, which emphasize reading comprehension and math, they have surpassed traditional public schools in terms of results with those students who have most difficulties. [KIPP](#), [Uncommon Schools](#), and [Achievement First](#) are some of the programs that stand out most for implementing original, results-oriented proposals in a sector that brooks little innovation. To this end, mention should also be made of [Massachusetts 2020](#), an organization whose mission is to expand and enhance educational opportunities for the state's children. A public-private partnership with more than US\$26 million in funding, it runs a wide range of programs covering the curriculum both during and after school hours, essentially revolutionizing the world of education.

Programs aimed at fixing public educational institutions are also emerging in developing countries. Education in El Salvador experienced serious setbacks as a result of the civil war that ravaged the country for more than a decade. When it ended in 1992, half a million children, especially in rural regions, did not know how to read. The situation was exacerbated by a lack of teachers. Meanwhile, with support from the Salvadoran Ministry of Education, parents from some of the poorest communities decided to take matters into their own hands. Their collaboration gave rise, in 1991, to the Educación con participación de la Comunidad (Education with Community Participation, or EDUCO) program, a new concept in education in Latin America based on community management. Under the EDUCO program, students' parents selected, hired and supervised teachers themselves, tasks that had hitherto fallen to the government. Similarly, in India, [Gray Matters Capital](#) has provided a solution for a government-run education system plagued by serious problems due to limited resources and excessive bureaucracy that resulted in an ineffective academic environment. Specifically, it has spearheaded the movement to create affordable private schools, that is, to provide a market-based solution to increase the system's quality and effectiveness. In the foundation's own words, "families are considered clients rather than the beneficiaries of charity,"¹³⁰ and the schools charge "tuition fees that are affordable to low-income families and allow them to cover their costs and become sustainable enterprises."¹³¹

Another proposal advocated by many Future Trends Forum experts to improve the education system is the use of educational technology at schools, universities, and vocational training centers, as well as in public-sector capacity-building programs. The telecommunications age means being able to connect to anyone, anywhere, at

¹³⁰ <http://www.graymatterscap.com/>.

¹³¹ <http://www.graymatterscap.com/>.

any time. The goal is to take advantage of information and communications technologies to promote education and revolutionize how training is offered. The fifth edition of the annual [eLearning Africa](http://www.elearning-africa.com/) conference¹³⁵ will be held in May 2010. The conference, which brings together experts, users, providers and new e-learning participants, aims to create a distance-education network in Africa, where it is not always easy to reach everyone. The conference primarily focuses on achieving sustainable Internet access solutions, mobile learning, the use of ICT to improve the quality of teaching and learning, and how ICT is currently used in teacher training.

Social innovation is a constant in the field of education and will continue to yield new models to serve those most in need. To guarantee that equitable, equal-opportunity, quality education is regarded as a universal human right, everyone—from the state to individual families to society at large—must be committed to it. The emergence of a suitable education system that cultivates students' innovative spirit will launch a virtuous cycle to help prepare future entrepreneurs and leaders.

¹³² <http://www.elearning-africa.com/>.