International Policy Centre for Inclusive Growth
Poverty Practice, Bureau for Development Policy, UNDP



Dimensions of Inclusive Development

GUEST EDITORS

Poverty in Focus is a regular publication of the International Policy Centre for Inclusive Growth (IPC-IG). Its purpose is to present the results of research on poverty and inequality in the developing world.

Guest Editors

Leisa Perch and Gabriel Labbate

Desktop Publisher
Roberto Astorino

Copy Editor

Lance W. Garmer

Front page: Multiple Dimensions of Development is the spirit behind this Poverty in Focus. The images represent the range of issues, the people and the regions we covered and also the message of dimensions within a broader context. They also reinforce the duality which lies behind development at all levels, including the need for social as well as technological innovation as part of structural transformation. Images 1, 3, 5-7 are from the IPC-IG"Humanizing Development" Global Photography Campaign (photographers respectively: GB Mukherji, Soleyman Mahmoudi, Ramesh Pathania and Joyce Wambui). Image 2 (Adrian Jankowiak) and image 4 (Max Thabiso Edkins and Resource Africa UK).

Editors' note: IPC-IG and the editors gratefully acknowledge the generous contributions, without any monetary or material remuneration, by all the authors and photographers of this issue.

IPC-IG is a joint project between the United Nations Development Programme and Brazil to promote South-South Cooperation on applied poverty research. It specialises in analysing poverty and inequality and offering research-based policy recommendations on how to reduce them. IPC-IG is directly linked to the Poverty Group of the Bureau for Development Policy, UNDP and the Government of Brazil.

IPC-IG Director
Rathin Roy

International Policy Centre for Inclusive Growth (IPC-IG), Poverty Practice, Bureau for Development Policy, UNDP

Esplanada dos Ministérios, Bloco O, 7º andar 70052-900 Brasilia, DF Brazil

ipc@ipc-undp.org www.ipc-undp.org

The views expressed in IPC-IG publications are the authors' and not necessarily those of the United Nations Development Programme or the Government of Brazil.

Rights and Permissions – All rights reserved. The text and data in this publication may be reproduced as long as written permission is obtained from IPC-IG and the source is cited. Reproductions for commercial purposes are forbidden.

Growth, Equity and Sustainability: A Declaration of Interdependence

Over one billion of us live without many of the basics that the other six billion take as given. Although 28 countries have moved from low-income status to middle-income status, with Ghana and Zambia among the newest Middle Income Countries, an estimated 800 million people still live in low-income countries. Of these, half live in just five countries, three of which are in sub-Saharan Africa. In these least-developed countries (LDCs), conflict, disaster and broader human insecurity impose structural limits on efforts to move from crisis to risk reduction and from growth to sustained development. So although many millions have been lifted out of poverty in the last ten years, it is also true that more people live in chronic hunger than ever before. Significant and sustained progress will require faster and better efforts. The message of this *Poverty in Focus* is that, "For Growth to be inclusive, it must be sustained and sustainable and that, for it to be sustained and sustainable, it must also be equitable."

As a contribution to the dialogue around Rio+20 and to the ongoing discussions around a post-2015 MDG Agenda, this *Poverty in Focus* links future development to sustainability and particularly to social sustainability. Looking beyond the critical issues of 'carbon footprints', 'low-carbon development", green economy' and the economics behind saving the planet, it draws attention back to the continuing challenge of ensuring that growth and development deliver for the poor and vulnerable. In its many forms—energy poverty, lack of access to water and sanitation, malnutrition or insecure access to food, and lack of access to education and health—the scale and scope of global deprivation call current development policy and practice into question.

Growth, gender, poverty and the environment can no longer be treated as loosely connected components of development. Recognizing their interdependence is at the core of improved and sustained development for all.

For one thing, the continuing decline of the quantity and quality of natural resources and of ecosystem functions is likely to exacerbate the likelihood of conflict over resources, particularly water. According to UNDP's Bureau for Crisis Prevention and Recovery, 35 countries had entered what could be designated a 'post-conflict phase' by 2008. The cost of conflict has been enormous, matching or surpassing, according to some estimates, the value of ODA received in the last 20 to 30 years in the same countries.

Addressing topics such as the evolving debate on environmental and social justice and improved accounting frameworks to 'include' environmental assets and services in considerations of growth, the enclosed articles can help us go beyond lip-service to the notion of sustainability. They focus on the 'software' components of development, highlighting the need for equal attention to process and to results. Suggesting that inclusive and sustainable development will need to leverage 'social technologies' such as political innovations, true engagement and honest evaluation, they make a clear case for a strong, representative state and the complementary roles of civil society and the private sector in defining and achieving sustained and sustainable development. They underscore the role of formal and informal mechanisms in the negotiation and reconciliation of conflicting and competing interests.

In view of the high expectations placed on the next year's Rio+20 meeting, let us remind ourselves that 'social sustainability' will be built on the foundations of productive and social inclusion. Too often, the focus has fallen largely on productive inclusion, with limited effort to address the structural factors that cause and sustain exclusion and marginalization, be they related to gender, political processes, property rights for the poor, and so on. Moreover, a focus on 'sustained' development as well as sustainable development acknowledges that, for many countries, existing development gains are fragile and easily reversed. The acute challenges faced by countries in the Horn of Africa due to persistent drought, displacement, conflict and poverty are a case in point.

A socially sustainable approach, say these authors, is one in which policy efforts do not shy away from the many interdependent multiple dynamics, processes and situations that affect vulnerability and predispose the poor and the vulnerable to harm from shocks and change.

Growth, equity and sustainability are mutually compatible, if efforts have enough time and resources, are responsive to underlying structural causes and encourage the vigorous participation of the poor, allowing them to define their futures. What follows illuminates the complexity of inclusiveness as a development outcome and highlights bold action in and by the South. We hope that these articles serve as a source of further innovation and inspire more cooperation and the spread of knowledge within the South. Ours is an age of political convulsions, global economic shifts, inexorable climatic change and stubborn poverty. Informed and catalytic strategies are needed now more than ever before.

Overview:

Where People, Poverty, by Leisa Perch, International Policy Centre for Inclusive Growth **Environment and Development Meet**

Twenty years after Rio, we are still struggling with many of the same issues and contradictions in the development process that we faced earlier; in fact, many have become even more complex.

The Rural Poverty Report 2011 (IFAD, 2010) notes that some 1.4 billion people continue to live in extreme poverty, struggling to survive on less than US\$1.25 a day, and that more than two thirds reside in rural areas of developing countries. Papers by Andrew Sumner (2010)1 and Ortiz and Cummins (2011)2 further emphasise that growth has not been equitable, with the latter paper highlighting that the rate of change on the trajectory from indigence to poverty and from poverty to non-poverty has been very slow for the global poor as a constituency.

As the world turns its attention to COP 17 in Durban and the 20th anniversary of the Rio Convention (the UN Convention on Environment and Development), phrases such as the 'green economy' and 'inclusive and sustainable development' are now shaping the discourse on development. In view of the expectations placed on the 'green economy', carbon credits, and market-based mechanisms as policy responses for development ills, this is a good time to remind ourselves about the need for 'social sustainability', a critical pillar of sustainable development -in other words, to reaffirm that greening processes will not automatically deliver for the poor or the vulnerable.

Often, the backdrop for the discourse on sustainability has been characterised by tension, rather than by reconciliation, among the economic, social and environmental dimensions of development (i.e., the three pillars). At times, the discourse has been framed within 'limits to growth',3 and, more

recently, within 'making growth more inclusive including integrating both environmental risk and co-benefits'.

Overall, the successful combining of social and environmental co-benefits in policy and practice has remained more elusive. The Government of China's recent statements4 on the need to reconcile growth and social development with environmental sustainability signal potential shifts, but the extent of such reconciliation is not yet clear. Similarly, Indonesia and India have also taken steps to address such concerns, with the Government of India recently launching an incentive mechanism⁵ to promote greater energy efficiency in the private sector.

Given the predominant view of the role of capital and labour (in the economic system) as factors of production and growth, competition and tensions are manifest in policy and institutional frameworks. Natural capital is still seen as another, even abundant factor of production, and the capacity of institutional checks and balances environmental ministries—to drive the agenda remains relatively weak. Social sectors remain peripheral to many of the debates, national and global alike, about how to arrest catastrophic environmental change.

