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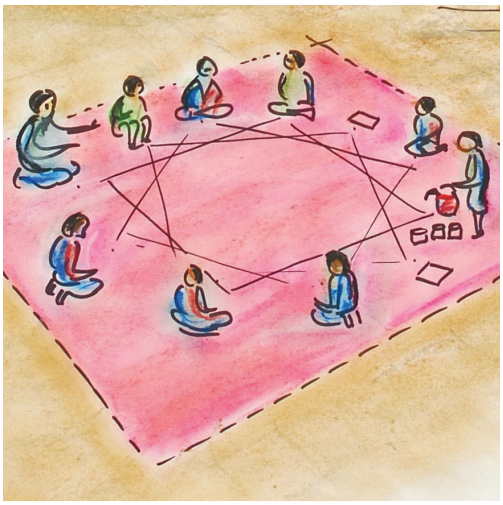

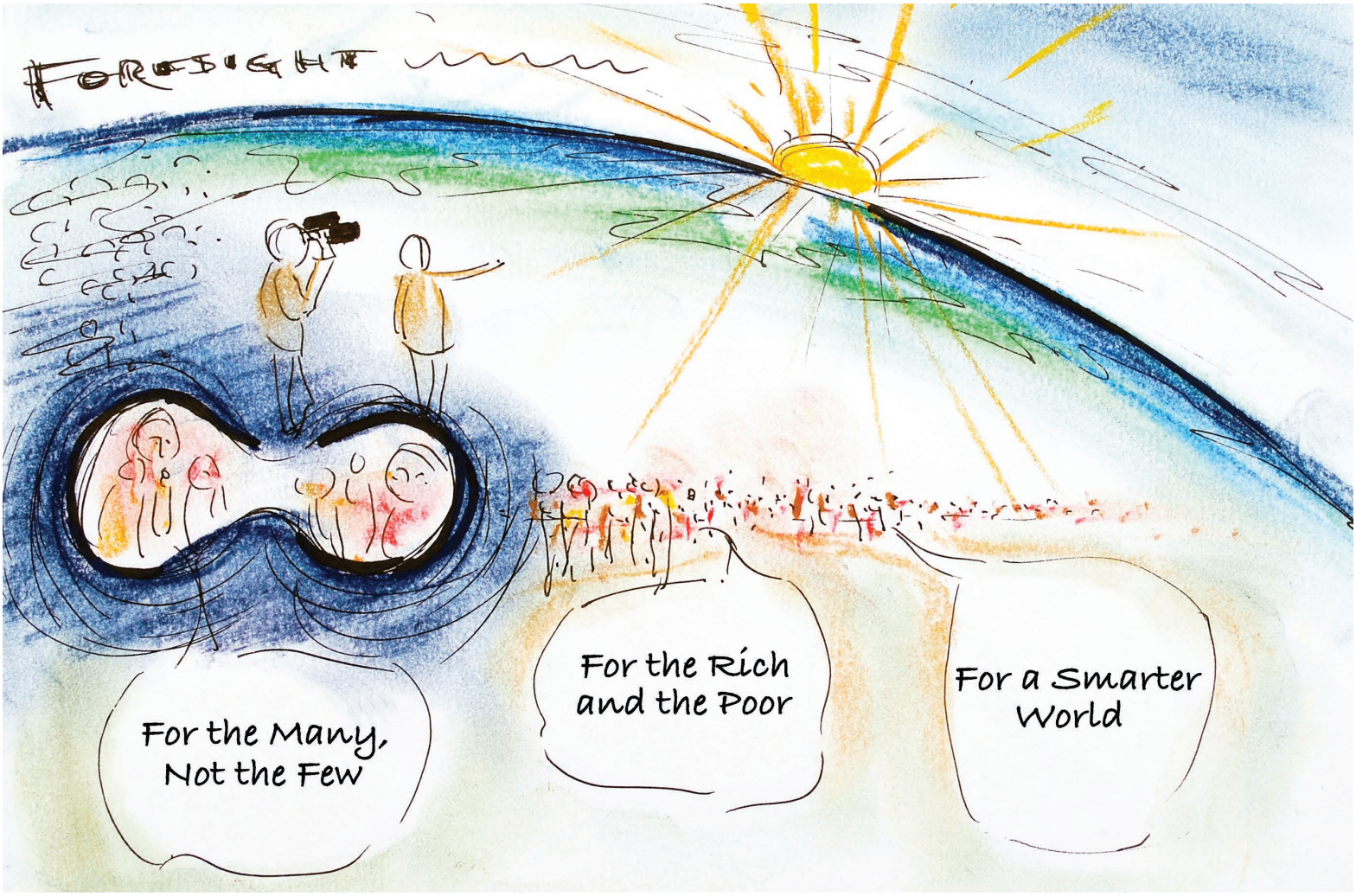

FORESIGHT FOR SMART GLOBALIZATION:

ACCELERATING & ENHANCING PRO-POOR DEVELOPMENT OPPORTUNITIES

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WORKSHOP REPORT

MARCH 16-20, 2009
THE ROCKEFELLER FOUNDATION BELLAGIO CENTER
BELLAGIO, ITALY

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THE ROCKEFELLER FOUNDATION

OCTOBER 2009

THE WORKSHOP AND REPORT WERE SUPPORTED BY THE ROCKEFELLER FOUNDATION

Contents

Preface

In March 2009, we co-chaired a diverse international gathering of experts and practitioners at the Rockefeller Foundation Bellagio Center in Italy, with a focus on applying foresight thinking to address global poverty. Drawing deeply from knowledge in several domains—energy and climate change, science and technology, and economic governance—the workshop yielded a variety of powerful ideas, images, and conclusions. The enthusiasm and intensity with which participants grappled with complex global issues was inspirational for all involved. Participants challenged each other to move beyond linear thinking and to adopt a more holistic, integrated approach to addressing some of the world's most vexing problems. In the process, the group collectively demonstrated a passion for thinking deeply about interlocking global issues over the coming decades, and for illuminating the key trade-offs and decisions needed to improve the lives of poor and vulnerable people in the future.

It became abundantly clear that for participants from both the developed and developing world, foresight is not merely a technical abstraction, but a very courageous statement about the possibility of shaping the future in the presence of many grave difficulties. It was also striking to discover that this group, comprised of people from Africa, Asia, Europe, South America, and the United States—who had previously done little or no work together—coalesced around the notion that faulty governance is the single greatest impediment to the advancement of the well-being of the world's poorest, and that the possibility of wiser, anticipatory governance is real, though difficult and distant.

Of primary importance was the crystallization of the pro-poor foresight concept, a framing architecture for the workshop. There was a powerful resonance with this idea, leading us to believe that it has the potential to establish a durable and vigorous community of forward-looking doers and thinkers who are ready to pursue and explore the notion of pro-poor foresight not just as theory, but as practice.

With a true shattering of old forms underway, it is clear that now, more than ever, pro-poor foresight is critical to transforming our collective future. We hope that this report will help to launch such a discussion, convey the power of foresight for development decision-making, and encourage others to pursue robust and resilient solutions to the scourge of global poverty.

As the participants reflect in the synthesis statement at the report's end, one need only consider the interconnected shocks caused by the current global recession to realize that we are "in the midst of a unique, critical period characterized by multiple and severe flaws in existing paradigms, and deep uncertainty about the consequences of present choice on future outcomes."

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Executive Summary

Pro-poor foresight is forward-looking analysis that focuses on poor and marginalized people by expanding their social and economic opportunities and by enhancing the social, economic, and ecological resilience of human society. Yet foresight, as generally applied within government, industry, and the non-governmental sector, rarely includes an explicit focus on poverty. While foresight exercises typically take into account the impact of long-term political, economic, social, and technological trends, the differential implications of these factors for the lives of poor people tend not to be addressed. Poor communities, however, will be disproportionately affected by the myriad and intractable problems of the 21st century, including climate change disasters, weak governance systems, financial crises, security threats, and societal disruptions.

The application of pro-poor foresight for envisioning the future of human development is crucial for ensuring long-term prosperity and sustainability. This realization was the guiding and motivating force behind a workshop organized by the Institute for Alternative Futures (IAF), with support from the Rockefeller Foundation. The workshop, "Foresight for Smart Globalization: Accelerating & Enhancing Pro-Poor Development Opportunities," was held from March 16-20, 2009 at the Rockefeller Foundation Bellagio Center in Italy.

By the end of the workshop, the dialogue had produced several key findings that illuminated the value of foresight in the developing world, including:

- Foresight can provide an important set of silo-busting tools to provide a systematic view of the increased complexity of our globalized world.
- Foresight can provide decision-makers from both developed and developing countries with a valuable "safe space" to rehearse and test decisions that address deep uncertainties.
- Foresight can provide a valuable way to connect the "grassroots to the grasstops" by communicating with the public around an important issue and to solicit feedback and opinions.
- Foresight is most critical in addressing the problems of weak and impoverished nations.

The report explores three main ideas at the heart of the workshop: pro-poor foresight, anticipatory governance, and smart globalization. It also summarizes the real-world experience of participants in conducting foresight in different geographical regions and the barriers faced in applying foresight for decision-making. Subsequently, it describes three interlocking issues—energy and climate change, science and technology, and economic governance—that were discussed in tandem at the workshop.

In conclusion, pro-poor foresight provides an opportunity to approach the problems of developing countries in the Global South in a unique, interconnected, and more effective manner. Pro-poor foresight can catalyze insight in the minds of communities and decision-makers, forge new paths for action, and lead to understanding and embracing complexity. In short, it serves as a survival tool through which we, as individuals, as communities, and as a species can escape the bounds of present circumstances and achieve a measure of freedom of choice about our destinies.

1. Introduction

In assessing the practice of foresight as generally applied within government, industry, and the non-governmental sector, an important gap quickly becomes apparent: poverty is rarely included as an explicit issue for consideration. While foresight exercises typically take into account the impact of long-term political, economic, social, and technological trends, the differential implications of these factors for the lives of poor people tend not to be substantively addressed.

Historically, foresight has been used by a range of global stakeholders, including policy-makers, corporations, and local communities, to better anticipate future challenges and to identify risks, opportunities, and new solutions to complex problems. However, adopting an approach to foresight that clearly and unambiguously takes into account issues related to poverty has been lacking and has become all the more pressing given that poor communities will be disproportionately affected by the myriad and intractable problems of the 21st century, including climate change disasters, weak governance systems, financial crises, security threats, and societal disruptions. Unfortunately, this lack of foresight focused on poverty, from both the Global South and the Global North, has either allowed these issues to remain problematic or, even worse, has contributed to their severity.

This central concern—that the application of foresight for envisioning the future of human development is a necessity in order to achieve large-scale societal change—was the guiding and motivating force behind a workshop organized by the Institute for Alternative Futures (IAF), with support from the Rockefeller Foundation. This workshop, entitled "Foresight for Smart Globalization: Accelerating & Enhancing Pro-Poor Development Opportunities," was held from March 16-20, 2009 at the Rockefeller Foundation Bellagio Center in northern Italy. The workshop was co-chaired by Leon Fuerth—Founder and Director of the Project on Forward Engagement, Research Professor at The George Washington University, and former National Security Adviser to Vice President Al Gore—and David Jhirad, Special Advisor for Energy and Climate Change at the Rockefeller Foundation.

