3-2010

Sparking Social Innovations

Olivier Serrat

Follow this and additional works at: https://digitalcommons.ilr.cornell.edu/intl

Thank you for downloading an article from DigitalCommons@ILR.

Support this valuable resource today!

This Article is brought to you for free and open access by the Key Workplace Documents at DigitalCommons@ILR. It has been accepted for inclusion in International Publications by an authorized administrator of DigitalCommons@ILR. For more information, please contact catherwood-dig@cornell.edu.

If you have a disability and are having trouble accessing information on this website or need materials in an alternate format, contact web-accessibility@cornell.edu for assistance.
Sparking Social Innovations

Abstract

(Excerpt) Necessity is the mother of invention. The demand for good ideas, put into practice, that meet pressing unmet needs and improve people's lives is growing on a par with the agenda of the 21st century. In a shrinking world, social innovation at requisite institutional levels can do much to foster smart, sustainable globalization.

In consequence of successive scientific revolutions, mankind has changed its conditions and capacities with increasing speed. Globalization is a given: today, mankind's activities are affecting the entire planet—and thereby mankind itself—for good and ill.

A select list of the worldwide challenges we face includes alleviating poverty; mitigating and adapting to climate change; ending abuse of natural resources and the environment; cleaning up environmental pollution; dealing with natural disasters; countering medical challenges, e.g., pandemics; encouraging disarmament; coping with security threats; accommodating nonstate power; handling failed states; tapping capacity for social action; allaying frustration among minorities; confronting violence; identifying global rights; building a global rule of law; evolving regulatory and institutional frameworks to contain global financial and economic crises; optimizing international trade; managing mass migrations; employing human resources better; and optimizing knowledge.

Keywords
Asian Development Bank, ADB, poverty, economic growth, sustainability, development

Comments

Suggested Citation


Required Publisher's Statement

This article was first published by the Asian Development Bank (www.adb.org)
Sparkling Social Innovations

By Olivier Serrat

The Agenda of the 21st Century

In consequence of successive scientific revolutions, mankind has changed its conditions and capacities with increasing speed. Globalization is a given: today, mankind’s activities are affecting the entire planet—and thereby mankind itself—for good and ill.

A select list of the worldwide challenges we face includes alleviating poverty; mitigating and adapting to climate change; ending abuse of natural resources and the environment; cleaning up environmental pollution; dealing with natural disasters; countering medical challenges, e.g., pandemics; encouraging disarmament; coping with security threats; accommodating non-state power; handling failed states; tapping capacity for social action; allaying frustration among minorities; confronting violence; identifying global rights; building a global rule of law; evolving regulatory and institutional frameworks to contain global financial and economic crises; optimizing international trade; managing mass migrations; employing human resources better; and optimizing knowledge.

The issues our population of 6.9 billion people—projected to reach 7.7 billion in 2020—now meets head-on have causes and effects in communities, villages, towns, provinces, regions, countries, and groups of countries, needless to say in varying degrees of attribution. We must therefore explore human perceptions, relations, and institutions from the perspective of how communities at different scales form, operate, interface, and

---

1 Transformations in the global economy impact at all levels. However, for the more locally minded, examples of challenges in modern cities include unemployment, homelessness, crime, urban decay, pollution, access to health care, sickness and old age, disability, social discrimination, social exclusion, prostitution, drug and alcohol abuse, racism, sexism, domestic violence, teenage pregnancy, abortion, and underage drinking, among many others. For example, the Young Foundation mapped Britain’s unmet needs in 2006. It found 40 key needs in six interconnected clusters: (i) poverty of power, money, and place; (ii) new forms of destitution—the results of globalization; (iii) psychic needs; (iv) needs arising from fractured families and weak family substitutes; (v) needs arising from damaging consumption; and (vi) violence and abuse. See Geoff Mulgan, Alessandra Buonfino, and Lili Geissendorfer. 2006. Mapping Britain’s Unmet Needs. The Young Foundation. Available: www.youngfoundation.org/files/images/06_06_Mapping_Britains_unmet_needs.pdf
treat the natural world. Enlightened self-interest intimates that as many actors and agents as possible collaborate in such discussions at the optimum institutional levels to leverage social innovation in support of smart, sustainable globalization.