The articles in this Poverty in Focus serve to highlight both the need for greater focus on 'software' components to make development work and the capacity of 'social technologies' to produce development and growth. Contributing to the debate about getting policy right, Gabriel Labbate discusses the challenges and opportunities that policy makers face in implementing policies with probably environmental and social dividends, and, together with Kishan Khoday, argues that the environment

Often, the backdrop for the discourse on sustainability has been characterised by tension, rather than by reconciliation, among the economic, social and environmental dimensions of development (i.e., the three pillars).

Overall, the successful combining of social and environmental co-benefits in policy and practice has remained elusive.

The sustainability of the supply of resources (environment), sustained access to resources in securing livelihoods (society) and the quality of financial resources (investments) are essential to stabilizing environmental change cycles, reducing/ mitigating ecological scarcity, and enhancing the renewal of the ecological system.

^{1.} See: http://www.ipc-undp.org/pub/ IPCOnePager120.pdf>.

^{2.} See: http://www.unicef.org/socialpolicy/files/ Global_Inequality_Beyond_the_Bottom_Billion.pdf>.

^{3.} See Silent Spring by Rachel Carson (1962) and Limits to Growth by Donella Meadows (1972).

^{4.} Thomas, L. (2011). 'The Earth is Full' in The New York Times. Available from http://www.nytimes.com/2011/06/08/opinion/ 08friedman.html? r=1&src=me&ref=general>

^{5.} See: http://moef.nic.in/downloads/public- information/India%20Taking%20on%20 Climate%20Change.pdf>.

and society are organic systems constantly in flux and change and that there may therefore be no ideal state of sustainable development. Specifically, Khoday's article, supported by many others, including those of Lindiwe Sibanda (FANRPAN) and Dan Smith and Janani Vivekananda (International Alert), signals the need for more flexible policymaking, one able to adjust as new information is made available. Nicolas Perrin's article on the ECA region argues for the importance of taking note of the political economy dimensions of various policies.

The article by Helene Connor and Laura Williamson further reinforces this by calling for a "blinders off" approach which move us beyond simplistic viewpoints of how power relationships define the interactions of the three pillars of development and how those pillars interact with each other.

Individually and collectively, the contributions herein make a clear case for a strong, representative state and the complementary role of civil society and the private sector in defining and achieving sustained and sustainable development. They also refer directly and indirectly to the role of formal and informal institutions necessary for the negotiation and reconciliation of conflicting and competing interests. The article by Denis Sonwa and Olufunso Somorin, for example, makes a clear case anchoring rights and responsibilities in law where they can be defended yet linked to fluid systems of institutional building that respect local reality and culture.

This consensus suggests that the planned discourse for the Rio+20 meeting on 'institutional frameworks' may need to ensure a broad scope that can set standards and promote innovation and adaptation at all levels of society.

This accords with Hodgson's definition of institutions as "systems of established and prevalent social rules that structure social interactions. Language, money, law, systems of weights and measures, manners and firms (and other organizations) are thus all institutions".6

While not a comprehensive list or accounting of the richness of social and political innovation available for development, the examples highlighted underscore the need for global policy, including the global climate change agenda, to focus on incremental and long-term gains as well as immediate 'wins'. From the perspective of social innovations, the comparative analysis by Darana Souza and Danuta Chmielewska highlights the benefits of 'publicly-assigned rights and rights-holders', particularly when policy and programmes then reinforce them.

The contributions by Leonardo Hasenclever, Alex Shankland and Nicolas Perrin highlight the continuing lack of coherence and the need to avoid complacency even when big battles are won. Leisa Perch's article on gender and employment also speaks to a number of subtle localized and micro realities that continue to undermine socio-economic resilience. While specific to SIDS, they highlight the dynamic interplay between the economy at the household, group and macro level which often limits sustained growth.

Moreover, concerns expressed about the quality of employment and about the disconnect between needs and income as well as the continuous exposure of SIDs to external shocks, resonate also for other countries and suggest the need to focus on adaptation and resilience-building, not just as marks on the development trajectory, but also as continuously evolving processes.

By probing some of the 'uncomfortable' questions of politics and interests and by highlighting the potential for conflict, both overt and gradual, these articles suggest the need for greater caution when addressing complex development challenges where not all interests, capacities and implications rest easily or clearly on the surface.

They particularly outline the acute but lesser known 'social' knock-on effects of public policy failures and warn that socially blind policies are unlikely to be sustainable in the long term. Critically, the articles show the capacity

of policy mixes that combine the macro and the micro to deliver.

On this point, Lucy Wanjiru's article on accounting for gender and sustainability raises the profile of equality as an important condition for a green economy and shows the potential of the Women's Business Initiative to tackle growth and affordability in tandem with equity, access, opportunity and the quality of development. Leonardo Hasenclever and Alex Shankland's review of REDD+ makes the case for the indigenous community as an equal partner, not just a beneficiary. Thus, a picture of cautious optimism, balanced with the need to move beyond rhetoric, emerges.

Reviewing the development context and challenges in the smallest countries (SIDS) to one of the largest (India), the authors' common clarion call is for sustaining development and anchoring development in society.

The authors argue that the sustainability of the supply of resources (environment), sustained access to resources in securing livelihoods (society) and the quality of financial resources (investments) are essential to stabilizing environmental change cycles, reducing/mitigating ecological scarcity, and enhancing the renewal of the ecological system. Even so, they also note that population growth and other demands place significant and potentially exponential pressures on assets, goods and services that are critical to future generations.

Perhaps most critical for a rapidly globalizing and changing South is our reconfirmation that transnational, regional and global concerns will increasingly influence 'national' policy. There can be no green economy without an international enabling environment, particularly on trade, that allows countries to invest, support and anchor today's development decisions in tomorrow's possibilities.

^{6.} Hodgson, Geoffrey M. (2006). 'What are Institutions?' Journal of Economic Issues, Vol. XL No. 1. Pp 1-25. March edition. Accessed from http://checchi.economia.unimi.it/corsi/whatareinstitutions.pdf>.

Integrating Poverty and Environment Policies:

by Gabriel Labbate, Ph.D, Senior Programme Officer, UN-REDD Programme/Poverty and Environment Initiative

Issues, Challenges and Opportunities

The integration of environmental and development policies can be traced as far back to the 1960s with the publication of Silent Spring (Carson, 1962), to the 1970s with the establishment of UNEP, and to the 1980s with the Brundtland Commission (WCED, 1987). The concept took central stage in the Rio 1992 conference on environment and development and continues today as a pivotal element in the 'green economy' discussion (UNEP, 2011).

The understanding of how poverty and environment interact with each other has also evolved. Initially, the idea of a poverty-environment nexus as a synergistic spiral of environmental degradation and poverty dominated the discussion (WCED, 1987; World Bank, 1992). Short-term needs overran potential long-term benefits, with poverty inducing environmental degradation, which, in turn, exacerbated poverty. In this conceptual model, poor individuals are both victims and agents of environmental degradation.

This synergistic cycle, however, provides limited insight into the true dynamics of resource use by poor groups (Brocklesby and Hinshelwood, 2001; Dasgupta et al., 2005). Formal and informal institutions are better at explaining the short- and long-term incentives that influence patterns of resource use (North, 1990).

The generalisation of this synergistic spiral also ignores issues of heterogeneity, or the notion that not all poor individuals have the same capital endowments and that, therefore, equally poor groups can make different use of similar pools of resources (Chomitz, 1999; Barbier, 2000).

Often, the drivers of environmental degradation are also moving away from the poor, with a substantial share of damage originating in commercial ventures attempting to satisfy the increasing demands of a growing population that has an increasing spending capacity and shifting consumption patterns for value-added good and services (MEA, 2005).

There is little challenge to the idea that the integration of development and environment can result in cost-effective policy options. The benefits can be non-trivial and encompass almost every policy area, from local to national/ regional, from urban to rural (DFID, EC, UNDP, WB, 2002; TEEB, 2010). However, while integrating poverty and environment policies can produce significantly positive and quantifiable results, it remains more the exception than the rule.