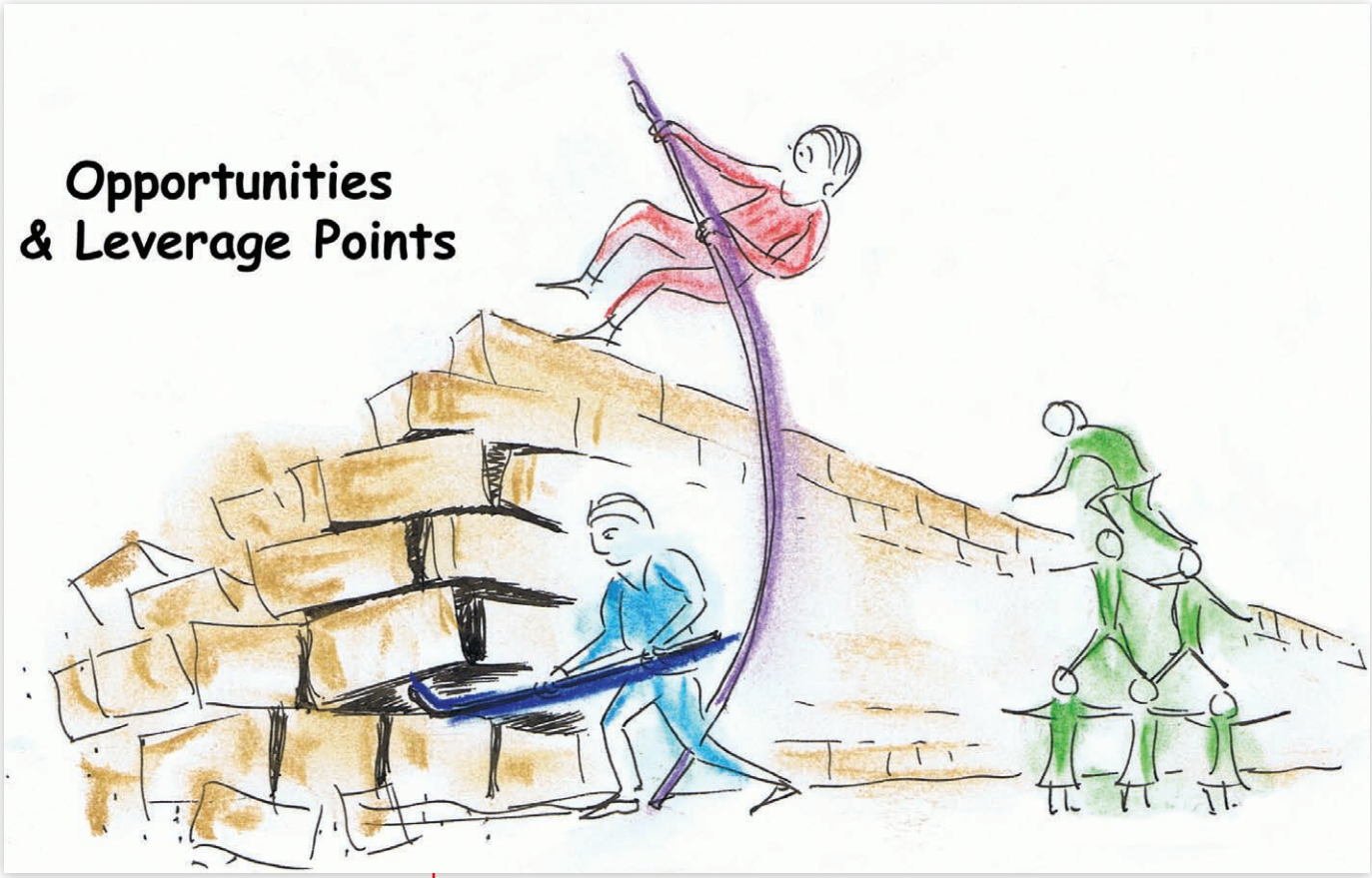
THE FULL BACKGROUND PAPER BY DAVID JHIRAD, CLAUDIA JUECH, AND EVAN MICHELSON, *FORESIGHT FOR SMART GLOBALIZATION*, IS AVAILABLE AT:
www.altfutures.com/pro_poor_foresight

The workshop participants came from a diverse set of geographic and disciplinary backgrounds, as they mixed experience and expertise in both foresight and knowledge-specific areas, ranging from energy, climate change, science and technology, and economic governance to scenario building, forecasting, trend monitoring, and policy analysis.

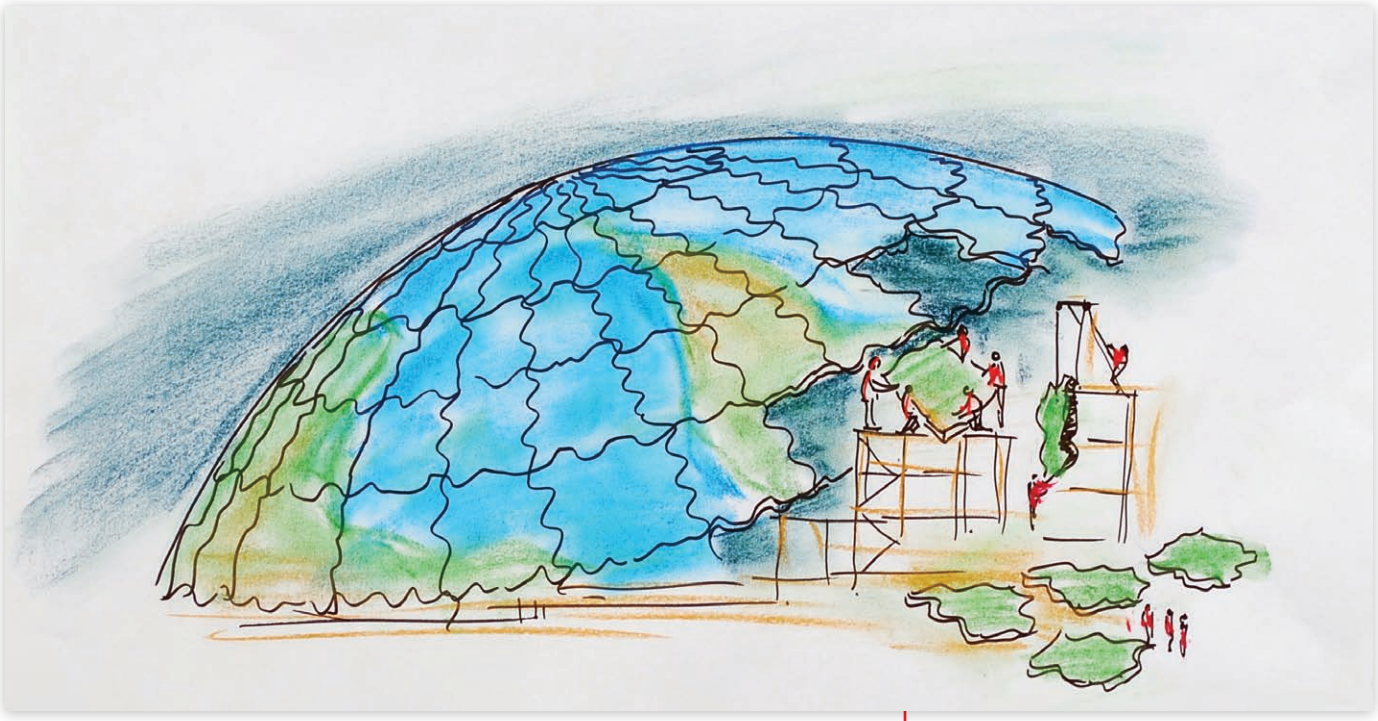
The backdrop to the workshop involved the idea of "smart globalization," which aims to bring innovations into action by benefiting more people, more fully, and in more places. Around the world, globalization has helped people reap the positive benefits of revolutionary advances in health, medicine, and profound progress in physical and social sciences. In the last three decades, illiteracy worldwide has dropped by half. Eighty percent of the world's population lives in countries where poverty is declining.

Not everyone's lives, though, are improving fast enough, nor are they improving equitably. Half of the people on earth subsist on less than two dollars a day. A billion people live in abject poverty, with neither running water nor enough to eat. Ten million children succumb to preventable or treatable diseases every year. Climate change and environmental degradation pose the greatest dangers to the communities least prepared to weather them.

> This is an extraordinary opportunity to see how the future is brought to the present. In the end, it is the long-term quality of choices and decisions that justifies what we do. Foresight has become a necessity to make poverty a distant memory.



THE WORKSHOP PARTICIPANTS UNDERTOOK A PROCESS TO IDENTIFY OPPORTUNITIES AND LEVERAGE POINTS FOR PRO-POOR FORESIGHT.



SMART GLOBALIZATION REQUIRES PUTTING TOGETHER THE PIECES AS A JOINT EFFORT ON A GLOBAL SCALE.

Globalization has also caused the long-term and the short-term to become inextricably bonded. Recent events have highlighted these ever-tightening links of the past, present, and future.

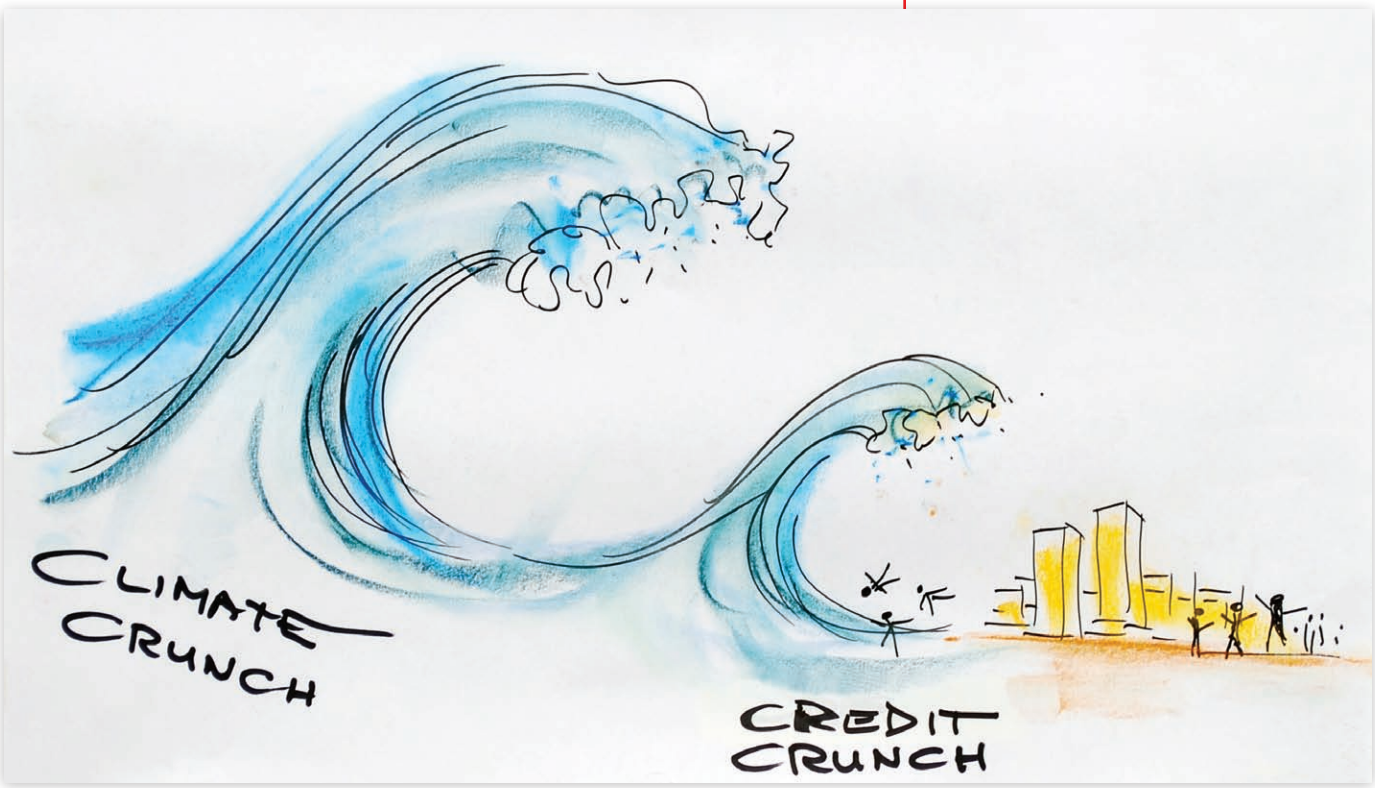
Globalization has also caused the long-term and the short-term to become inextricably bonded. Recent events have highlighted these ever-tightening links among the past, present, and future. A financial crisis rooted in decades-old economic policies quickly spreads globally and hinders the ability of nations in Sub-Saharan Africa and Southeast Asia to emerge from poverty. A global food crisis with the potential to undo years of development work leads to a doubling or tripling of the price of agricultural inputs in a few short weeks and portends higher food costs for years to come. Climate change threatens the livelihoods of the poor, raises the risk of increased environmental migration, and poses additional health threats to populations living in vulnerable areas of urban slums and coastal cities.