Innovation, that is, incremental and emergent or radical and revolutionary changes in thinking, products, services, processes, or organizations, has always been a feature of human societies. Typically, but not exclusively, it has since the 15th century been spurred by cumulative advances in material civilization, themselves impelled by entrepreneurial then, increasingly, profit-seeking corporate interests. But the role of corporate innovation can only be limited where social matters press in throngs to the fore and markets imperfectly (if at all) meet demand with supply. Until we expand the reach of markets so that more people can reap rewards, or at least make a living, from applying their entrepreneurial mindsets to social problems, many will continue to expect that governments or charities should subsidize and fill deficits.

Yet, despite successful attempts at fostering entrepreneurial government from the mid-1990s, efforts still fall short of rising expectations and related social sector institutions continue, unfairly perhaps given the variety of needs, to be viewed as inefficient, ineffective, and unresponsive. (A more pointed observation would be that public sector organizations are just not good at embracing failure and could learn much from design thinking.) Still, government can only provide part of the answer, and for this it would have to better reflect the values of taxpayers (assuming they recognize then care about social problems). Long-term solutions to social inequities must be broad-based and self-sustaining: in imperfect markets, that means finding ways to turn a profit so that social entrepreneurs can keep going.

Daily news provide countless examples of global interdependence and the domino effect of geopolitical settings. (The financial crisis of 2007 to the present is but the most recent.) Social enterprise is needed to cultivate products, services, models, and approaches that address the agenda of the 21st century, finding its rightful place in, and certainly informing, the continuum of human affairs that includes mainstream business.

---

2 Simply put, innovation is the act of introducing something new (or reapplying old ideas in a new way). It is commonly classified along the following dimensions: (i) process versus product, (ii) radical versus incremental, (iii) technological versus organizational, and (iv) science-led versus customer-driven.

3 Peter Drucker catalogued seven causes for that: (i) unexpected occurrences, (ii) incongruities of various kinds, (iii) process needs, (iv) changes in an industry or market, (v) demographic changes, (vi) changes in perceptions, and (vii) new knowledge.

4 From a corporate perspective, innovating is creating value by doing things differently (or doing them in a novel way). Based on this viewpoint, however, the incidence and value of innovation can only be established after the event. Thus, innovating is the process of creative problem solving or solution seeking in response to real problems, needs, or opportunities—designed to produce practical outcomes. Interestingly, some now argue that the private sector has a better chance of making a difference if it knows how its business agenda relates to specific social needs.

5 Besides, most corporate innovation is no longer born within the walls of an organization. Technologies, for instance, as distinct from their applications, are increasingly being bought and sold. “The cathedral and the bazaar” connotes closed and open models of innovation (and the gradual erosion of the former). At the same time, today’s users demand a role in defining and shaping what they need. Traditional concepts of innovation—such as what it is, who does it, where it is conceived, where it comes from, how it is organized, and who it affects, as well as the discovery skills associated with individual “serial innovators,” e.g., associating, questioning, observing, experimenting, and networking—provide less and less explanatory traction. This is not to denigrate the crucial role of outstanding individuals, as the accomplishments of William Wilberforce, Robert Owen, Florence Nightingale, Gandhi, Fazle Hasan Abed, and Muhammad Yunus, among others, attest. However, given the barriers that concern for efficiency, vested interests, mindsets, and longstanding relationships pose, it is better not to conceive of social innovation as a discovery: it is, rather, a continuous, collaborative, and cumulative activity involving many actors and agents in which ideas are shared, tested, refined, developed, and applied, with the occasional leap forward—or across to another sector. A systems approach to innovation would locate actors and agents as well as their interactions at individual, interpersonal, organizational, inter-organizational, and system levels, and pay attention to the norms, regulations, rules of the game, and habits that govern these.