Even development agencies find the integration of their poverty and environment portfolios a challenge, despite expanded efforts like the Poverty and Environment Initiative, a partnership between UNEP and UNDP, and the global commitment to the MDGs as an overarching development policy framework.

There are good reasons for this:

First, poverty and environmental policies can have significant synergies and be complementary, but they still comprise largely different types of intervention packages. A healthy environment can be a necessary, but not sufficient, condition to lift people out of poverty. Some of the deepest poverty readings take place in quite pristine environments, such as in tropical forests beyond the agricultural frontier (Chomitz, 2007).

The integration of poverty and environment policies has taken centre stage in the development debate for their potential to generate substantial social benefits.

Contrary to accepted beliefs, these policies do not produce systematic win-win situations for all sectors of society and therefore their implementation faces political difficulties.

The effect of very rapid growth on ecosystems and their services has not been trivial. More than half of all ecosystem services are degraded or being used unsustainably.

Some estimates put global environmental damages in 2008 alone at 11 percent of global GDP, several times the impact of the global financial crisis in the same year (UNEP, 2010).

The best chances of success will come from sustained interventions that are honest at recognizing challenges, focus on impact, do not divorce themselves from the underlying reasons of poverty, and invest in better governance and greater efficacy of public policy.

The relationship can go the other way, too. Addressing social imbalances can be a necessary, but not sufficient, condition to ensure sustainable resource use (see also Gilbert, 2010).

Second, a healthy environment is not a binary (0,1) variable. In most cases, the challenge is to find that level of resource pressure which allows for increased income among the poor, yet that stays within perceived safe limits—for example, those required to preserve the resilience of ecosystems. This can turn into a complex optimisation problem, one in which the target is not to maximise a single variable, but rather to find the best balance among several.

Third, improving the well-being of the poorest implies increased consumption capacity (e.g., more food, better clothing, housing, etc.). Traditionally, development has been coupled with an increased production and consumption of goods and services, resulting in a rate and pattern of growth in the last 50 years in which the global economy has increased six-fold, food production has increased by two and a half times, and water use has doubled. The effect of this very rapid growth on ecosystems and their services has not been trivial. More than half of all ecosystem services are degraded or being used unsustainably. The species extinction rate is 1,000 times above the estimated normal level. Cultivated systems already cover one quarter of the Earth's terrestrial surface, while the amount of water impounded in dams is three to six times that of natural rivers (MEA, 2005).

Some estimates put global environmental damages in 2008 alone at 11 percent of global GDP, several times the impact of the global financial crisis in the same year (UNEP, 2010).

The unlimited production of consumer goods is not a feasible option. Consequently, the increased consumption of the poorest under conditions of sustainable resource use will need to be balanced by readjustments in the consumption patterns of middle and upper classes in developed and

developing countries. In this context, integrating poverty and environment would require policies that could be politically unpalatable. The notion that sectors of society might have to sacrifice some consumption to achieve a world free of poverty under conditions of sustainability is still anathema to some citizens in developed and developing countries (Lind, 2010; Soley, 2010).

Fourth, mainstreaming poverty-environment policies in development plans is not cost-free. It demands time and attention from qualified staff, a generally scarce resource. It can also entail re-accommodation of expenditures between sectors because realizing the benefits of poverty-environment mainstreaming can require increases in environmental spending, a potentially difficult choice for a policy maker with limited resources (see also Bah, 2008).

As a result, some needed environmental investments may not be carried out because, as portfolio theory teaches us, the fact that an intervention has a positive payoff is not a sufficient reason to automatically expect its implementation. Proposed interventions must have a positive payoff and a rate of return above that of other competing demands. In the long run, environmental policy can pay for itself, but, in the short run, the transition costs can often be significant. Development agencies would do well to better understand these costs and their influence on the decision-making process.

Finally, the mainstreaming of poverty-environment policies does not escape the law of diminishing returns. Projects that provide technical support to countries in order to integrate poverty and environment policies should prioritise those interventions in which payoffs are maximised, preferably in the short run, and use these as building blocks for more complex efforts.

Vaguely focused interventions distract scarce public-service talent, render poor services to the objective of scaling up the mainstreaming of povertyenvironment policies, and generally have difficulties in demonstrating impact.

Notwithstanding the above, the potential for integrating poverty-environment policies is immense. The following examples outline the scale of potential payoffs for rural and urban environments.

- For the rural sector, small-scale agriculture and improved water and soil management hold great potential for integrated poverty and environment policies. In many settings, it can reverse ongoing processes of land degradation, improve food security, and diminish the vulnerability of poor populations (Barbier, 1987; Holt, 2001). It is true that, in many rural settings, realising the benefits of poverty-environment policies can require addressing land tenure issues, land concentration, and power asymmetries, underscoring the observation that environmental investments are insufficient, in of themselves, to lift people out of poverty.
- Current efforts at reducing deforestation and forest degradation (REDD+) provide another avenue with tremendous potential for 'win-win' poverty and environment policies. A mosaic of improved land use practices and forested areas supported by economic incentives and technical support is probably the best option currently available to stabilise frontiers in large sectors of developing countries and to reduce rural poverty. Such efforts alone will not reverse deforestation trends; they should be accompanied by efforts to tackle large-scale agriculture, real estate speculation, and other forces that promote forest cutting.
- At the urban level, the traditional sectors of water and sanitation remain the most promising areas for a twin-track approach. The poverty-environment linkages here have been well researched and the payoffs are substantial (UNDP, 2005). Linked to these is the interface between health,

exposure to toxics, the informal waste collection sector, and recycling, an area in which the Poverty Environment Initiative is already working in Uruguay.

The increased production of waste has surpassed the capacities of most urban centres in developing countries and has provided grounds for the establishment of an informal waste collection sector that is responsible for most recycling. The conditions under which this activity takes place are extremely harsh and often reinforce structural poverty.

In summary, the integration of poverty and environment policies can have significant social rewards. Sustained interventions that keep structural realities in view, focus on impact, do not divorce themselves from the underlying causes of poverty, and invest in better governance in and greater efficacy of public policy are more likely to deliver the transformations necessary to anchor sustainable development.

Bah, El-hadj M. (2008). 'Structural Transformation in Developed and Developing Countries', MPRA Paper 10655. Available at: http://mpra.ub.uni- muenchen.de/10655/1/ MPRA_paper_10655.pdf>.

Barbier, E. (1987). 'Cash Crops, Food Crops and Agricultural Sustainability', Gatekeeper Series 2, International Institute for **Environment & Development.**

Barbier, E. (2000). 'The Economic Linkages between Rural Poverty and Land Degradation: Some Evidence from Africa', Agriculture, Ecosystems and Environment, Vol. 82, pp. 355-370.

Brocklesby, M. and Hinshelwood, E. (2001), 'Poverty and the Environment: What the Poor Say: An Assessment of Poverty **Environment Linkages in Participatory** Poverty Assessments', DFID.

Carson, R. (1962). Silent Spring. New York, Houghton Mifflin.

Dasgupta, S., Deichmann, U., Meisner, C., and Wheeler, D. (2005). 'Where is the **Poverty Environment Nexus? Evidence** from Cambodia and Lao PDR and Vietnam', World Development, Vol. 33, No. 4, pp. 617-638.

Chomitz, K., (1999). Environment-Poverty **Connections in Tropical Deforestation,**

discussion notes prepared for the **WDR Summer Workshop on Poverty and** Development, 6-8 July 1999, Washington DC.

Chomitz, K. (2007). At Loggerheads?: Agricultural Expansion, Poverty Reduction, and Environment in the Tropical Forests, Washington DC, World Bank.

DFID, EC, UNDP and the World Bank (2002). Linking poverty reduction and environmental management: Policy Challenges and Opportunities.

Gilbert, N. (2010), 'Can Conservation Cut Poverty?', Nature 467, 264-265. **Available at:** http://www.nature.com/news/ 2010/100913/full/467264a.html>.

Holt, E. (2001). 'Measuring Farmers' **Agroecological Resistance to Hurricane** Mitch in Central America', Gatekeeper Series No.Sa102, International Institute for Environment & Development.