Only if we are intelligent, inventive, and socially conscious—only if we work together—can we harness globalization to develop and spread sustainable solutions to these challenges. This is "smart globalization:" connecting individuals, institutions, and communities with tools and techniques, ideas and innovations to build better futures.

By convening a group of high-level experts to explore opportunities for implementing foresight focused on pro-poor solutions in the Global South, the workshop aimed to achieve three major goals:

- Highlight the rationale and practice of pro-poor foresight in accelerating and enhancing "smart globalization."
- Gain a better understanding of foresight in relation to a set of key issues that are relevant to the Global South.
- Convene and create network-building opportunities for a burgeoning community of practitioners concerned with advancing foresight for development.

WORKSHOP PARTICIPANTS CLEARLY SAW THE IMPORTANCE OF FORESIGHT IN ANTICIPATING CURRENT TRENDS THAT WILL SWAMP THE GLOBAL SOUTH. AS ONE PARTICIPANT NOTED, "THE WAVE YOU SEE IS NOT THE ONLY WAVE YOU GET."



The following report looks at some of the connections between the worlds of foresight and development. The next section explores the workshop's overarching themes of pro-poor foresight and anticipatory governance, followed by a section discussing the opportunities and barriers for implementing pro-poor foresight. The three interlocking issues—energy and climate change, science and technology, and economic governance—that served as the substantive topics of discussion are presented in Section 4. The conclusion includes a collaborative synthesis statement achieved by the end of the workshop and reflects a series of next steps suggested by the participants.

Integrated throughout the report are descriptions of the real-world experience of participants in conducting foresight in different geographical regions and in connecting foresight to decision-makers. The report also highlights several key findings that illuminate the value of foresight in the developing world, along with providing links to the full background papers that were prepared in advance of the workshop. These conclusions serve to highlight the various benefits for the foresight, development, and policy communities in adopting a forward-looking mindset in addressing the future of poverty and globalization.

Included in this report are images of foresight or concepts related to foresight. These were developed by Joe Ravetz—an author, foresight practitioner, and graphic facilitator—during the meeting in conjunction with participants to record and visualize the ideas that emerged over the course of the workshop.

2. Pro-Poor Foresight and Anticipatory Governance

Throughout the meeting, the participants discussed the nature of foresight and its role in fostering smart globalization and pro-poor development.

In advance of the workshop, this notion of pro-poor foresight was initially defined as focusing on poor and marginalized people by:

- Expanding their social and economic opportunities;
- Enhancing the social, economic, and ecological resilience of human society; and
- Strengthening the capacity for anticipatory governance to address how global and regional trends, forecasts, shocks, and disasters affect poor communities.
- Pro-poor foresight, therefore, is foresight that is for the benefit of, with, and by, poor people.

FOR THE POOR:

Unlike much of the current body of foresight work, pro-poor foresight consciously makes poor people part of the analysis. It is important to note that defining poverty is relative to a particular geographical or socio-economic context. For example, the poverty line, as defined by per capita income, would be very different in the United States as compared to South Africa. However poverty is defined, pro-poor foresight includes the most marginalized and powerless members of a community in its analysis of the future.

This pro-poor focus of foresight is particularly important to build into the foresight work of national governments, futures groups, and corporations. There should also be futures work focused directly on poverty and its elimination. Pro-poor foresight argues that poor people should be routinely considered in the forecasts and scenarios of foresight.

WITH AND BY THE POOR:

Poor people can and should be integrated into foresight processes. Scenarios, for example, can take into account the insights and reactions of poor people in order to create more realistic, gripping, and innovative narratives. As foresight moves to considering preferred futures or shared visions, and goals to achieve these outcomes, poor communities should definitely take part in developing scenarios, visions and other futures products which directly affect them.

There are also techniques that can be used to engage poor people, such as focus groups, the "future workshops" developed by Robert Jungk, and others. One of the goals of the professional foresight community should be to build up the library of these techniques and ensure that they are available to others in the field.

KEY FINDING:

Foresight can provide decision-makers from both developed and developing countries with a valuable "safe space" to rehearse and test decisions that address deep uncertainties. For example, simulations allow leaders to try out decisions and think through potential impacts of their actions.

Pro-poor foresight, when done well, can be a powerful tool for various stakeholder groups. For example:

- Government ministries in many countries, particularly in the Global South, seldom have the capacity or the authority to think outside the narrowly defined silos of their ministry. Foresight provides a powerful set of tools for looking at crosscutting issues.
- The global development community and Western aid agencies can benefit from a broad look at issues and the impact of actions across interest areas. This is a different mindset from that of many organizations, which only focus narrowly on a single issue area.
- Communities are rarely empowered to envision, and to create, better futures. Pro-poor foresight tools can be used effectively to help communities build powerful shared visions.

"Foresight is the capacity to imagine different futures…Foresight is not the end; it is the beginning. Next we need anticipatory governance. This means we need to make wiser decisions and build in the feedback loops to adapt our policies. We need to both look forward and understand sideways what is going on. Foresight is essentially a survival skill that humans have. It blends an understanding of the past with prescience." – Leon Fuerth

Leon Fuerth opened the workshop by discussing the question of "why foresight?" and connected the idea of pro-poor foresight with the notion of "anticipatory governance." He noted that foresight is an undervalued, but vital, part of governance. Foresight is the capacity to anticipate alternative futures and visualize their consequences in the form of multiple outcomes. It allows people to visualize, rehearse, and refine in the mind actions that would otherwise have to be tested in reality or where the consequences of error are irrevocable.

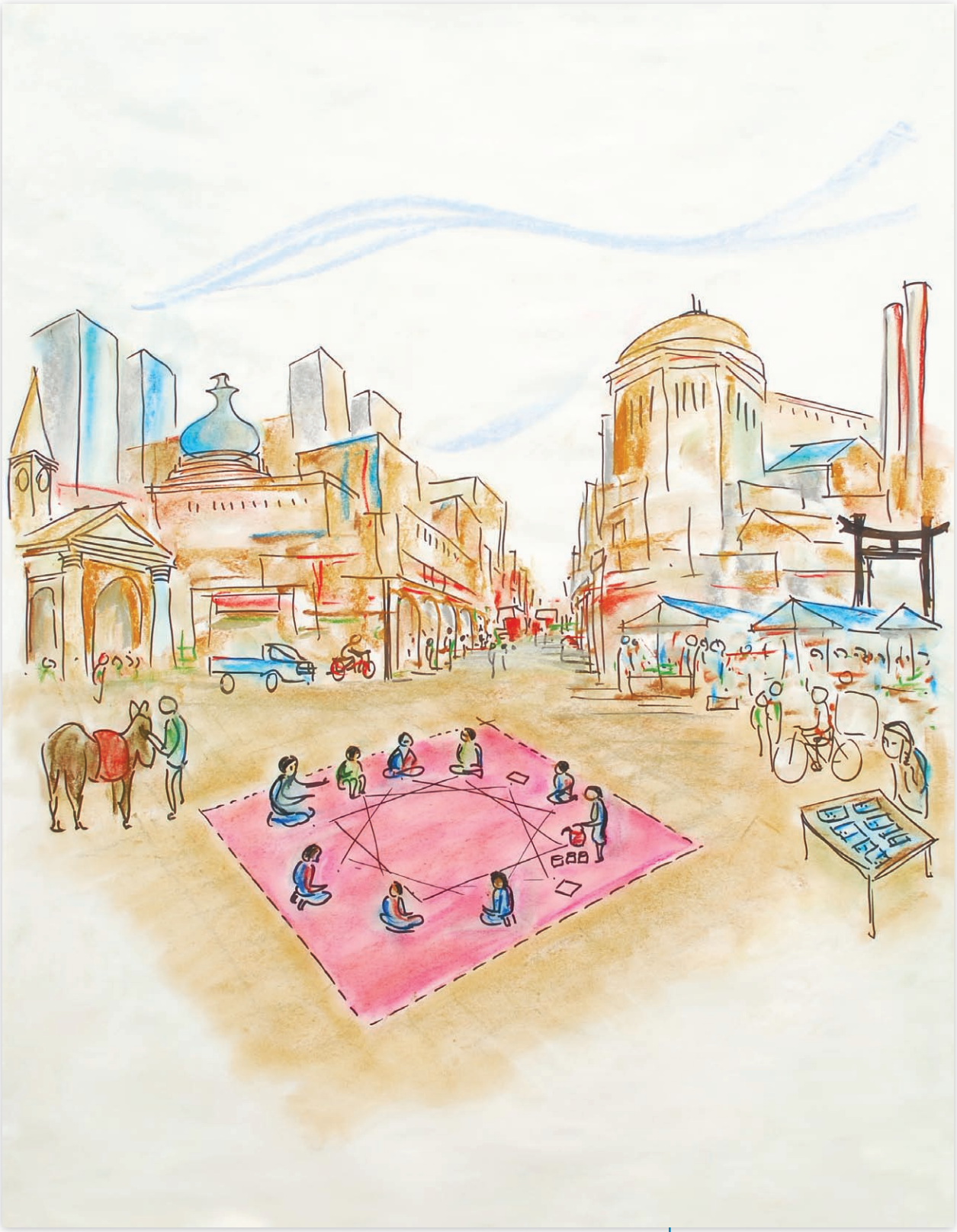
Foresight analysis has much to offer both the developed and the developing world. However, the field of foresight analysis, though vigorous, is not well recognized as a discipline, and foresight specialists are not routinely incorporated into policy-making systems and therefore have little impact on the decision-making process or the thinking of policy-makers.

THE FULL BACKGROUND PAPER BY LEON FUERTH, *FORESIGHT AND ANTICIPATORY GOVERNANCE*, IS AVAILABLE AT: www.forwardengagement.org/lecturesandwritings

FORESIGHT IN SUB-SAHARAN AFRICA

The extent of foresight development and use in the Sub-Saharan African region has been most significant in South Africa, which has a long, but mixed, history of using foresight. One of the most famous cases arose in the 1990s in the form of the Mont Fleur Scenarios. These scenarios were used prior to the first open elections in 1994 and devised four narratives focused on the "we" of South Africa as a state. The scenarios analyzed the key choices facing South Africa, particularly the dismantling of apartheid and the nature of the political settlements and economic policies that would follow.

While the shared economic transition envisioned in this exercise has not occurred fully, there has been vibrant foresight work in South Africa in the both the private and public sector, although it is not clear whether these activities have had a major impact on decision makers. Typically, the public does not demand participation in foresight processes, or it is otherwise overlooked. Other countries in Sub-Saharan Africa face similar difficulties in promoting and using foresight. In some nations, there is only the shadow of representative government, and such governments remain functionally irrelevant to the lives of the people. Some participants adamantly believed that foresight can be used to demonstrate the impact of this irrelevance and prompt them to make a difference.



IN THE FACE OF APPARENTLY INSURMOUNTABLE PRESSURES, THERE ARE EMERGING OPPORTUNITIES FOR UNDERTAKING FORESIGHT ACTIVITIES FOR, WITH, AND BY POOR COMMUNITIES.

FORESIGHT IN SOUTHEAST ASIA:

One of the more interesting examples of effective foresight in Southeast Asia came from the small, but prosperous, Republic of Singapore. Foresight has been an integral part of Singapore's culture and functioning since it was founded in the 1960s. Early use of scenario planning was able to capture the attention of key policy-makers and the foresight community was able to build on that success to make scenarios an integral part of policy-making for key decisions.

Foresight and effective leadership have enabled Singapore to address some major problems early in its history. Securing sustainable sources of water from Malaysia, Singapore's larger neighbor, and setting rules for low income housing are two prime examples. Forward-looking thinking enabled Singapore to deal with these issues early, when the costs were lower. If Singapore had not dealt with them at this stage, many of its response options would be more expensive at a later date, and other solutions would not now exist.