6 An externality is a consequence of an economic activity that is experienced by unrelated third parties. In imperfect markets, externalities are the rule, not the exception, and their impacts grow in proportion to social inequality. Externalities color value. Measuring and communicating social value is important and can help social enterprise become more competitive. However, social accounting practices are underdeveloped and only rarely codified in legislation. A related concern is that of ethical markets, embodying values of trust, transparency, and contract law, aiming to offset mankind’s propensity to barter without concern for the social and environmental consequences of production and exchange, including side- (or frontal) effects on third parties. While the ability of government to allocate resources is limited, its role as norm setter, rule maker, enforcer, and overseer of markets is essential.

---

Opportunities are usually disguised as hard work, so most people don’t recognize them.
—Ann Landers
socially responsible business, public services, and voluntarism. The qualitative development that it can bring to the table is borne of more engaged, personalized, joined-up, adaptable, and economical services that use fewer resources to deliver better outcomes. Indeed, the agenda of the 21st century may be pointing toward a social economy in which social values and mission play stronger roles. In May 2009, President Obama announced that his administration would request a $50 million allocation of the following year’s budget to seed a Social Innovation Fund.

**Table 1: Where Social Enterprise Sits**

<table>
<thead>
<tr>
<th></th>
<th>Mainstream Business</th>
<th>Socially Responsible Business</th>
<th>Social Enterprise</th>
<th>Public Services</th>
<th>Voluntarism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inputs, Finance, and Resources</td>
<td>Financial and commodity markets</td>
<td>Financial and commodity markets</td>
<td>Ethical investment and fair trade sources</td>
<td>Tax and borrowing, public employment</td>
<td>Donations, charity, giving</td>
</tr>
<tr>
<td>Processes and Work</td>
<td>Value chain, lean production, just-in-time</td>
<td>Greater attention to supply chain management of ethical and environmental issues</td>
<td>Heavily biased toward social inclusion and environmental objectives</td>
<td>Public service value chains combined with contracting out</td>
<td>Volunteering into social projects</td>
</tr>
<tr>
<td>Outputs, Consumers, and Markets</td>
<td>Consumer markets selling on price, quality, and brand</td>
<td>Some green and fair trade branding</td>
<td>Green, fair trade and social inclusion central to brands</td>
<td>Access to public services, politically determined nontraded, limited co-payment</td>
<td>Gift, given away, no charge</td>
</tr>
<tr>
<td>Social Value Chain</td>
<td>Business generates jobs and profits, pays taxes, allows philanthropy, and provides useful goods and services</td>
<td>Business can be done in a more socially responsible way—meeting social goals builds a better business</td>
<td>Social goals are primary, business is a way to achieve them—meeting business goals creates more social impact</td>
<td>Government essential to provide nonmarket public goods at scale that neither the voluntary sector nor mainstream business can</td>
<td>Giving culture underpins efforts at public good creation in all sectors; new wave of voluntary solutions</td>
</tr>
</tbody>
</table>


**Quid Social Innovation?**

First and foremost, social entrepreneurs are exercised by an explicit ethical imperative. Obviously, this conditions how they perceive and assess opportunities. In comparing social and for-profit entrepreneurs, then, the question of what it is that they seek to maximize is paramount. Put simply, social innovation equates with new ideas that successfully meet social goals through mission-related impacts. Geoff Mulgan has defined it as innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly
developed and diffused through organizations whose primary purposes are social.\footnote{Geoff Mulgan. 2007. \textit{Social Innovation: What It Is, Why It Matters, and How It Can Be Accelerated}. Skoll Center for Social Entrepreneurship. Working Paper. Available: www.sbs.ox.ac.uk/centres/skoll/research/documents/social_innovation.pdf} That is, social innovation from individuals, movements, and organizations tackles pressing social problems or new social issues, with a focus on problem solving and experimentation to formulate new products, services, models, and approaches.\footnote{The definition distinguishes social from corporate innovation. To this day, that is generally stimulated by profit maximization. In truth, however, there are many borderline cases. What is more, and is increasingly likely to be so, the products and services that organizations sell can in the final analysis only succeed if they address a fundamental social needs, however that might reveal itself. Therefore, recognizing that innovation is inescapably a public–private undertaking, Rosabeth Moss Kanter presciently envisioned 10 years ago that the social sector might become a learning laboratory for corporate interests. (By the same token, more and more social entrepreneurs use business formats to achieve their objectives.) See Rosabeth Moss Kanter. 1999. \textit{From Spare Change to Real Change: The Social Sector as a Beta Site for Business Innovation}. Harvard Business Review. May–June, pp. 122–132.}