Lind, M. (2010). From Shrillness to S obriety: Pragmatism in Climate Politics. Available at: http://www.policy-network.net/ publications_detail.aspx?ID=3758>.

Millennium Ecosystem Assessment (2005). **Ecosystems and Human Well-being:** Synthesis, Washington DC, Island Press.

North, D. (1990), Institutions, Institutional Change and Economic Performance, Cambridge, Cambridge University Press.

Soley, C. (2010). 'Needs Must: Should the Environment Trump Prosperity?' Available at: <www.policy-network.net/ publications_download.aspx?ID=3662>.

TEEB (2010). The Economics of Ecosystems and Biodiversity. Available at: http://www.teebweb.org/ TEEBSynthesisReport/tabid/29410/ Default.aspx>.

UNDP (2005). Millennium Project. Report of Task Force 7 on Water and Sanitation. Available at: http:// www.unmillenniumproject.org/documents/ WaterComplete-lowres.pdf>.

UNEP (2010). Why environmental externalities matter to institutional investors. Available at: http:// www.unepfi.org/fileadmin/documents/ universal_ownership.pdf>.

UNEP (2011). Towards a Green Economy: **Pathways to Sustainable Development** and Poverty Eradication. Available at: http://www.unep.org/ greeneconomy/GreenEconomyReport/tabid/ 29846/Default.aspx>.

World Bank (1992). World Development Report 1992 - Development and the Environment, New York, Oxford **University Press.**

World Commission on Environment and Development (1987). Our Common Future, Report of the World Commission on Environment and Development, Oxford, Oxford University Press.

by Lucy Wanjiru, Programme Specialist, Gender and Environment, UNDP/BDP Gender Team

Accounting for Green Growth From the Lens

of Gender Equality: Why It Matters!

While a green economy has the potential to contribute to global economic recovery and to create both high- and low-skill jobs, it also supports quality investments at the community level to provide clean, affordable energy and to reduce threats from food, water, ecosystem and climate crises.

A green economy that functions in this way is more likely to deliver on its promise to eradicate poverty and to promote equity, especially among women.

- 1. Oxfam International (2005).
- 2. Gender Justice: Key to Achieving the Millennium Development Goals. Available at http://www.ungei.org/resources/files/MDGBrief-English.pdf>.
- 3. Policy Paper: Intellectual Property, Agro biodiversity and Gender.
- 4. Evidence for Action Gender Equality and Economic Growth. Available at: http://www.oecd.org/dataoecd/34/15/45568595.pdf>.
- 5. UNDP and Energy Access for the Poor: Energizing the Millennium Development Goals. Available at: http://www.undp.org/energy/>.
- Equitable, healthy and decent jobs and livelihoods", Women's major group position paper in preparation of the "Rio+20" United Nations Conference on Sustainable Development 2012.

 Available at: http://www.unep.org/civil-society/Portals/59/Documents/12_GMGSF/docs_and_presentations/Additional_messages/gender_perspective_on_the_green_economy.pdf>.

6. "A Gender Perspective on the "Green Economy"

The world is shifting away from economic growth models based on fossil fuels and toward a new 'green' economy based on low-carbon development. The financial and economic crises have prompted increased investments in environmental infrastructure through economic stimulus packages, while countries continue to make commitments and substantial monetary pledges to support emerging financing mechanisms to mitigate and adapt to climate change.

A green economy can help to achieve sustainable development by alleviating environmental threats, contribute to the creation of dynamic new industries and income growth, and create quality jobs that can improve workers' economic standing and thus their ability to better support their families.

These new industries and jobs can help protect and restore ecosystems and biodiversity, reduce energy consumption, decarbonize the economy, and contribute to climate change mitigation and adaption.

The sustainability of the new green economy depends, however, not only on that economy's ability to yield environmental benefits, but also on its effectiveness in helping to eradicate poverty and to increase gender equality and women's empowerment.

Green economy initiatives that aim at creating more environmentally-sound economies are not automatically inclusive of fundamental social requirements such as income equity, job quality and gender equality. In failing to account for social factors, they could maintain or even aggravate the negative social and distributive trends of the traditional economy, such as existing inequalities and gender gaps.

While a green economy has the potential to contribute to global economic recovery and to create both high- and low-skill jobs, it also supports quality investments at the community level to provide clean, affordable energy and to reduce threats from food, water, ecosystem and climate crises. A green economy that functions in this way is more likely to deliver on its promise to eradicate poverty and to promote equity, especially among women.

In many developing countries, women are living on the frontlines of climate change. As primary producers of staple foods—a sector that is highly exposed to the risks of drought and uncertain rainfall—women are disproportionately impacted by climate change and are often excluded from political and household decisions that affect their lives. During natural disasters such as floods and hurricanes, for example, women suffer disproportionately and often count higher among the dead.¹

In addition, women tend to possess fewer assets and have insecure forest and land tenure rights. Even where legislation to secure women's land rights exists, the process of implementing the laws remains a challenge. In Madagascar, for example, only 15 percent of women own small landholdings, although the constitution guarantees women's land rights and 83 percent of employees in the agricultural sector are women. Furthermore, agricultural financing processes do not often include gender considerations. "OECD statistics show that of the US\$18.4 billion spent on agricultural aid between 2002 and 2008, donors reported that just 5.6 percent included a focus on gender".2

Although women generally lack decisionmaking power in social and political institutions and are excluded from leadership positions or given only secondary roles, they are not only victims of adverse climate impacts. Indeed, they are also active agents of change, leaders, and champions of economic growth and sustainable development.

Despite suffering from socio-economic disadvantages, women are already responding to climate changes while they work to maintain their families and communities. They are at the frontlines of everyday adjustment and adaptation to changing conditions and environments.

As primary caretakers of families, communities and natural resources, women are energetically supporting rural food security and maintaining agricultural biodiversity.3

They have accumulated specific knowledge and skills about local conditions and ecological resources and have the power to contribute to economic transformation and sustainable development. But to reach their full potential, they need support in scaling up and upgrading their activities related to sustainable agriculture, renewable energy, and the conservation of water supplies, forests and other natural resources so that they can generate greater economic benefits from their labour.

Increased access to cleaner fuels, energy sources and technologies, all of which

are essential for climate change mitigation, can have significant and rapid economic benefits for women in developing countries. It can improve productivity and efficiency and open up new income-generating opportunities for women, especially in currently underserved rural areas.

Supporting women in designing, producing and marketing new energyrelated equipment could trigger a positive chain reaction. Research shows that women are most likely to invest in the wellbeing of their families; their increased control over resources likely leads to increased spending on children, a greater accumulation of human capital in the next generation, and the creation of sustainable livelihoods for whole communities.4

The green economy will need to support innovative approaches and business models to facilitate women's entrepreneurship opportunities and support the scaling-up of field-proven solutions and approaches that facilitate growth for female-owned business ventures beyond social assistance and micro-credit schemes. In Mali, Burkina Faso and Senegal, for example, access to mechanical power (multifunctional platforms), some of which is run from clean biofuel, is generating income for 2 million rural women, increasing school completion rates, and equalising the girl-to-boy ratio in primary schools. New options (e.g., off-grid decentralised

mini-grids, water pumping and biofuel) are also being introduced rapidly. Scaling up energy access in off-grid areas across Africa will be instrumental in empowering women and accelerating progress on multiple MDGs.5

Still, despite recent gains in gender equality and women's empowerment, a significant wage gap and extremely low numbers of women in high-growth employment fields remain. Women still face significant challenges in entrepreneurship, including limited access to start-up capital, financing, networks, and technical expertise, as well as a lack of opportunity to bid on competitive federal contracts.6

A truly sustainable 'green economy' must promote gender-friendly, greencollar employment and entrepreneurship opportunities and social equity and must create green pathways out of poverty for both genders.

The Case of UNDP's Women's Green **Business Initiative**

The United Nations Development Programme's (UNDP's) strategic approach to addressing climate change is guided by the principles of inclusion and sustainable development, recognizing that climate change is a development issue and must be addressed hand-inhand with efforts to reduce poverty. To this end, UNDP has launched the Women's Green Business Initiative, a global programme aimed at promoting women's employment and entrepreneurship opportunities through climate change mitigation and adaptation activities.