However, Singapore represents a unique case that may not be applicable to many countries in the region. Singapore is a small country, to the point that problems quickly become collectivized and need to be addressed at the communal level. In turn, Singapore must try to anticipate and react before problems arise. The leadership, and its vision for the country, has been critical in seizing opportunities and avoiding threats.

In response to the non-linear events of recent years—from the terrorist attacks of September 11th in 2001 and the outbreak of SARS in 2004—Singapore has worked to increase its horizon scanning capability, particularly in scanning for weak signals that could become sudden shocks. Moving forward, it is also in the process of setting up a Center for Strategic Futures. Singapore's foresight work is currently benefiting from some specific areas of focus, including:

- Cognitive studies that illustrate how normal cognition and experience can blind us to signals and cues.
- Complexity theory, which shows that small forces can have big outcomes.
- Using scenarios to gain agreement, not on the details of the scenarios themselves, but on consensus about risks and opportunities in the face of scenarios.
- Identifying strategies that are robust across multiple scenarios.

Governance is often practiced without consideration of the longer-term implications of decisions. It is slow to detect defects in policy and inattentive to better, alternative options. This reactive approach might be viewed fatalistically as the cost of doing business in the real world—a world of unintended consequences that humble our grand plans. Yet it is precisely in that real world where the costs of "business as usual" are becoming insupportable at a frightening rate of speed.

Current world conditions necessitate anticipatory governance that combines a robust foresight system with other systems for integrating foresight into the policy process. Fuerth describes this process of anticipatory governance as a system of systems, involving four basic components: (1) a foresight system; (2) a networked system for integrating foresight and the policy process; (3) a feedback system to gauge performance and also to manage "institutional" knowledge; and (4) an open-minded institutional culture. Feedback systems for gauging the performance of policies and for facilitating the building and exchange of institutional knowledge are particularly important to ensure that anticipatory governance operates effectively.

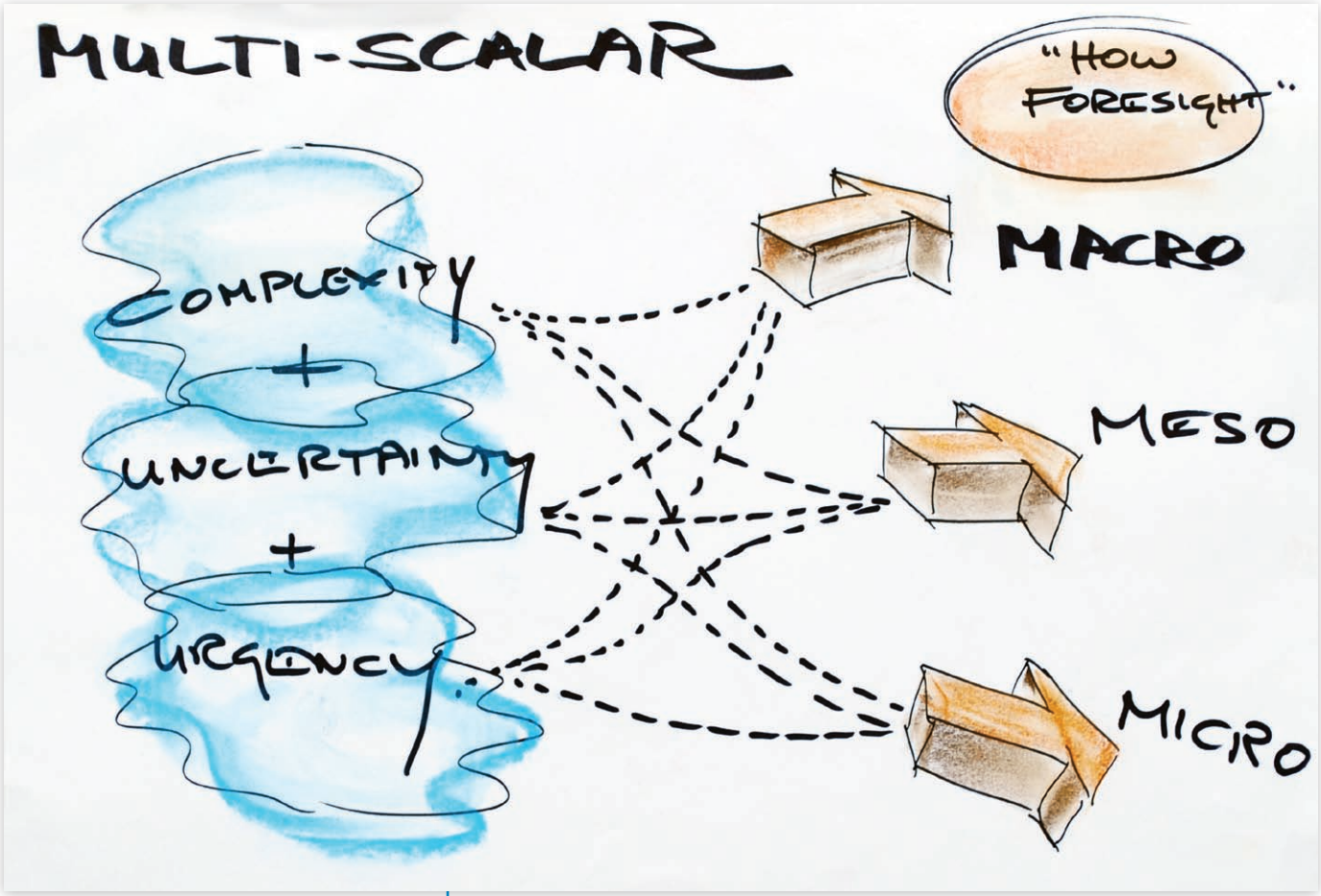
There is a particularly acute need for anticipatory governance in the Global South, where margins for error are narrow to begin with and which are certain to be further compressed by oncoming complex issues. Therefore, the window available to help improve the lives of the poor is shrinking rapidly. For instance, the recent economic collapse is the worst since the Great Depression and will affect the Global South even more deeply than elsewhere. The failure to achieve the United Nations Millennium Development Goals leaves many poor and vulnerable people facing hardship. The consequences of climate change and the environmental crisis will have the worst impacts on poor people, and over the next ten years there will be climate effects that cannot be reversed.

KEY FINDING:

Foresight can provide an important set of silo-busting tools to address a systematic view of the increased complexity of our globalized world. For instance, scenarios and forecasts can illuminate future conditions, allowing leaders in government, business and civil society to identify potential challenges and opportunities.

Anticipatory governance appreciates that the present is only a thin membrane between past history and future possibility.

Fuerth emphasized that the problems with which governance must now contend are no longer merely complicated, but complex. This means that problems are non-linear by nature, and that their interaction with policies leads to a progression of surprises. Failure to adapt governance to this fact of life exposes us to a series of costly errors, the effects of which become magnified and multiplied at every scale, from the communal to the global. Foresight, in the form of anticipatory governance, is therefore a survival tool by means of which we, as individuals, communities, and a species can escape the bounds of present circumstances, and achieve a measure of freedom of choice about our destinies.



COMPLEXITY, UNCERTAINTY, AND URGENCY CAN LEAD TO CHALLENGES AND OPPORTUNITIES AT THE MICRO-SCALE, MESO-SCALE, AND MACRO-SCALE.

WORKSHOP PARTICIPANTS VIEWED FORESIGHT AS A TOOL FOR RICH AND POOR ALIKE TO SEE BEYOND LOCAL BOUNDARIES AND LIMITATIONS, OR THE BOUNDARIES OF OUR LOCAL VALLEYS.

3. Opportunities and Barriers for Implementing Pro-Poor Foresight

Many participants pointed out that the prime value of foresight is in catalyzing new insights in the minds of communities and decision-makers and serving as an integral part of the policy process, which it can both inform and enhance. They noted that foresight is not only a product, but also a process that enriches those involved in the activity. For instance, leaders who engage in the process of creating scenarios often have a better understanding of how their decisions affect the whole and a greater appreciation of the consequences of their decisions.

In addition, participants emphasized that to advance foresight, several factors need to be in place. For instance, capacity building is of the utmost importance but remains hard to measure. Participants noted that a major benefit of previously funded foresight work in Sub-Saharan Africa was building such human capacity through training programs, although the lack of explicit measures of benefit led to the closing of these programs over time.

Fuerth's idea that pro-poor foresight needs to explicitly enable systems thinking and help deal with complexity was also a key aspect of the discussion. For example, the United Kingdom Foresight Programme adopted a systems thinking approach while addressing the issue of health care, helping ministers realize that there were no simple fixes and that there was an advantage and leadership in demonstrating the complexity of problems. One result was the development in the United Kingdom of public service agreements that have targets shared by different agencies, with buy-in from high-level civil servants.

The involvement of government leadership, and foresight champions, was a key theme across many of the successful foresight projects in which the participants were involved. In addition, participants stressed that creating involvement from leadership is one of the most difficult, but often one of the most important aspects of a successful foresight process. A key take-away from the workshop was the importance of involving policy-makers early in their careers and getting them to demand foresight as part of their regular decision-making practice.

Through a collective effort, foresight activities in these varied contexts have been found to address the interests of a marginalized, dispossessed people. These activities can help move participants into a "safe-space" to explore topics in a more honest way than was previously possible. It can also be one of the few ways to address taboo issues and build legitimacy for unpopular, but necessary, actions.

The collective nature of foresight as a process lends itself to procedural fairness when those involved in foresight are representative of the larger whole. This point is particularly salient in regards to pro-poor foresight, which needs to be an open, inclusive process that seeks a diverse array of input. A foresight process that is seen as closed, or partisan, will become a barrier to widespread adoption and use. Throughout the workshop, participants built-up this notion by developing the concept of foresight that goes from the "grassroots to the grasstops." These participants emphasized the importance of foresight as a tool for connecting with the grassroots, communicating the significance of future issues, and providing a voice to the voiceless.

It was also apparent that leaders in the private sector in the Global South can serve as a valuable partner for pro-poor foresight activities. For example, in South Africa, larger businesses understand the value of foresight and incorporate foresight into their strategic planning. Corporations are becoming much more aware of the importance of the triple bottom line (i.e., economic, ecological and social) and thus are becoming important partners in addressing pressing social problems.

FORESIGHT IN THE UNITED KINGDOM

Among developed nations, the United Kingdom has one of the most well-developed foresight mechanisms. The United Kingdom Foresight Programme, the government-wide foresight unit for the country, is housed in the Government Office for Science. This effort has evolved a set of approaches to make foresight useable across agencies and attractive for obtaining ministerial buy-in. It serves all departments both in its coaching on foresight and in the reports and analysis it develops. While a pro-poor focus is implicit in some of the analysis from the Foresight Programme (for example, its work related to infectious disease), such a framework is not included for all projects.

The Foresight Programme also conducts cross-cutting foresight analysis that affects multiple agencies. Each of the large projects is sponsored by a Cabinet-level minister who is responsible for determining how the work is used. The projects include evidence from multiple sources and perspectives, which is valuable in creating buy-in from policy-makers. The Foresight Programme's Horizon Scanning Centre also conducts smaller horizon scanning projects for a wide range of government departments and agencies. Findings from the Foresight Programme's activities can be used to develop operational strategies, even though the unit does not make policy recommendations. An important component of each project is the development of a follow-up action plan to achieve impact, and champions in the cabinet and in the media are very important in creating follow-through and disseminating information to the public.

THE ADOPTION OF A PRO-POOR CONCEPTUALIZATION OF FORESIGHT COULD TRANSFORM THE FIELD AND OPEN NEW DIRECTIONS FOR THE APPLICATION OF FORESIGHT IN DIFFERENT CONTEXTS, CULTURES, AND COMMUNITIES.