Much as corporate innovation, social innovation can only thrive if it meets a need. And, as might be expected, its stages also involve (i) generating ideas by understanding needs and pressure to change and identifying potential solutions; (ii) designing, developing, prototyping, and piloting ideas; (iii) assessing, then scaling up and diffusing the best ideas; and (iv) learning and evolving.\footnote{The process of social innovation is given a full treatment in Robin Murray, Julie Caulier-Grice, and Geoff Mulgan. 2010. \textit{The Open Book of Social Innovation}. The Young Foundation. Available: www.youngfoundation.org/files/images/Open_Book_of_Social_Innovation.pdf} However, there is another side to the coin. The motives that spark social innovation, for instance, are likely to be quite different: they may include material incentives but the principal drivers of accomplishment will habitually range broadly to include such concerns as care, compassion, identity, autonomy, and recognition. Critical resource requirements will also diverge: money is the bottom line in business; however, social innovations often seek out and rest on political support, volunteers, and philanthropic commitment. Patterns of growth are not the same either: social organizations or movements do not in general grow as quickly as corporate interests yet tend to be more resilient. How the success of innovation is judged defers too: scale or market share, for example, matter little when the unmet need is intense but well circumscribed. Lastly, each social field exhibits distinct patterns, drivers, and inhibitors, with implications for short- (days, weeks, months), medium- (1–3 years), and long-term (3–20 years) horizons for decision making.\footnote{In social organizations, Geoff Mulgan explains that social innovation is facilitated by practitioner networks, political allies, strong civic institutions, and the support of progressive foundations and philanthropists. For social movements, basic legal protections and status, in addition to open media and the Internet, are key. In politics and government, the conditions are likely to include competing parties, think tanks, innovation funds, contestable markets, and plentiful pilots. In business, social innovation can be driven by competition, open cultures, and accessible capital. In all social fields, global links make it easier to learn lessons and share ideas at an early stage.} (Some social problems may require generational timescales.)

Social entrepreneurs have existed throughout history. St. Francis of Assisi, the founder of the Franciscan Order, would qualify as a social entrepreneur—having built multiple organizations that advanced pattern changes in his “field.” Similarly, Florence Nightingale created the first professional school for nurses and established standards for hygiene and hospital care that have shaped norms worldwide. What is different today is that social entrepreneurship is developing into a mainstream vocation, not only in the United States, Canada, and Europe, but increasingly in Asia, Africa, and Latin America. In fact, the rise of social entrepreneurship represents the leading edge of a remarkable development that has occurred across the world over the past three decades: the emergence of millions of new citizen organizations.\footnote{We are what we repeatedly do. Excellence, then, is not an act, but a habit. \textemdash Aristotle} 