Working in close collaboration with governments, civil society organizations, and the private sector, the Initiative is establishing "service delivery platforms" that offer policy advice, capacity building, financing options, information, and increased access to new technologies for developing countries. This initiative will further the UN Systemwide Policy on Gender Equality and the Empowerment of Women⁷ and the UNDP Gender Equality Strategy (2008-2013).8

The Women's Green Business Initiative will contribute to poverty reduction

Women and the Environment:

- Forests contribute to the livelihoods of many of the 1.2 billion people living in extreme poverty, and the large majority of these poor (over 70 percent) are women (Gurung and Quesada, 2009).
- 70 percent of the 1.3 billion people living in conditions of poverty are women. In urban areas, 40 percent of the poorest households are headed by women (UNDP, 2009 from UNFPA, 2008).
- Women predominate in the world's food production (50-80 percent), but they own less than 10 percent of the land (UNDP, 2009 from UNFPA, 2008).
- In sub-Saharan Africa, women comprise 60 percent of the informal economy, provide about 70 percent of all the agricultural labour and produce about 90 percent of the food (FAO, 2008).
- By training women, including grandmothers, to be solar engineers, the Barefoot College has helped them and communities to access renewable energy and reduce reliance on biomass as an energy source (Castonguay, 2009).

The Types of Enterprises that can be Supported by the Women's Green Business Initiative Include:

- Producing and marketing low-emission, more efficient stoves and equipment.
- Producing, marketing, and installing renewable energy technologies.
- Producing biofuels and biogas for lamps, cookers and motorised equipment.
- Expanding existing businesses using new energy efficient and renewable energy sources.
- Preserving forest and biodiversity through tree planting, ecosystem conservation and sustainable use of indigenous resources.
- Providing financial, business and environmental management and consulting services.

and the achievement of the Millennium Development Goals (MDGs), especially of MDG 3 on gender equality and women's empowerment. This is particularly important for gender-responsive and green public investment.

The Initiative equips women to engage vigorously in new economic activities that address climate change threats while building stronger, more resilient and self-reliant communities by implementing three strategic elements:

- Creating a policy environment that enhances equal economic opportunities for women: The Initiative provides advice and technical support to governments on policy and planning frameworks to remove legal, administrative and financial constraints affecting women's economic advancement and provides incentives and resources for the expansion of women's green enterprises.
- Building capacity for women's organizations and women entrepreneurs:
 The Initiative provides training and support services to assist women's organizations and entrepreneurs in starting, incubating and scaling up viable business enterprises that contribute to climate mitigation, adaptation and resilience.
- Increasing women's access to climate change finance mechanisms:
 The Initiative promotes genderresponsive public and private investments. It facilitates increased

access to existing climate change funds and pursues the establishment of new targeted financing options for women's green business initiatives.

The Women's Green Business Initiative aims to directly empower women in developing countries to engage in the design, production and delivery of green technologies, products, services, and information to adapt to and mitigate the effects of climate change. It also provides support services to remove legal, policy and regulatory biases that hinder women's entrepreneurship and employment in the new green industries and activities of the future. Evidence shows that investing in gender equality can accelerate economic growth and reduce poverty.⁹

Therefore, integrating gender considerations in the green economy is critical to the creation of a more equal and sustainable society for all. Doing any less means not involving and capitalising on the capacity, innovation and learning of 50 percent of the world's population.

The following references are related to the box on page 9:

Gurung, Jeannette and Andrea Quesada (2009). Gender-Differentiated Impacts of REDD to be addressed in REDD Social Standards. A report prepared for an initiative to develop voluntary Social and Environmental standards for REDD. Available from:
http://www.wocan.org/files/all/gender_differentiated_impacts_of_redd_final_report1.pdf>.

The green economy will need to support innovative approaches and business models to facilitate women's entrepreneurship opportunities and support the scaling-up of field-proven solutions and approaches.

Integrating gender considerations in the green economy is critical to the creation of a more equal and sustainable society for all.

UNDP (2009) Resource guide on Gender and Climate Change. Available from: http://content.undp.org/go/cms-service/download/publication/?version=live&id=2087989>.

FAO (2008). Gender Equality: Ensuring rural women's and men's equalparticipation in development. Food and Agriculture
Organization. <ftp://ftp.fao.org/docrep/fao/011/i0765e/i0765e10.pdf>.

Castonguay, Sylvie (2009).
Barefoot Colleague Teaching Grandmothers to be Solar Engineers. WIPO Magazine, 3/2009. June 2009. WIPO, Communications Division. Available from: http://www.wipo.int/wipo_magazine/en/2009/03/article_0002.html.

7. UN System Doc. CEB/2006/2.

8. The UNDP Gender Equality Strategy calls for tailored initiatives to support broad-based, equitable development that is inclusive of women's needs and contributions—especially those of poor women. Section 6.1 of the Gender Equality Strategy deals broadly with "Poverty Reduction and the Achievement of the MDGs" and includes initiatives for "Promoting inclusive growth, gender equality and MDG achievement." Paragraph 51 states that UNDP will be pro-active in working with national entities to incorporate a gender perspective, with special attention to four areas:

1) macro-planning instruments that incorporate gender analysis and specify gender equality results;

2) women's unpaid work; 3) gender-responsive public

9. Klasen, S. "Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions". Available at: http://siteresources.worldbank.org/ INTGENDER/Resources/wp7.pdf>.

investment; and 4) gender-sensitive analysis of data.

Sustainable Development as Freedom: Energy, Environment

by Kishan Khoday, Deputy Representative, UNDP Saudi Arabia¹

and the Arab Transformation

Control over energy and the environment has been central to state legitimacy and power in the Arab region, shaping the nature of governance and influencing how sovereignty and statecraft function in the region. As the systemic transition across the Arab region proceeds and countries craft new social compacts for development, the equitable and sustainable use of natural resources will likely emerge as a central issue of contention.

The social compact in past decades has been defined by a balance between state control over natural capital, on the one hand, and the provision of social welfare benefits, on the other. However, sustainable development is about more than charity—it is also about justice and accountability, with a key challenge being to expand the benefits of the region's natural wealth for the average citizen and the poor in particular.

Higher expectations have emerged for more transparent, accountable and participatory use of energy and the environment as a public good, combating corruption, preventing the squandering of natural wealth, and preserving natural capital for future generations.

The spirit of transformational change in the region stands as an opportunity to address entrenched systems of control, broaden access and benefitsharing related to natural wealth, expand the role of local governance, and strengthen resilience of the natural asset base on which the poor depend. While analyses of the links between environment and human development often focus on consumption sustainability, a broader perspective is needed to address the important role of natural resources as a means to expand

people's long-term choices and freedoms. Unless trends of resource scarcity and ecological change are addressed, basic freedoms, human security and human development stand in jeopardy.

In particular, the vulnerability of food, water and energy resources and the exacerbation of climate change together bring serious risks to sustaining human development. As noted by former UN Secretary General Kofi Annan, "when resources are scarce—whether energy, water or arable land—our fragile ecosystems become strained, as do the coping mechanisms of groups and individuals. This can lead to a breakdown of established codes of conduct, and even outright conflict." Underlying shifts in global resource demand and fragility of supply combined to create record prices for basic food and energy commodities in recent years, exacerbating social and political instability in many countries.

The transformation in the Arab region now provides space to rethink the role of natural resources in the economy, with new green economy concepts potentially providing a channel to increase social equity and the efficiency of resource use and generating new knowledge-based approaches to economic innovation and competitiveness. Such rethinking would do well to consider the role of the green economy, defined as an economy "that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities". 2 The concept has emerged as a way to stimulate economic activity, while responding to food, water, energy and climate crises and reorienting the global economy from a "system that allowed, and at times generated, these crises to a system that proactively addresses and prevents them."3

As countries across the Arab region move forward with new social compacts, the equitable and sustainable use of natural resources will emerge as an issue of contention.

Transformational change in the Arab region is an opportunity to rethink the role of natural resources in creating more inclusive and sustainable growth and as a means of expanding people's long-term choices and freedoms.