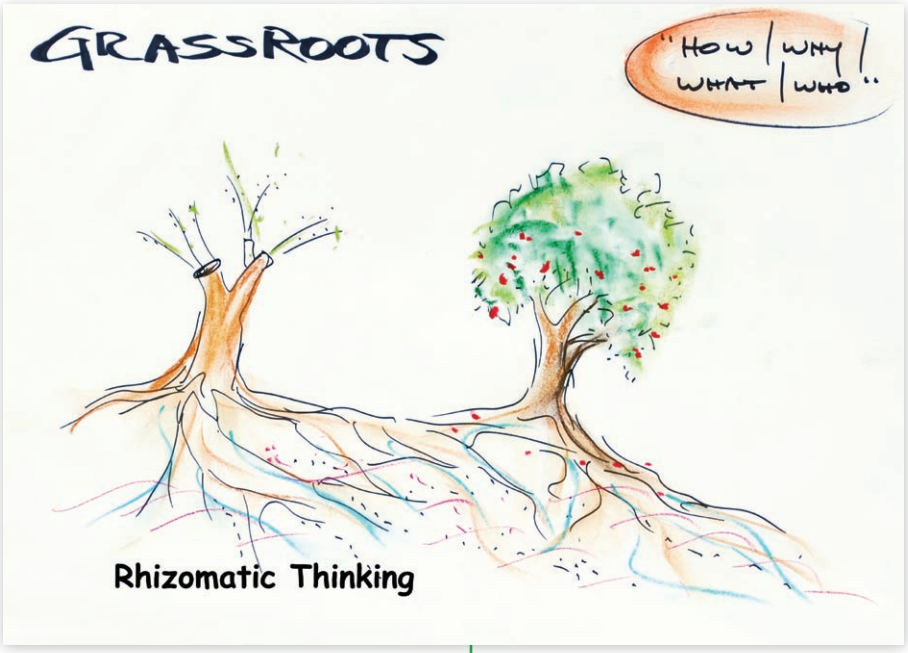
FORESIGHT IN THE UNITED STATES

The United States government has a relatively well-developed foresight focus for national security, and Congress has mandated a review of national security decision-making that has recently broadened its focus to consider issues traditionally outside the scope of national defense.

Foresight in the United States can be complicated because Congress is a critical force. However, the atmosphere for conducting foresight, particularly on domestic issues, has become ideologically and conflict laden, making the practice of foresight more difficult to implement more widely. The lack of foresight on many non-defense issues, such as health care, education, and climate change, has ironically led some of those issues to reach a critical stage to the point that they now threaten aspects of the country's national security. It was noted that part of the problem in doing effective foresight in the United States is that the structure of the current system of governance is fundamentally unable to handle the level of complexity it faces.

KEY FINDING:

Foresight can provide a valuable way to connect the "grassroots to the grasstops" by communicating with the public around an important issue and to solicit feedback and opinions. Public participation in foresight processes offer a structured way for articulating and understanding the complexity of systems through various methods, such as storytelling and collaborative learning, that can release collective creativity, lead to paradigm shifts, and identify new forms of action.



PARTICIPANTS EMPHASIZED THE IMPORTANCE OF FORESIGHT AS A TOOL FOR LINKING LEADERS AT THE TOP AND CITIZENS THROUGHOUT SOCIETY.

However, significant barriers exist for the use of foresight for pro-poor development, both in the use of foresight as a tool for informing policy decisions and as a process for community involvement and engagement.

First, myopia about the present is a significant barrier for foresight work. Foresight is an excellent tool for getting people to think about wider interests and longer-term consequences. However, if people are not physically and emotionally secure, much less at the point of self-actualization, how can they engage the potential challenges of the future? This is particularly pressing where immediate concerns and problems are large and seemingly intractable. A key question emerged: how effective is a conversation on the future if people are worried about feeding, housing, and clothing their children today?

Second, foresight communities, especially professional, consulting futurists, are skewed heavily toward the developed world. Futurists and foresight practitioners from the developing world do not necessarily represent poor people either. Who can represent them in foresight activities, and what are the instruments to involve them and hear their voice?

Third, poor people have their own ways of making their needs known. These ways vary dramatically from community to community. In India, for instance, poor people come out in large numbers to vote. In many places, politicians, nongovernmental organizations, and others claim to know what poor people want. However, foresight, as a collection of targeted tools, has the potential to provide a powerful set of methods to determine what poor people want and make their voices heard—but only if the process is open and collaborative.

Fourth, understanding cultural constraints can be an important factor for the success of foresight. While long-term thinking and consensus building may be more important in some cultures, these characteristics might be less common elsewhere. In some contexts, foresight has to demonstrate practical value to be successful, while in others, storytelling and powerful narratives are necessary features for building credibility, influence, and community cohesion.

A final overarching problem is the intransigence and ineffectiveness of the leadership in many developing countries, which can create an important barrier that hinders efforts directed toward pro-poor development. While pro-poor foresight can be used to show communities and individuals how to make transformative change, leaders can be hostile to forward-looking thinking and view it as an attempt to appropriate constituencies or stir up trouble. For this reason, foresight is seldom done, or can be risky to undertake. Additionally, economic incentives can also provide barriers to those who work to integrate foresight into strategic planning. For instance, in many developing countries, the "resource curse" has led governments to extract as much of the available natural resources as possible during their administration, without planning for the long-term implications.

Similarly, another important and vexing barrier is corruption inside the state. Sometimes there is not political will for change because powerful interests benefit from the current status quo. For example, government ministries and agencies can be threatened by the work that a foresight office or project does and may try to close the office or render it ineffective.

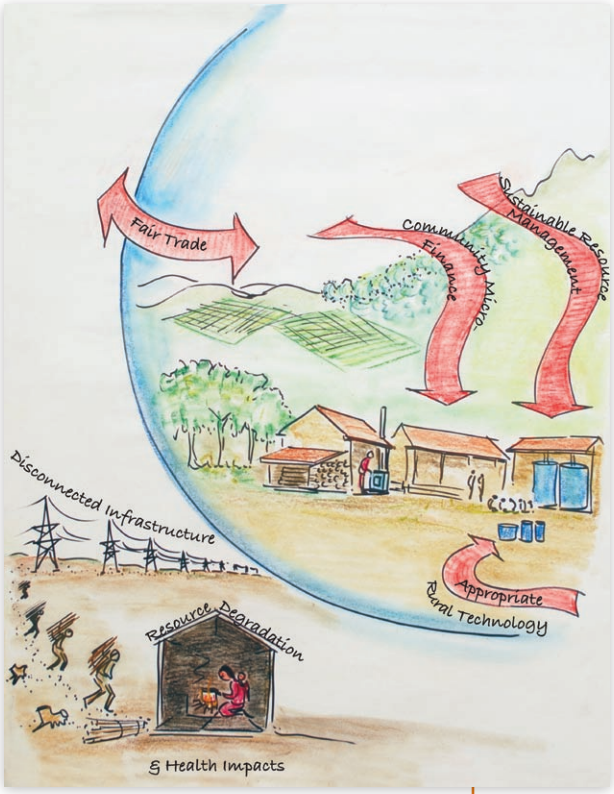
Foresight can also become captured by the political process and become too identified with a particular political party or leadership groups. When foresight activities become connected in the minds of the people with a certain political party, there is the risk that when the party leaves office, the ability to conduct foresight exercises and to have the results influence decision-makers can disappear as well.

Foresight needs to seed the conversation with analysis that helps illuminate common problems and to get leaders to think beyond self-interest. It can help to train people who will have incredible power in different societies to understand the impacts of their decisions, as well as making a contribution to the quality of the conversation that must happen to avoid catastrophe.

THERE ARE BARRIERS AND OPPORTUNITIES TO ADVANCING PRO-POOR FORESIGHT AT THE INTERSECTION OF DISCIPLINES, SUCH AS HEATH, ENERGY, EDUCATION, AND SECURITY.

4. Pro-Poor Foresight in Energy & Climate Change, Science & Technology, and Economic Governance

Pro-poor foresight is needed on a wide range of critical issues. For the workshop, three experts prepared papers on important cross-cutting areas: energy and climate change, science and technology, and economic governance. Each author presented the highlights of the paper, and then participants discussed the interconnecting implications of these findings in small groups and in plenary sessions. The full papers are available online at the Institute for Alternative Futures website at: www.altfutures.com/pro_poor_foresight.



THE CURRENT CLIMATE CHANGE DEBATE IGNORES TWO KEY QUESTIONS FOR THE FUTURE: HOW DO WE REDUCE ENERGY POVERTY? WHAT WILL THE ENERGY NEEDS OF POOR COMMUNITIES BE IN 2030 OR 2050?

PRO-POOR FORESIGHT IN ENERGY & CLIMATE CHANGE

Teresa Malyshev, Senior Energy Analyst at the International Energy Agency (IEA), provided concrete, analytical projections for energy use and climate change. Her analysis clearly shows the lack of sustainability of current global energy consumption—environmentally, economically, and socially. Global usage of oil, coal, and gas is rising fast. Electricity demand is projected to rise significantly due to increased urbanization and modernization in countries such as China and India.

The future of human prosperity depends on how successfully the global community tackles the two central energy challenges facing the world today: securing the supply of reliable and affordable energy and affecting a rapid transformation to a low-carbon, efficient, and environmentally-benign system of energy supply.

Recent forecasts for energy demand indicate usage patterns that are unsustainable. However, it can be argued that even these forecasts are optimistic, because they are based on the assumption of much higher energy prices than prevail today. If prices remain low, observed demand for energy could exceed current projections.

Additionally, these forecasts assume little improvement in the desperate state of energy poverty for the poorest people in the developing world. Today, roughly 2.6 billion people use fuelwood, charcoal, agricultural waste, and animal dung to meet most of their daily energy needs for cooking and heating. More than 4,000 deaths could be prevented every day by eliminating the use of polluting fuels for cooking and heating. In many countries, these resources account for over 90 percent of total household energy consumption.

Women and children are often responsible for fuel collection. In some rural areas of Tanzania, for example, women and children have to travel more than ten kilometers every day to collect fuelwood. Collection of fuel, particularly firewood, limits the educational and work opportunities of children and women, as well as degrading the local environment. Women and very young children spend more time than men inside unvented or poorly ventilated homes that are polluted from the cooking fuel. These groups make up a high percentage of the 4,000 preventable deaths that occur every day from indoor air pollution.

Modern, efficient energy services in developing countries would free up time for more productive activities, improve rural education, and empower women. To provide electricity to all of Africa and supply liquefied petroleum gas (LPG) for cooking would cost only $18 billion, out of a $20 trillion world energy market. Many countries are beginning to understand the importance of clean, indoor energy and heavily subsidize the use of kerosene or LPG. However, the subsidies are often poorly targeted and fail to reach rural households, who are in greatest need of clean energy.

> Climate change will cut across all our work. The damage has already been loaded into the system. The question is, can the damage be reduced now?

During the group discussions, there were other energy solutions proposed by the participants that touched on innovations in realms as diverse as education, communications, agriculture, and water. Some of building blocks for creating a sustainable energy future include:

- An internationally-coordinated "moon shot" effort for renewable energy, conducted in conjunction with major emerging economies, such as China, India, and Brazil;
- Moving as much fresh water agriculture to salt water agriculture as possible;
- Producing synthetic meat without requiring the growing of animals;
- Moving to wireless storage and transmission of energy when technologically feasible;
- Teaching people core principles of urban ecology and sustainability; and
- Creating a global collective intelligence system for energy.

Many would argue that developed countries must cut back on energy use to make room for growth in developing countries. While true, that is not nearly enough to meet the challenge of climate change. Even if developed countries reduced emissions to zero, it is impossible to get to the best case projection from the IEA (stabilization of greenhouse gas concentrations at 450 parts per million of carbon dioxide).

Any long-range, sustainable solution to climate change will require the assent and participation of poor communities. While poor people may seem to be powerless, they can be an effective, powerful, and collective force, especially in relation to any climate change treaty that might emerge from the Copenhagen Climate Conference planned for December 2009. Poor communities demand and deserve greater access to energy, as they are also the stewards of many of the world's most productive carbon sinks in the forms of wetlands, oceans, and tropical rainforests.