—David Bornstein
Table 2: Social Innovations in the Social Field

<table>
<thead>
<tr>
<th>Generation</th>
<th>Development</th>
<th>Mainstreaming</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Organizations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice, imagination, beneficiaries, and user inputs generate possibilities.</td>
<td>Start-ups, incubators, learning by doing, and pilots road-test ideas.</td>
<td>Organizational growth, emulation, replication, and franchise to achieve scale.</td>
</tr>
<tr>
<td><strong>Social Movements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small groups, seeking like-minded allies, spurred by anger, resentment.</td>
<td>Movements try to demonstrate worthiness, unity, numbers, and commitment.</td>
<td>Governments endorse claims and pass legislation. Public habits change.</td>
</tr>
<tr>
<td><strong>Politics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongovernment organizations, party activists, people in need, and the media make demands for new programs.</td>
<td>Politicians become champions. Ministers and officials take up issues and give political commitment.</td>
<td>Bureaucrats and professionals implement, provide funding, and authority.</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity methods, consultations, contestability, and the adaptation of models from other sectors generate possibilities.</td>
<td>Incubators, zones, and pathfinders—with assessment and evaluation methods—test and capture lessons.</td>
<td>Growth, new structures, franchises, and spending programs achieve scale.</td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enthusiasts produce and consume in what is almost a gift economy.</td>
<td>Small companies, mission-related investment, and consumer and shareholder activism develop niche markets.</td>
<td>Multinationals and majors buy in and achieve marketing clout.</td>
</tr>
<tr>
<td><strong>Academia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New ideas are developed on the margins of academia.</td>
<td>Ideas are tested in practice or spread through academic networks.</td>
<td>The once-radical idea becomes mainstream.</td>
</tr>
</tbody>
</table>


Using Emergence to Boost Social Innovation

Notwithstanding the difficulties caused by externalities and the shortage of ethical markets, the paucity of sustained and systematic analysis is hindering the practice of social innovation. This is where innovation accelerators such as the Social Innovation Fund can play a role.13

However, rather than worry about critical mass, social entrepreneurs foster critical connections to kindred spirits, strengthen these as communities and networks of practice, and develop those further as systems of influence. Critical to this, from a systems perspective, are what Geoff Mulgan calls connectors, viz., the entrepreneurs, brokers, and institutions that link the demand and supply and the push and pull of people, ideas, and resources. In Why It Matters, and How It Can Be Accelerated, from which the following draws extensively, he identifies ready entry points for action:

- **Leadership and Structures Suited to Innovation.** Leaders with the power to act in fields such as health and education can visibly value and reward social entrepreneurs and social innovations. Separate structures, insulated from day-to-day concerns, can also be developed to straddle the boundaries of organizations or systems and combine freshness of perspective with the authority to make things happen.

---

13 In the United Kingdom, the Young Foundation’s Launchpad develops promising ideas into new ventures by providing funding, social capital, and entrepreneurial expertise. See Launchpad. 2010. Available: http://launchpad.youngfoundation.org/
• **Finance Focused on Innovation.** It costs to generate, test, and then adapt ideas in the light of experience. Social innovation requires a mix of resources including grants, tax credits, subsidies, and private investment through dedicated vehicles ranging from technology-oriented venture capital to banks.

• **Public Policy Frameworks that Encourage Innovation.** Governments can improve the climate for innovation in many ways. To begin, innovativeness can be made a criterion for competitive bidding associated with public procurement. Markets for social solutions can also be developed further to include outcome-based funding models and greater competition and contestability. Decentralization can also give communities greater freedom to shape their own solutions. Innovation units can be set up in government agencies to coordinate pioneers, encourage new ideas, and promote faster learning. Laboratories can test ideas with the close involvement of users. Technology labs can focus specifically on mining mature or near-mature technologies for social potential.

• **Dedicated Social Innovation Accelerators.** New ideas must be given time to incubate in a protected environment that provides support, advice, and the freedom to evolve. A related approach is to develop accelerators that emphasize scaleable innovations in particular sectors. These accelerators can provide development funding, rapidly test out new ideas in practice, allow fast learning across a community of social innovators, and establish clear pathways for scaling up the most promising models.

• **National and Cross-National Innovation Pools.** Many of the social problems that communities around the world face are not unique. Cross-national innovation pools can gather groups of interested governments or foundations from several countries for an aligned innovation process.

• **Research to Enhance Learning.** The world needs much more extensive, rigorous, imaginative, and historically aware research on social innovation. Alongside greater conceptual clarity and common definitions, this calls for more case studies and better analysis of success factors and inhibitors at each stage of the innovation process. Research can also investigate better links with adjacent disciplines working on private sector innovation and science, public sector improvement, and civil society. There are also opportunities for researching some specifics of social innovation, for instance, which styles of philanthropy achieve the greatest long-term impact, how corporate social responsibility systems can best contribute to scaleable and replicable models, and where Internet-based business models can address social challenges.