Sustainable development is about more than charity—it is also about justice and accountability.

^{1.} Kishan Khoday has served with UNDP since 1997, as UNDP Sustainable Development Advisor and **Deputy Coordinator for Natural Resources** and the Environment in Indonesia (1997-2005), UNDP Assistant Representative and Team Leader for Energy & Environment in China (2005-2009) and UNDP Deputy Representative in Saudi Arabia (since 2009).

^{2.} UNEP, Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication -A Synthesis for Policy Makers, UNEP, Nairobi (2011), 2.

^{3.} Jose Antonio Ocampo, The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective, Report of Experts to Second Preparatory Committee for the UN Conference on Sustainable Development (Rio2012), UNDESA, UNEP and UNCTAD, New York (2010), 2.

The 2012 Rio Earth
Summit is an opportunity
to engage in new southsouth cooperation for
sustainable development,
to engage the new role of
the South in emerging
risks and solutions.

A south-south solutions exchange can support sharing of models for sustainable development and green economy policy, and the transfer and development of clean technologies within the south. It could also facilitate the integration of green economy approaches into rapidly growing ODA and foreign investment flows from emerging economies to least developed countries.

Food Security at the Crossroads

Food security accelerated the emergence of some civil society movements, with 2011 seeing record prices because of surging global demand and historic droughts and flooding in key exporting countries in 2010.

The Arab region already stands as the world's largest net food importer and many fear we are witnessing a shift away from cyclical price fluctuations towards longer-term structural change driven by a shift in supply and demand fundamentals—a convergence of surging emerging economy demand alongside bottlenecks to expansion of agricultural land and productivity that include climate change, rising energy costs, reduced groundwater irrigation capacities, desertification and reduced soil fertility.

Enhanced social safety nets and new approaches to agricultural productivity gains are needed for Arab countries to adapt to these challenges. New attention is needed to review economic and fiscal policies related to agricultural production and land use, subsidy and social security systems, ecologically sound farming, crop diversification, expansion of sustainable irrigation and water use efficiency, use of energy efficiency and renewable energy measures, and soil replenishment.

Furthermore, food insecurity is driving some Arab countries to explore overseas land acquisition and leasing. Globally, the acquisition of land for food security has topped 140 million acres, bringing with it an investment potential of US\$50 billion to host countries.⁴

Saudi Arabia, for example, is now active in land acquisitions and leasing in Ethiopia, Indonesia and Sudan driven by high population growth in the Arab Gulf, with populations expected to double from 2000 levels by 2030 in an environment of scarce arable land and groundwater resources. However, this new global trend brings concerns about the impact on local communities in terms of land and water rights and their own food security, with a need for South-South cooperation and integration of sustainability, inclusion and equity into growth and investment policies.

Energy and Inclusive Growth

As noted by the 2010 IMF World Economic Outlook, "the persistent increase in oil prices over the past decade suggests that global oil markets have entered a period of increased scarcity. Given the rapid growth in oil demand in emerging market economies and a downshift in the trend growth of oil supply, a return to abundance is unlikely in the near term."

The convergence of declining energy reserves, the dramatic rise in emerging economy demand, and a gradual global shift to climate-friendly growth have created a break from the type of cyclical factors that shaped the past, with oil prices likely to remain high for some time to come. This holds risks for Arab countries, most of which are net energy importers.

There is now recognition that rising prices could constrain future human development trends unless energy alternatives are engaged. As a result, countries across the region are now intensifying efforts to expand renewable energy and energy efficiency measures to reduce import dependence and thus to save public resources for social development goals while also creating the foundations for new growth and a green economy.

Energy plays an equally important role in defining the nature of the state and human development in oil-exporting countries in the Arab region. The energy sector remains central to the region's economy, making up approximately 40 percent of GDP, but, as reserves decline, oil-exporting countries are also intensifying efforts to expand local renewable energy and energy efficiency measures. This is meant to conserve increasingly scarce oil reserves for future export revenues, on the one hand, and to diversify economies beyond oil to ensure a sustainable base for economic growth and youth employment, on the other.

In Saudi Arabia, for example, which is largely dependent on oil-burning power facilities and the expansion of non-oil industrial sectors, recent years have seen a dramatic increase in local direct oil use. The new King Abdullah City for Atomic

^{4.} Lester Brown, The New Geopolitics of Food, May/ June 2011, Earth Policy Institute, Washington DC, 7-8.

and Renewable Energy forecasts that, if current trends prevail, local oil demand could increase from about 2.5 million barrels per day (mbpd) out of the 10 mbpd produced today, to as many as 8 million barrels per day by 2028.6

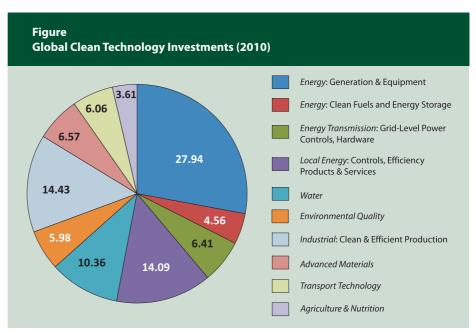
Thus, in addressing energy risks and opportunities in the Arab region, two complimentary goals are taking shape in the region, both in line with the vision of the UN Secretary General's Advisory Group on Energy and Climate Change: 1) to reduce the energy intensity of growth and 2) to expand access to sustainable forms of energy for the poor, the latter of which is in particular focus in 2012 as the International Year of Sustainable Energy for All.7

As a result of the global shift in resource supply and demand and emerging green economy opportunities, clean technology reached a record high market capitalization of US\$386 billion in 2010, of which US\$200 billion was in clean energy (see Figure).8 This is driven by emerging economies like Brazil, China, and India.9 Potential also exists for the Arab region to join this trend by building on its world-leading energy sector capacities and solar radiation levels. Initial steps include renewable energy and energy efficiency targets in Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia and UAE, and plans for a pan-Arab solar power network.

However, while clean energy holds benefits for the sustainability of development, it will not necessarily benefit the poor without policies for inclusive growth in the sector.¹⁰

The 2008 Riyadh Declaration on Energy for Sustainable Development, for example, advocated to make clean energy accessible for Least Developed Countries and was supported by the OPEC Fund for International Development and other partners.

This is important for the Arab region, where 40 percent of the poor lack energy access, with electrification rates in Sudan and Yemen as low as 25 percent. As noted at the global MDG+10 Summit in 2010, "lack of access to modern energy services is a serious hindrance to economic and



Source: Cleantech Group (2011).

social development and must be overcome if the MDGs are to be achieved."

South-South Solutions

Coming 20 years after the landmark 1992 Rio Earth Summit, the upcoming 2012 Rio Earth Summit will place a major focus on institutions for sustainable development and on the green economy.

Two underlying issues are important: the role of emerging economies in global sustainability challenges and solutions and the emerging risks from resource scarcity for social equity and inclusive growth. Unlike in previous eras of economic transformation, current responses to food, water and energy security are emerging through leadership of the South.

Thus, South-South cooperation can play a key role in harnessing the comparative advantages of partners in the South to bring about transformational change in the global economy and to support sustainability of their own economic and social development.

Just as the agricultural green revolution of the past reduced poverty across the world, so, too, could the next wave of clean technologies emerge as a critical tool for achieving inclusive growth and sustainable development. South-South cooperation can be a transformative force in this regard.

Opportunities exist to build new strategic partnerships to combine experiences and expertise and to establish policies and institutions as the foundations for new green growth and benefits to the poor. Scope also exists for cooperation among natural resource exporting and importing countries in the South to find new solutions to surging prices, market volatility, and vulnerability of the poor.

A South-South solutions exchange on issues of natural resources and the environment can add value to this process, connecting achievements and best practices among partners and helping shape evolving green economy strategies in follow-up to the upcoming 2012 Rio Earth Summit. ■

^{5.} IMF, World Economic Outlook, International Monetary Fund (IMF), Washington (2011), 89.

^{6.} KACARE (2011), Statement by the President of the King Abdullah City for Atomic and Renewable Energy to the Global Competitiveness Forum, 14 January 14 2011, Riyadh.