PRO-POOR SOLUTIONS TO ENERGY ACCESS

Malyshev identified a number of pro-poor solutions to energy deprivation in developing countries, including:

- Targeted Subsidies:
Targeted energy subsidies can better serve poor communities in many countries. LPG and kerosene are often heavily subsidized in developing countries, with the intended aim of shifting fuel consumption patterns in poor, rural areas away from biomass to cleaner, more efficient fuels. However, subsidy schemes give greater benefit to the urban sector and richer households and, for the most part, fail to shift fuel consumption patterns away from biomass in rural areas.

- Microfinance:
Microfinance institutions allow households and villages to mobilize the capital needed to make small energy investments, such as in clean stoves. Notably, women's access to such financial services has increased in the past decade. There are strong arguments for using the community as a vehicle for this financing and making it jointly and individually responsible for repayment.

- Integrated Policy Proposals:
Many rural households would not be able to afford modern energy services, even with microfinance or subsidized capital investment. In such cases, efforts to tackle energy poverty would clearly need to go hand in hand with broader policies aimed at alleviating poverty more generally and promoting economic development.

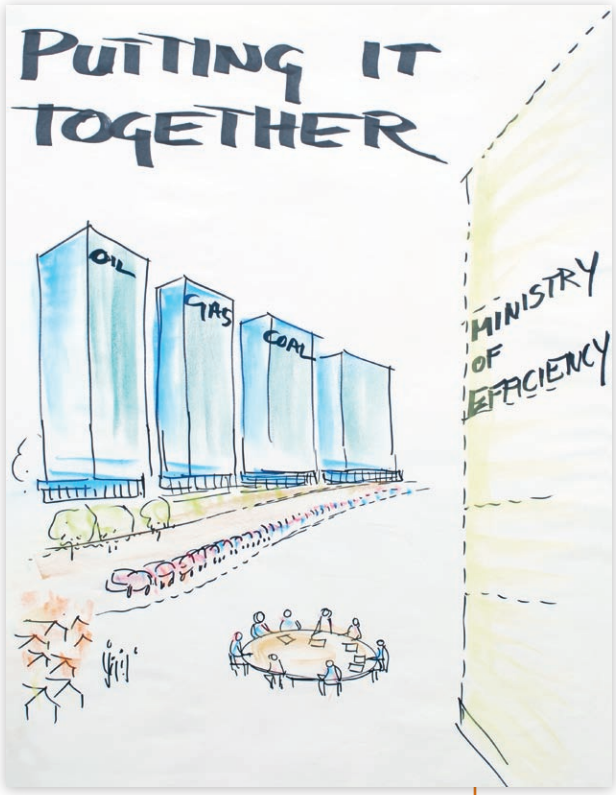
- Improving Data and Statistics:
Detailed, accurate statistics on energy supply and consumption are essential for proper policy and market analysis. In particular, there is very little information on energy use in slums worldwide.

THE FULL BACKGROUND PAPER BY TERESA MALYSHEV, *LOOKING AHEAD: ENERGY, CLIMATE, AND PRO-POOR RESPONSES*, IS AVAILABLE AT: www.altfutures.com/pro_poor_foresight

Many Sub-Saharan Africa nations use their oil resources as the major source of financing for the government. Countries will typically pump and sell oil to maximize income during the current government's time in power. Little thought is given to long-term investment or sustainability. However, some nations, particularly Norway, have developed major funds based on their national energy income that can be held as a trust to address future, longer-term needs.

There is not a demonstrated solution set that addresses both pro-poor energy and climate change pre-emption. The task of futures analysis is to create another picture of alternative paths.

The issues involved with energy and climate change are incredibly intertwined. Energy interacts with health, water, cities, transportation, and other areas to create complex feedback loops. However, addressing the energy and climate change problem in only one nation or region is unlikely to create the robust solutions needed to create a sustainable future.



DIFFERENT ENERGY SECTOR INTERESTS, AND THE MINISTRIES THAT REGULATE THEM, OFTEN REMAIN TRAPPED IN THEIR OWN SILOS.

Foresight can apply a systems thinking approach to this problem by creating solutions that work across different potential scenarios. Using narrative techniques in scenarios, foresight practitioners can help individuals understand the enormity of these problems and the importance of action.

PRO-POOR FORESIGHT IN SCIENCE & TECHNOLOGY

Nares Damrongchai, Executive Director of the APEC Center for Technology Foresight, looked at many of the prominent future scenarios and relevant foresight work related to science and technology (S&T) in his paper and presentation. He focused on the few major futures projects with a pro-poor component. Damrongchai also brought his extensive experience on technology road mapping to the conversation at Bellagio.

He highlighted the Millennium Project's work, particularly the *State of the Future* report, which portrays an optimistic future of the world where advances in science, technology, education, economics, and management are capable of making the world work far better than it does today. The *State of the Future* report uses an iterative process of soliciting expert opinion and environmental scanning to identify critical global challenges facing humanity. Challenges with a significant science and technology component include:

- Achieving sustainable development for all while addressing climate change;
- Ensuring sufficient clean water for all without conflict;
- Reducing the threat of new and emerging diseases and micro-organisms;
- Global convergence of information and communication technologies that works for all; and
- Using science and technology to improve the human condition.

The *State of the Future* report also notes that improved communications among scientists; and future synergies among nanotechnology, biotechnology, information technology, and cognitive science can fundamentally change the prospects for civilization.

The RAND Corporation, in its 2006 report entitled *The Global Technology Revolution 2020*, provided an in-depth look at science and technology futures. The report narrowed down 56 technology applications to a "top 16" list with broad relevance to significant social problems. These top technologies include such applications as inexpensive solar energy, rural wireless communications, rapid bioassays, filters and catalysts for water purification and contamination, cheap autonomous housing, and green manufacturing.

We need to ask what technological building blocks can be put in place that both lead to innovation and drive down poverty. These are incredibly messy problems, and foresight applies complex thinking that works on co-produced solutions at various levels of the system.

However, even with the promise of these applications, science and technology is recognized not only as a positive driver in the future, but as a possible negative, sometimes dangerous, driver as well, depending upon how well it is managed and the setting and context where it is applied. How these issues are addressed will shape changes not only in science and technology but also in the societies we live in over the next 5 to 20 years.

In working towards pro-poor applications of S&T, Damrongchai believes that the foresight community should interact closely with the development community and encourage the use of anticipatory intelligence and governance in this area. He suggested that:

- Countries with certain levels of industrial development, such as middle-income developing countries, could use foresight tools—including technology road mapping (TRM), as practiced in industrialized countries—to help identify new market opportunities and to link existing technologies and products to the global market before setting out to develop new technologies.
- The foresight community should come together and create a sense of urgency on issues that have long-term implications but that need immediate action and attention. In this regard, the influence and interaction between the foresight community and governments, international organizations, and the business community is vital. Unfortunately, evidence so far shows that the foresight community has not been very successful in this endeavor.

Foresight could also help link the producers and the users of technology in the Global South. Poor communities around the world represent a large, and largely untapped, potential market for new technologies. In business circles, this is often called the "Bottom of the Pyramid," based on a popular book by C.K. Prahalad.

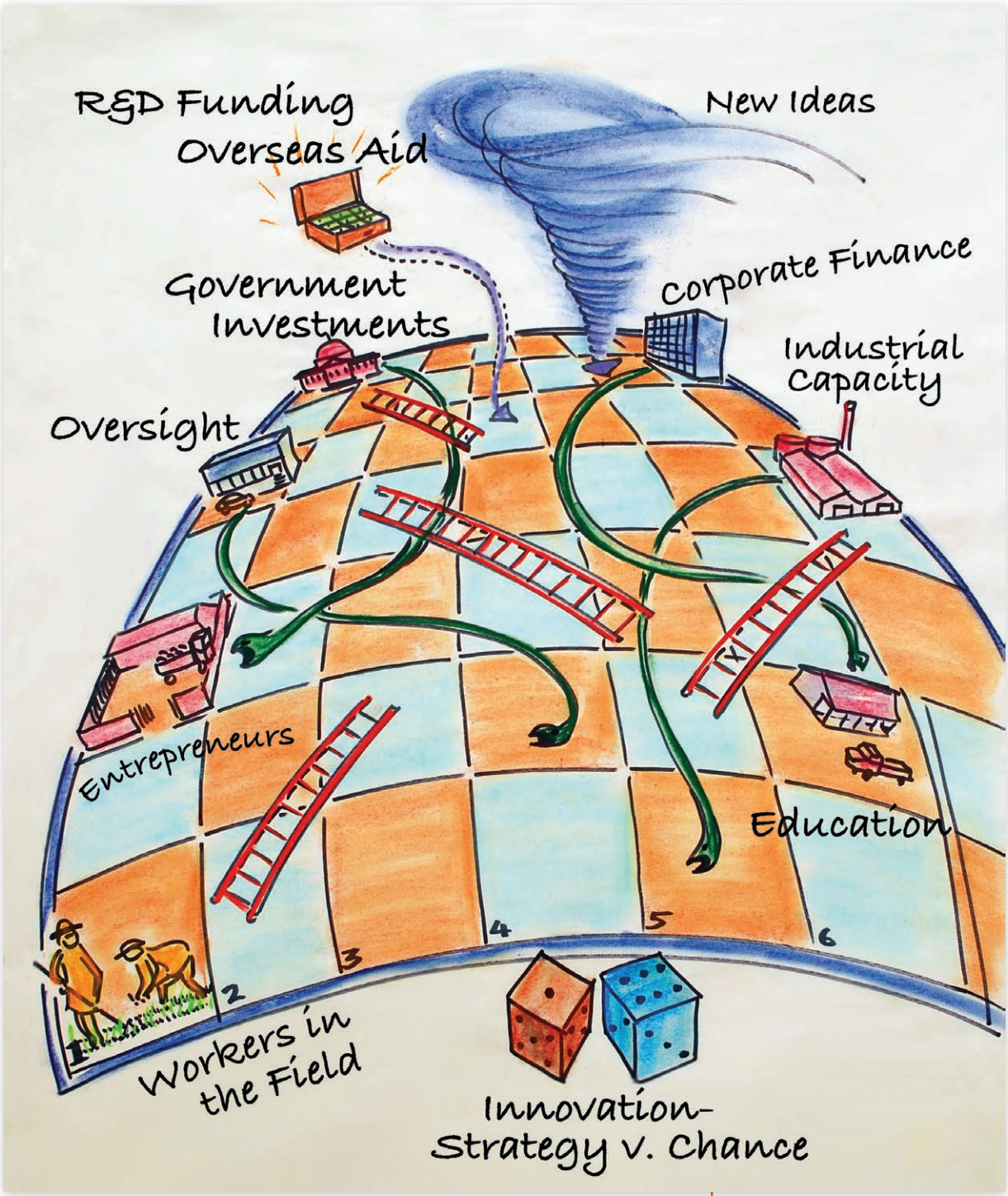
IMPROVING PRO-POOR TECHNOLOGY FORESIGHT IN SOUTHEAST ASIA

Over the past ten years, organizations similar to the APEC Center for Technology Foresight have been conducting thematic foresight studies in high impact areas—such as water, energy, infectious disease, and urbanization—with particular relevance to poor communities.

Activities underway include:

- Approximately 1.8 billion more people could be living in a water-scarce environment by 2080. Recent foresight studies point to the need for an integrated global water strategy, plan, and management system. These analyses indicate that improvements in water supply and management will also help improve sanitation and health in poorer countries, as about 80 percent of diseases in the developing world are water-related.
- Numerous in-depth studies on the future of energy have been conducted by energy-related companies, governments, and international organizations. The APEC Center for Technology Foresight has recently conducted a study on future fuel technology and concluded that the integration of biofuels, unconventional hydrocarbons, and hydrogen will become the key to responding to the future demand of fuel in the Asia-Pacific region.
- About 30 percent of all deaths are caused by infectious diseases. Recent outbreaks of SARS, H5N1 (bird flu), and H1N1 (swine flu) highlight the importance of emerging threats, the need to develop capabilities in new technological development and usage, and the convergence between existing technologies. Forward-looking assessments have identified a number of technologies to address this challenge, including genetic-based vaccines and microbicides, modeling and simulation, ubiquitous computing, cheap diagnostic kits targeted for use in developing economies, and tracking technologies for effective surveillance.
- The year 2008 marked the first time in history that more than half of the world population is living in cities. The APEC Center for Technology Foresight has repeatedly explored the concept of healthy cities as it relates to issues such as education and transportation.