![Figure: “How-To” for Social Innovation](http://www.youngfoundation.org/our-work/research/themes/advancing-innovation/methods/how-social-innovation)
Box: Are We There Yet? Private Financial Organizations Struggle to Find Green Solutions

Presumably, the creation of sustainable livelihoods is a topic that private financial service organizations know something about. So, excitement ran high when the United Nations Environment Programme discussed the environmental implications of globalization with several of them in Frankfurt in November 2000.

To be sure, a few saw that financial service organizations can encourage sustainable development. The market-based opportunities and challenges that one speaker identified include ethical or green funds, green securities, tradable permits, and mixed instruments such as environmental bonds. The knowledge-based openings that he made out could be voluntary agreements, certification, reporting, and disclosure of information. Another explained the workings of the Nikko Eco Fund (which invests in companies that excel in environmental conservation). But most highlighted the direct, indirect, and image risks associated with environmentally sensitive projects. Except for one speaker who reminded the audience that 1.3 billion people live on less than $1 a day, they contemplated only emerging markets.

Predictably, then, few new business models were outlined. One participant (from the United Nations Environment Programme) made clear the potential of cleaner production financing in terms of cost reduction (materials, energy, waste treatment), business upgrading (improved quality and competitiveness of green processes, products, services), and risk reduction (inherent to cleaner production). Even so, he recognized constraints, of which the small sizes of investments. (Others are the absence of business incentives, the lack of ability of the private sector to prepare creditworthy proposals, the longer payback period of such investments, undervaluation of environmental risks, and the fact that financial organizations often do not see the technical and financial merits of investment proposals.) One session on environmental management and reporting guidelines for the financial services sector also came unstuck. A panelist explained the endeavors of the Global Reporting Initiative. But subsequent talks described separate attempts to develop a common reporting framework at the national level, and in isolation from the global initiative.

Yet the relationship between companies and the environment in which they operate is more and more important, and senior managers recognize increasingly that companies have a responsibility not only to shareholders but also to other stakeholders. Environmental (and social) accounting could embed these responsibilities. But despite its topicality, the United Nations Environment Programme’s roundtable did little to advance knowledge and much remains to be done before a practical framework for action comes about.

The emphasis that several speakers placed on image risks is not encouraging. So, those who lament aid fatigue will take comfort in the fact that most examples provided on smart environmental lending were drawn from multilateral development banks such as ADB. This suggests that they could help the financial services sector of their developing members to incorporate environmental considerations in their activities, and share their practical experiences of environment-friendly lending. And there surely exists potential for cleaner production financing—the hidden cost of waste is far greater than the cost of its treatment and disposal (counting compliance with regulations, wasteful use of raw materials, energy, and labor, tarnished images, and liability). For this reason, constraints on cleaner production financing ought not to be insurmountable, and development banks could mitigate them by means of credit lines, trust funds, policy dialogue, and training.

But the growing number of initiatives on environmental reporting, which use very different reporting frameworks, is cause for worry. It could set off a race to the top and spawn restrictive trade practices. What is more, the applicability in developing countries of the frameworks advertised is debatable. Should environmental reporting allow for regional variations? If this is not the case, how should the drafting process for global guidelines proceed?

Further Reading

For further information
Contact Olivier Serrat, Head of the Knowledge Management Center, Regional and Sustainable Development Department, Asian Development Bank (oserrat@adb.org).

Asian Development Bank
ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to two thirds of the world’s poor: 1.8 billion people who live on less than $2 a day, with 903 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration. Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Knowledge Solutions are handy, quick reference guides to tools, methods, and approaches that propel development forward and enhance its effects. They are offered as resources to ADB staff. They may also appeal to the development community and people having interest in knowledge and learning.

The views expressed in this publication are those of the author(s) and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent. ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

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