^{7.} UN, Report of the UN Secretary-General's Advisory Group on Energy and Climate Change, United Nations Publications, New York (2010), 7-9.

^{8.} Nicholas Parker, The Emerging Global Clean Economy: The Race for Sustainability Prosperity Goes Mainstream, Cleantech Group, Presentation to the Global Competitiveness Forum, 24 January 2011, Riyadh.

^{9.} UNEP, Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication: Policy Synthesis, UNEP, Nairobi (2011), 23.

^{10.} IEA and UN, Energy Poverty: How to Make Modern Energy Access Universal, OECD/IEA (2010), Paris.

by Nicolas Perrin, Senior Social Development Specialist Europe and Central Asia Region, World Bank

Challenges and Opportunities for Inclusive Green Growth

A focus on the social dimensions of climate change improves operational quality in terms of both substance and process, thereby contributing to better overall results.

Social and institutional analysis helps provide a snapshot of vulnerability and assesses institutional capacity for responding to climate change helping us not just to understand vulnerability in itself but who is vulnerable, for how long and why.

This strategy is particularly important in the Europe and Central Asia region (ECA), where the effects of climate change are already being felt, post-Communist legacies create unique environmental and infrastructural problems, and existing social inequalities could easily be exacerbated by the consequences of climate change.

In the Europe and Central Asia region (ECA), where the effects of climate change are already being felt, post-Communist legacies create unique environmental and infrastructural

environmental and infrastructural problems, and the consequences of climate change could easily exacerbate existing social inequalities.

This article seeks to identify some of these intersecting considerations and the role of social approaches in sustaining efforts to mitigate and adapt to climate change.

Why? A focus on the social dimensions of climate change improves the operational quality of substance and process, thereby contributing to better overall results. Social and institutional analyses help provide a snapshot of vulnerability and assess institutional capacity for responding to climate change, helping us to understand not just vulnerability itself, but also who is vulnerable, for how long, and why.

Can ECA countries adapt to climate risks and reduce emissions while safeguarding development?

Climate change represents a multisectoral concern for the Europe and Central Asia region. Temperature increases between 0.5 degrees celsius in the south and 1.6 degree celsius in the north have been noted, with anticipated increases of up to 1.6 to 2.6 degrees celsius by the mid-century.

Climate variability significantly threatens ECA countries, with negative effects already evident. The region's poor infrastructure and dire environmental situation, rather than the changing climate itself, figure most prominently as the region's key drivers of vulnerability. Due to these pervasive socio-economic

and legacy issues, even countries and sectors that potentially stand to benefit from a warming climate are poorly positioned to do so (Fay et al., 2009).

Although most ECA countries have achieved an absolute reduction in emissions during the past two decades due to industrial decline, emissions have begun to rise again, as efforts to de-couple economic development from carbon intensity meet with little success (World Bank, 2010).

Among the world's top ten highest greenhouse gas emitters per unit of GDP, five are from the ECA: Uzbekistan (1), Kazakhstan (3), Ukraine (6), Russia (7), Azerbaijan (8). Still, while reducing GHG emissions is vital for stabilising the global climate, national public policy often seeks to balance this with the need to provide access to affordable energy, opportunities for the mobility of people, goods and services, and transitional support to those dependent on carbon-intensive livelihoods.

Structural transformation of the economy to renewable energies in ECA offers opportunities for GHG reductions and important distributional and institutional challenges.

Social dimensions of green growth and climate change in ECA

Unprepared to manage a changing climate, ECA countries face increasing economic losses and inequitable social impact that will be disproportionately borne by the poor. Climate change, combined with a crumbling and inflexible infrastructure, renders ECA countries vulnerable.

Over the past 30 years, natural disasters have cost ECA countries about US\$70 billion, a figure anticipated to rise.

Most of this damage has occurred in Armenia, Romania, Poland, Russia and Turkey (World Bank, 2010). This adds to the challenges confronting individuals facing poverty, hunger, disease, mortality, displacement and conflict who already lack the necessary access to social capital, financial assets, effective governance and community mobilisation structures (see Box).

Ensuring the creation of alternative livelihoods, equitable energy tariff reform, equitable access to renewable energy and social assistance, robust national institutions and legal structures, as well as awareness-raising among major industry and citizens on greenhouse gas emission reduction targets (often defined as 'soft adaptation') are a prerequisite to developing holistic, effective long-term green growth strategies.

The economies of ECA countries are highly carbon-intensive due to energyintensive export industries (mining, metals, and textiles) and a dearth of efficiency regulation and standards.

International efforts to mitigate climate change set stringent emission reduction targets for the energy sector (World Bank, 2010), causing significant increases in the household cost of energy, potentially limiting access for poorer households, and ultimately undermining reform efforts. The poor are critical

Possible Social Impact of Climate Change in ECA

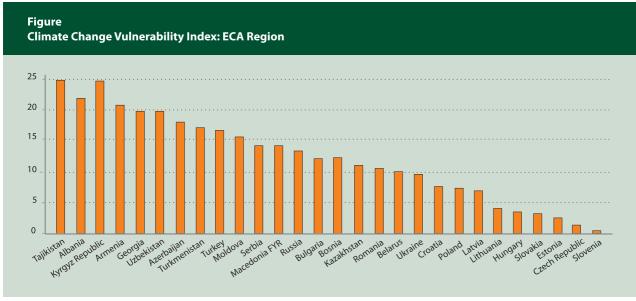
- 1. Loss of livelihoods related to stressed agriculture sectors (especially around rain-fed agriculture), water access degradation, increased climate variability and natural disasters.
- 2. Increase of forced migration (both rural and regional) triggered by climate variability can create new social challenges in the provision of urban services, remittances, social justice.
- 3. Increased conflicts between social groups (and possibly between countries) over scarce resources, especially water.
- 4. More frequent natural disasters can be devastating to health, infrastructure, and housing.
- 5. Raised morbidity rates due to the likely return of malaria to the Caucasus and Central Asia, and an increase in other weather-related diseases.
- 6. Climate change adaptation and mitigation strategies can exacerbate inequalities based on gender, youth, and wealth and undermine the realisation of rights to basic social services (housing, access to health and water, participation, etc.) and reinforce inequity through socially unsound mitigation efforts to reform energy and transport sectors and restructure industries.

Source: World Bank (2010).

stakeholders for long-term GHG emission strategies because, as residents, they would benefit from reductions in emissions (and particularly in air pollution) precisely when emissions have the potential to grow markedly as the living standards of the poor improve.

These are inherent contradictions between poverty reduction and natural resource management that need to be better understood and addressed.

Whereas technology is often touted as the starting point for green growth, social dimensions may prove to be even more crucial. Large-scale biomass and heat production programmes and the alteration of electrical grids to make better use of renewable energy sources will be pivotal in ensuring accessibility of those services across society while safeguarding livelihood opportunities and offering equitable employment opportunities to a changing



Source: World Bank (2008).

This article seeks to identify some of these intersecting considerations and the role of social approaches in sustaining the efforts to mitigate and adapt to climate change.

workforce in reformed infrastructure and sectors. New and innovative land use development practices will need to be explored to reduce infrastructure costs along with the energy required for transportation, community services, and buildings. Similarly, transportation technologies are likely to reduce the carbon footprint while improving development prospects, particularly for poorer and rural communities. Moreover, better forestry and agricultural techniques can offer cost-effective mitigation with significant potential to improve livelihoods, reduce soil erosion, and protect biodiversity (World Bank, 2010).

How can social approaches contribute to successful green growth strategies?

Green growth changes are largely societal if one considers the changes and scale required. In many countries, though, the climate change agenda has not been seen as a priority and is often met with skepticism.

The lack of general awareness of green growth options and climate risks remains an important obstacle for the adoption and adaptation of effective policy. Institutional challenges further reinforce this knowledge deficit. Green growth innovation as a public policy response is often divided among various agencies at national-level and lower-level institutions (regions, municipalities), where implementation capacity generally remains weak. This persistent capacity gap has direct consequences for the sustainability and effectiveness of short- and long-term strategies.

It is crucial for ECA countries to better understand drivers of vulnerability and

resilience in their respective contexts so that they can design and implement socially inclusive, climate-resilient policies and programmes.