THE FULL BACKGROUND PAPER BY NARES DAMRONGCHAI, *THE FUTURE OF SCIENCE AND TECHNOLOGY AND PRO-POOR APPLICATIONS*, IS AVAILABLE AT: **www.altfutures.com/pro_poor_foresight**



THE CHAIN OF INNOVATION IS COMPLEX, WITH MULTIPLE BARRIERS AND OPPORTUNITIES, INFLUENCED BY THE LOCAL POLITICAL AND CULTURAL ENVIRONMENT.

As with other areas of foresight, workshop participants noted the lack of existing materials focused on pro-poor foresight and poverty reduction in analysis related to S&T. Technology roadmaps focusing on pro-poor technologies and issues were seen by most participants as an important, but missing, component of pro-poor foresight. Better technology roadmaps could assist policy-makers in making decisions about technology development and adoption. They could also assist companies in identifying and implementing "bottom of the pyramid" strategies for underserved markets.

Other key ideas that emerged include new forms of incentivizing the creation and diffusion of different intellectual property regimes are needed for pro-poor development. One often mentioned strategy is larger use of "innovation awards" that provide a bounty for innovators in specific areas. Recent examples include the X-Prize Foundation awards for commercial space travel, genomics sequencing, and ultra fuel efficient automobiles.

Open source networks for innovation were another area seen as potentially useful for improving pro-poor innovation. Participants also noted that including farmers and other individuals with tacit knowledge in the innovation process can yield better inventions and increase the speed of technology diffusion. One relevant aspect for foresight is to consider what technologies would have a particularly high multiplier effect that might help in achieving the Millennium Development Goals.

In conclusion, pro-poor foresight, as a set of tools, can be used to engage and connect scientists and engineers around key problems for the Global South. New technologies for communication and collaboration, such as virtual worlds, could aid in that process. A number of research centers in the developing world are working to address these problems. These institutions could be linked to foster a more coherent South-South dialogue on technology innovation and diffusion to address pro-poor challenges.

WORKSHOP PARTICIPANTS TALKED AT LENGTH ABOUT THE POTENTIAL OF NETWORKS TO CONNECT INNOVATORS AND FORESIGHT PRACTITIONERS.

PRO-POOR FORESIGHT IN ECONOMIC GOVERNANCE

William Lyakurwa, Executive Director of the African Economic Research Consortium, began to connect these issues to the important topic of economic governance. Good governance, he noted, is a prerequisite for economic, sustainable development. At the same time, economic governance requires economic growth and without both, he concluded, the future of the Global South looks particularly grim.

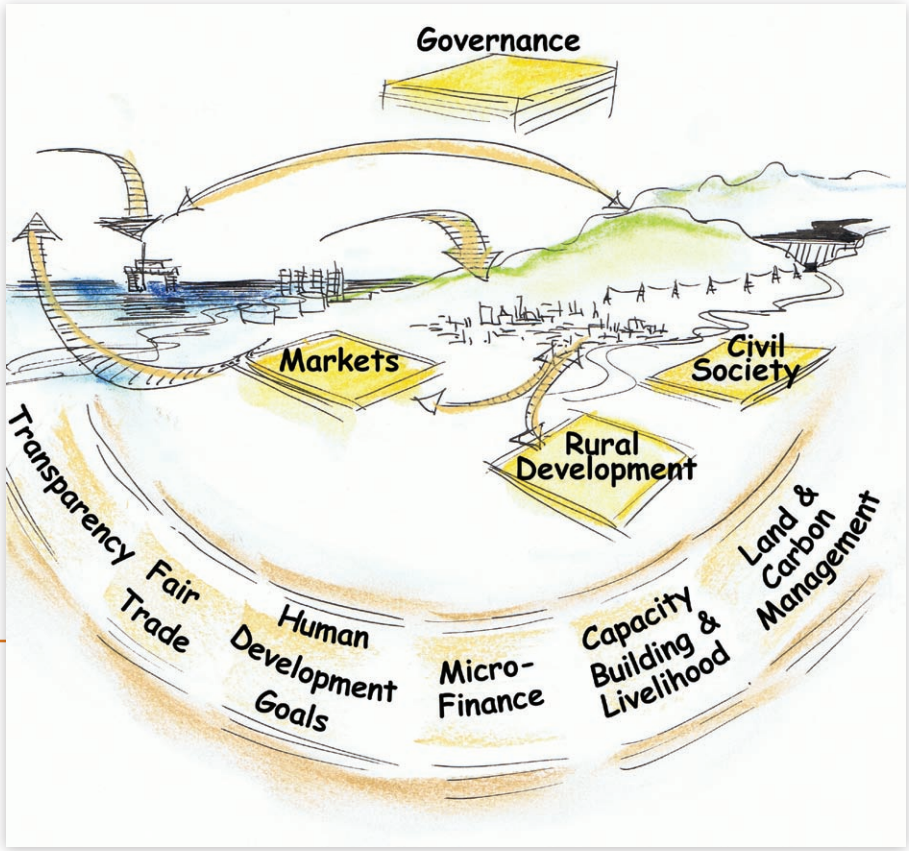
Achieving good governance requires giving the highest priority to poverty reduction, human development, productive employment, social integration, and environmental regeneration. Looking into the future 20 years from now, one of the major problems African economies will face is creating an economic environment conducive to resilient, pro-poor growth.

Without functional governance in these developing countries, it is impossible to address the root causes of poverty. Changes to the policy environment should also include reform in governance and policy processes of African nations by supporting participation of a variety of actors from different sectors, including poor rural farmers and women.

The large proportion of young people in many African countries holds the promise of a significant "demographic dividend" that can drive economic growth, but only if they are adequately trained for the jobs of the future. If properly educated, this emerging cohort could contribute significantly to global welfare and, if not, they are likely to remain unemployed and be easier recruits for destabilizing forces that can lead to domestic and international insecurity.

> Knowledge and creativity are engines of growth for any society. A multi-dimensional mindset is needed for development, addressing issues of gender, poverty reduction, and wealth creation. Otherwise, the conflict that emerges is a recipe for disaster. Development also depends on peace. The pro-poor options include a focus on sustainable growth paths for African countries that are steady and include the active participation of poor households.

The job of educating these young people should not be viewed as a problem for the Global South alone, however. In a globalized world, many of these young men and women will become migrants to Europe and to the United States. If appropriate opportunities emerge, these youths can become part of a chain that brings knowledge and resources back to the Global South to create a process of spiraling growth. If not,



EFFECTIVE GOVERNANCE WAS IDENTIFIED AS THE KEY TO ECONOMIC DEVELOPMENT.

they could be radicalized and marginalized, becoming a threat to peace and stability, or they could turn to the informal and underground economy, which is sizable in many nations.

Improved governance of these underground operations can encourage more businesses to come out of the shadows where they can better contribute to the welfare of their communities. Companies that are integrated into the larger economy have access to capital to grow and contribute taxes for the community's welfare.

This younger cohort will need to learn the technical skills of the future fairly quickly, as a large proportion of the population is moving out of agriculture and into the cities, thereby requiring new types of training linked to urban employment opportunities. However, as this generation moves to the cities, agricultural output, which remains the bedrock of the developing world economies, continues to decline, raising the possibility of food shortages in many countries. Moreover, these nations will need to develop viable, alternative industries to replace the historically dominate role of agriculture.

Lyakurwa noted that creating a pro-poor future requires social empowerment, particularly of women, which is a key factor for a successful future for many African nations. Studies have shown that providing education and economic opportunities to women has substantive benefits for the larger community. The Grameen Bank of Bangladesh is renowned for providing small loans to poor women to grow and encourage individual businesses, which then generate new employment opportunities.

Gender inequality is both an economic and a social issue. For example, a 2003 research report on gender inequalities, growth and development for Kenya's Ministry of Planning and National Development demonstrated that economic growth would have been 0.65 percent to 1.499 percent higher per year in Sub-Saharan Africa if the continent had less inequality in education. This would have doubled the average growth rate for that period, as educated women have better jobs at higher pay and have healthier, better educated children than less-educated women. Farms run by educated women have shown increases in yields of up to 22 percent. The education of women has powerful effects on every element of development, from raising productivity to environmental management.

The examination of alternative scenarios and paradigms can make an enormous difference for Africa's future economic governance. Pro-poor foresight requires that economic research and analysis be more explicit about who is winning and losing from economic development and by focusing particularly on the long-term impacts on poor people.

ANY UNEXPECTED ECONOMIC, TECHNOLOGICAL, POLITICAL, CULTURAL, AND SOCIAL OPPORTUNITIES EMERGE AT THE INTERSECTION OF DIFFERENT LEVELS OF GOVERNANCE, FROM THE LOCAL TO THE GLOBAL.

OPTIONS FOR PRO-POOR ECONOMIC GOVERNANCE

There are pro-poor economic governance options that can be used to address the needs of developing countries. Below are some of the ideas developed by Lyakurwa in his paper and that were the focus of the associated discussions at the workshop:

- Connect small farmers directly to supermarkets in the growing cities.
- Use oil for export and natural gas for local consumption.
- Establish stronger institutional frameworks that expand the planning horizon by looking beyond the next election.
- Strengthen administrative capacity by integrating ministries.
- Build a viable democratic environment tailored to African realities.
- Diversify the portfolio of investment options (including domestic), such as investing in regional and rural infrastructure.
- Diversify economies through trade (North-South and South-South).

KEY FINDING:

Foresight is most critical in addressing the problems of weak and impoverished states.

Pro-poor foresight was developed to think longer-term about novel solutions addressing the many problems of poverty and human development. It can connect leadership at the top and people at the bottom in an iterative process of decision-making. However, the pro-poor dimension of foresight is largely missing in the field's current work. By the same token, the development community does not often use the tools of foresight to enhance their analysis or understanding of long-term trends.

THE FULL BACKGROUND PAPER BY WILLIAM LYAKURWA, *PROSPECTS FOR ECONOMIC GOVERNANCE: PRO-POOR RESILIENT GROWTH*, IS AVAILABLE AT: www.altfutures.com/pro_poor_foresight

5. Conclusion

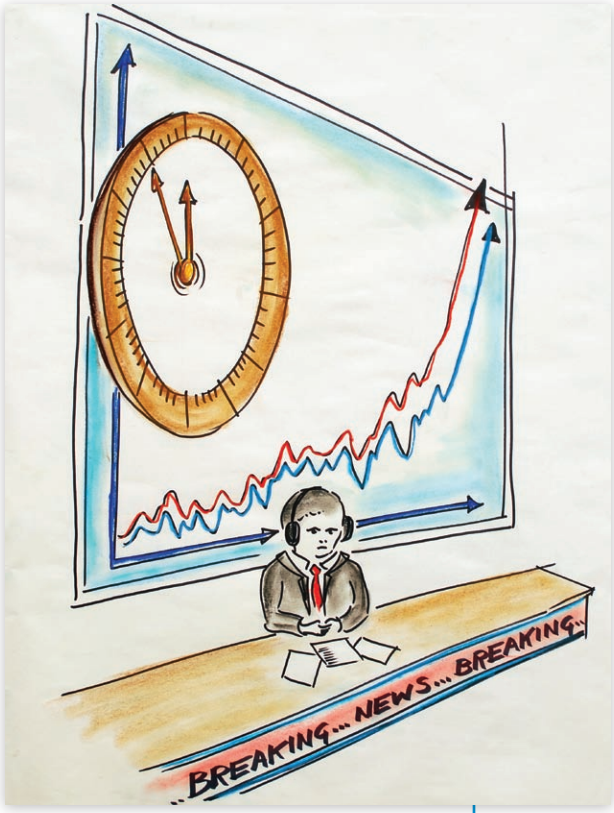
Our destiny is to try to shape our destiny. The question is: Can we develop the wisdom to do this effectively?

The recent economic crisis has threatened the financial system and affected every country in the world. But this will not be the only global crisis. In an interconnected world, the decisions of one nation, one community, one individual, can have an impact on people half a world away. Leaders now have the opportunity to use those connections to create a better future—if they have the foresight to do so.

Pro-poor foresight provides an opportunity to approach the problems of the Global South in a new way. At the conclusion of the workshop, the participants cooperated in drafting a synthesis statement of the major themes and ideas that tied together the background papers and session discussions, describing pro-poor foresight and its relevance, and developing recommendations to promote the concept further.

As noted earlier, it is apparent that many of the recommendations suggested by the workshop participants predominantly relate to the need for change at all levels of governance to address the challenges of global poverty. Over the course of the workshop, this suggestion was regularly coupled with the idea that renewed efforts are needed to foster and improve national foresight capacities through regular activities that link stakeholders from different sectors, including the media and the public, to achieve desired outcomes.

Adding poverty as an explicit dimension of existing and future foresight activities, such as scenario planning and trend analysis, was also viewed as a key component of fostering pro-poor decision-making. Finally, there was also a general assessment that a small number of pro-poor foresight projects could be activated to begin creating a repository of collective intelligence and knowledge about how the future might unfold. In the end, it is hoped that this workshop will serve as a defining point for the field by emphasizing the need to include a pro-poor dimension as a regular component of future foresight activities.



THE WORLD IS CONTINUOUSLY CAUGHT IN CURRENT CRISES, RARELY ALLOWING FOR THE FORESIGHT NEEDED TO ANTICIPATE AND PREVENT PROBLEMS BEFORE THEY OCCUR.

Recommendations

Improved governance is a critical anti-poverty action needed not only at the national level, but at the supranational level as well. Pro-poor foresight must similarly be addressed at global, regional, national, and local levels.

Foster national foresight capacity, including pilot efforts in countries willing to have involvement across ministries and regions, while involving the media and the public.

Conduct more technology road mapping specifically geared to poor people, including:

- Couple technology road mapping with scenario exercises to address barriers preventing development and deployment of pro-poor technologies.
- Address the gap around applied research for pro-poor technologies.
- Use foresight to stimulate the development of leapfrog technologies for poor communities.

Map the associations of conflict with economic development to illuminate the intersection of economic geography and pro-poor foresight.

Model inequity more explicitly, including measures of inequity focused on income, education, land ownership and use, and health.

Develop and implement large scale participatory approaches to pro-poor foresight, including:

- Use virtual spaces, such as wikis, to create collective knowledge for pro-poor foresight, particularly poverty reduction.
- Use gaming and simulations before importing solutions or policies from other countries and regions.
- Use scenarios to signal the urgency of problems, particularly for the poor.
- Use foresight to establish the values of different constituencies.
- Create ongoing learning systems that become a living repository of collective intelligence.

Encourage innovation in moving forward a range of ideas, including:

- National carbon measurement and monitoring.
- Agro-forestry.
- Rural electrification that builds on cell phone tower electrification.
- Prizes to foster innovation.
- Application of local resources for local and external markets, such as local beneficiation and processing of mined minerals.

Assure market opportunities and minimum returns through mechanisms, such as guaranteed markets (i.e., assured return on investment) for important pro-poor innovations.

THE WORKSHOP PRODUCED A SERIES OF INNOVATIVE IDEAS THAT INTEGRATE PRO-POOR FORESIGHT AND A SET OF RECOMMENDED ACTIONS.

Synthesis Statement

Foresight is systems thinking that forges paths for action while understanding and embracing complexity. It catalyzes new insight in the minds of communities and decision makers. Foresight is invaluable for sense making and is a virtually zero cost way to test and edit alternative blueprints for action. Foresight creates a safe space for addressing unpopular and challenging issues. Foresight is an integral part of the policy process, which it informs and enhances.

Poverty is itself a complex system, existing at multiple levels ranging from the global to the grassroots. Pro-poor foresight identifies and engages relationships among the complex systems that sustain poverty, while seeking to ultimately eradicate it. In this journey, the future of the wealthy and the poor in all nations is inextricably linked. Neither can avoid the shocks and discontinuities that the future may bring, such as the impact of forces that include climate change and economic crises. A first requirement for pro-poor foresight is procedural fairness, which is an indispensable pre-condition for outcome fairness. Processes must be open, equitable, and characterized by independent thinking.

Pro-poor foresight is required now because we are in the midst of a unique, critical period characterized by multiple and severe flaws in existing paradigms and deep uncertainty about the consequences of present choice on future outcomes. There is a shattering of old forms underway, and this is true on both the national and global levels. Only by working with a collaborative, forward-looking mindset can these problems be effectively addressed.

While there is a unique need for pro-poor foresight, there exist many barriers to its success and advancement. These include an unwillingness to effectively shape the future, an inability to see or do things differently, a myopic and exclusive focus on the short-term, and a sense of powerlessness to shape one's destiny. These barriers exist more strongly in some cultural and political systems than in others.

Yet, we do continuously shape the future with our individual actions and our collective policies. If done well, foresight increases our chances of wisely and successfully structuring our future. If not, we squander an opportunity to improve our collective awareness and our global systems.

However, foresight cannot do everything. Foresight should inform policy making processes by identifying strategies and directions as well as their implications. But, in some cases, foresight is necessary and relevant in spite of inaction on the part of governments.

Next Steps

Participants proposed several next steps at the end of the "Foresight for Smart Globalization" workshop. Each participant was encouraged to make concrete commitments that his or her organization could champion, although other participants and the wider foresight, development, and policy communities are welcome to join and participate in these and other activities that emerged from the workshop. The next steps and commitments were further refined by the participants following the workshop, and a selection of these activities is provided below.

CONDUCT PRO-POOR GLOBAL SCENARIOS

Initiate a collaboration effort among the workshop participants to create Pro-Poor Global Scenarios. The Pro-Poor Global Scenarios will describe futures we aspire to shape as well as developments we fear, with multiple scenarios that address the complexity of globalization.

BUILD A FORESIGHT FOR DEVELOPMENT COLLABORATION PLATFORM

The Foresight for Development Collaboration Platform will develop and pilot a common use system to build up, store, update and access foresight and futures knowledge, information, products, tools, and practitioner networks. All the workshop participants will be invited to join the collaborative network and will be in a position to cooperate with each other and contribute their knowledge and products.

UNDERTAKE YOUTH SCENARIOS IN KENYA

Create a youth scenario activity in Kenya that will draw on the network of workshop participants to create the scenario. The project is an attempt to foster debate about possible futures for Kenya and indicate paths the country could travel while taking into consideration the youth bulge. The project is targeted at contributing to the national reform agenda in dealing with one of the root causes of the post-election violence that occurred in 2008: the increasing problem of a growing population of poor and unemployed youth, both educated and uneducated, who agree to join militias and organized gangs.

ADVANCE FORESIGHT ACTIVITIES IN THE ASIA-PACIFIC REGION

Participants from Southeast Asia are committed to building upon existing foresight activities in the Asia-Pacific region. Topics of particular interest include growing urbanization, transitioning to a low-carbon society, and assessing the societal impacts of emerging technologies. This analysis could be undertaken by using Delphi methods and scenarios with an added pro-poor dimension.

DOCUMENT AFRICAN FORESIGHT PRACTICE

Participants plan to use the Bellagio Scholar Residence Program to develop a book on African foresight. This book would document existing scenario practice and foresight activities across the continent.

CREATE PRO-POOR FORESIGHT CURRICULUM FOR ACADEMIC PROGRAMS

Educating future leaders in pro-poor foresight was seen as vitally important by the workshop participants. Many participants want to integrate pro-poor foresight into their education work, combining experience in teaching and foresight analysis with curriculum development.

LINK THE DEVELOPMENT AND FORESIGHT COMMUNITIES

A number of participants expressed the importance of connecting the development and foresight communities. The participants will work to ensure pro-poor foresight is included in their work.

IMPROVE COMMUNICATIONS AND OUTREACH

Mobilize the participant network to existing professional communication channels regarding pro-poor foresight issues. This could include publishing high-level opinion pieces on pro-poor foresight, developing a collective intelligence network for foresight, and creating visual documentaries of the pro-poor concept. These efforts would assist the workshop participants in continuing the activities and promotion of pro-poor foresight.

Appendix: Workshop Participants

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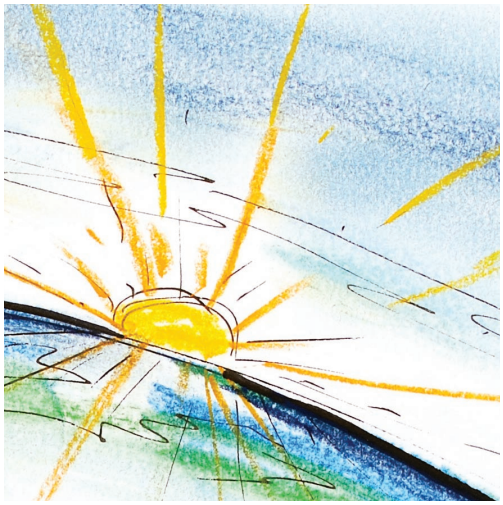

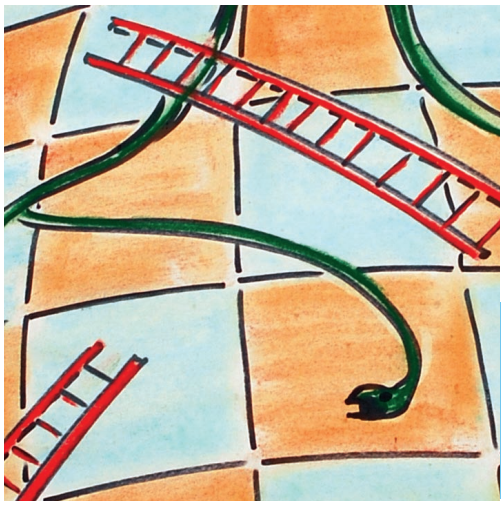

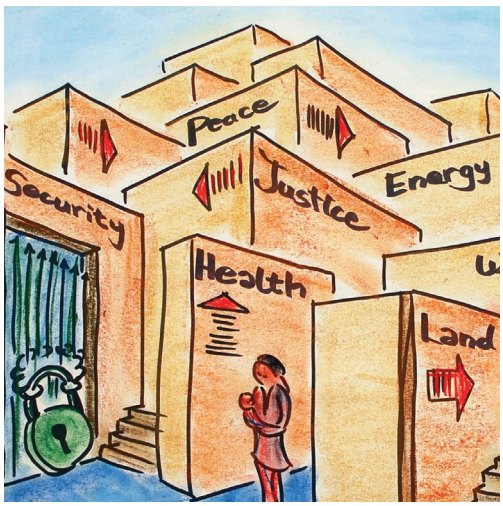

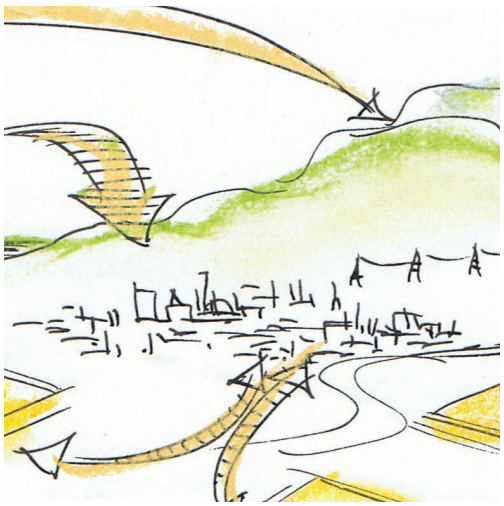

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