Social analysis can inform the discussion by ensuring that green growth interventions effectively target vulnerable populations, deliver direct benefits, and support their adaptive capacity and resilience while ensuring solutions for more equitable mitigation (by, for instance, applying a gender lens to reforms in low-carbon growth sectors).

Applying political economy analysis to assess the levels of accountability and inclusiveness could help to manage more effectively the political and social risks of mitigation and ensure that adaptive capacity is strengthened more comprehensively across societies. Promoting good governance is key to pro-poor adaptation and mitigation and reinforces social resilience.

As recent experiences from the Pilot Program for Climate Resilience have shown, designing and implementing participatory approaches to increase transparency, accountability, and performance, while supporting the participation of dynamic civil society organizations, can help achieve better programme outcomes and deliver benefits to societies' most vulnerable groups.¹ Experiences with community-based disaster risk management and community-based adaptation hold important lessons here.

Capacity-building and awareness-raising of local institutions and communities/ citizens to respond and adapt to the challenges of the green growth agenda in the ECA region are indispensible if those strategies are to succeed. This should be complemented by enhanced monitoring of the social dimensions of the green growth in locally and externally funded programmes to ensure synergies between all levels (government, donor, private sector, civil society).

The next decade offers a window of opportunity for ECA countries—a critical opportunity to get the politics and the policy right. Knowledge-sharing will

play a central role in ensuring that green growth investments are not only profitable, but also equitable. ■

Banda, K. (2009). 'Gender and Mitigation', presentation to Global Gender and Climate Alliance side event, Bonn, Germany, 1 June 2009. Accessed online at: http://unfccc2.meta-fusion.com/kongresse/090601_SB30_Bonn/downl/20090601_Banda.pdf>.

Cameron, C., Bachofen, C. and Perrin, N. (2010). 'Social Dimensions of Climate Change, Learning in Focus: Europe and Central Asia region series: vulnerability, resilience and adaptive capacity, climate policy building blocks, mitigation, adaptation', Washington DC, World Bank.

Fay, M., Block, R. I. and Ebinger, J. (eds.) (2010). 'Adapting to Climate Change in Eastern Europe and Central Asia', Washington DC, World Bank.

Perrin, A., Agrawal, A. and Kononen, M. (2009). 'The Role of Local Institutions in Adaptation to Climate Change', Social Development Paper No. 118, Washington, DC, World Bank.

Perrin, A., Agrawal, A. and Kononen, M., (2009). 'Climate Policy Processes, Local Institutions and Adaptation Actions: Mechanisms of Translation and Influence', Social Development Paper No. 119, Washington, DC, World Bank.

World Bank (2010a). 'Climate Change and the World Bank Group. Phase II: the challenge of low carbon growth', Independent Evaluation Group, Washington, DC.

World Bank (2010b). 'Development and Climate Change', World Development Report 2010, World Bank, Washington, DC.

World Bank (2011). 'Issues Paper on Gender and Energy: A Background Paper for the World Bank Group's FY2011 Energy Strategy and Activities', World Bank, Washington DC.

World Bank (2011). 'Low carbon growth in Europe and Central Asia: Principal issues and a program of work' (draft), World Bank, Washington, DC.

^{1.} The Pilot Program for Climate Resilience (PPCR), approved in November 2008, was the first program me developed and operational under the Strategic Climate Fund (SCF), which is one of two funds within the design of the Climate Investment Funds (CIF). The PPCR aims to pilot and demonstrate ways in which climate risk and resilience may be integrated into core development planning and implementation. In this way, the PPCR provides incentives for scaled-up action and initiates transformational change. The pilot programmes and projects implemented under the PPCR are country-led and build on National Adaptation Programs of Action (NAPA) and other relevant country studies and strategies. They are strategically aligned with other donor funded activities to provide financing for projects that will produce experience and knowledge useful to designing scaled-up adaptation measures. See: < http://www.climateinvestmentfunds.org/cif/ppcr>.

Adapting to Change:

The Linked Challenges of **Building Resilient Communities**

by Dan Smith and Janani Vivekananda, Secretary General and Senior Climate Change and Security Adviser, respectively, at International Alert

Over the past three years,

the global discourse on climate change has shifted from an almost exclusive focus on mitigation to more attention being given to adaptation options for vulnerable communities. Whilst this shift is welcome and needed, it presents policy makers with a stubborn challenge, namely, how to cope with uncertain future changes.

At the macro level, scientific data on the physical impacts of climate change are patchy. And if this is the case at the global level, then the quality and reliability of data only diminish at the regional, national and subnational levels.

It suggests that there is a limit to what and how science can inform the process of adaptation and the requisite flexibility and nimbleness required to confront increasing uncertainty. How, then, can policies and programming be planned and implemented to address these great challenges?

Standard approaches to planning tend to analyse historical records and the current situation in order to extrapolate to the future. In principle, this methodology also needs to cover climate and the natural environment: nature sets the context for everything and environmental change is a variable that must be included in designing any structure or process that is designed to last for more than a few months.

However, climatic events of the recent past and of the present are likely to be largely unreliable 'predictors' of the future. In development, policy makers seek to build societies, infrastructure, and economies to fit a certain set of physical conditions assumed to be constant. In contrast, environmental change directly challenges those conditions

and the norms that they shape. When one adds to the 'mix' a diverse humanity in various conditions of well-being, persistent inequality and a rapidly evolving global ecosystem, traditional assumptions no longer apply either in the same ways or even at all.

The implications of this are far-reaching. Adaptation, as process, cannot rely solely on forecasting and the design of scripted solutions for predicted impacts. That itself is daunting enough for most countries and well beyond the capacity of existing financial and scientific resources.

The significant public investment in innovation and 'green transformations', including research and development, by Brazil, India, China and South Africa are beyond the reach of many other countries in the South. Brazil's investment in the agricultural sector in 2009-10 amounted to over US\$60 billion, more than double the available global funds for climate change as of October 2010 (Perch, 2011: 17) and China reportedly plans to invest US\$738 billion in renewable energy over the next 10 years (Wirth and Podesta, 2010).

Even if the capacity and funds were available, there would still be an additional challenge: responding to the unpredictable. One solution would be to strengthen communities' resilience, i.e., their ability to face and ride out shocks to the system, whatever form those shocks might take. Such thinking is reinforced in the World Resources Report (2010-2011) Decision-making in a Changing Climate.

The Framing Paper for the Report (Levi, 2010) cites five elements for effective climate change adaptation, one of which is 'adaptive', i.e., flexible and able to adapt to new information and conditions.

As climate change interacts with other features of the social, economic and political landscape, many countries face a high risk of political instability and violent conflict. This risk of instability both adds to the burdens faced by deprived and vulnerable communities, and makes it harder for them to reduce their vulnerability by adapting to climate change.

By tracing these complex and interlinked trajectories of risk, it is clear that climate change and variability are not climate issues alone.

To shape adaptation policies to best effect, it is necessary to go beyond responding to the most immediate natural impacts of climate change and look to the broader dimensions of resilience such as power, livelihoods and access to justice.

Given increasing uncertainty and insecurity, it also makes sense for adaptation efforts focused on resilience-building to learn from other governance failures. The failure of institutions responsible for safeguarding poor communities' interests—both formal and informal—has been at the root of the vulnerability of those communities. Governments increasingly acknowledge that vulnerability to climate change lies more in context than in absolutes.

Poverty, weak governance, political instability and corruption are all potential barriers to effective adaptation; they also drive insecurity. Moreover, the combination of these elements often heightens susceptibility to events, turning them into crises and disasters.

A review by Colten et al. (2008) on community resilience and lessons from New Orleans and Hurricane Katrina highlights the role of threat-multipliers and manifold challenges in shaping the scale of impact and the length of the recovery from disasters. Their findings note that vulnerability to hurricanes arises from numerous causes,¹ and not just from the hurricane itself.

Additionally, 'silent' emergencies are at risk of further escalation by climate change. Malaria currently costs African economies US\$12 billion a year in lost productivity (World Bank, 2011:19) and, according to the Food Price Watch, escalating food prices have driven an estimated 44 million people into poverty in developing countries since mid-2010 (World Bank, 2011).²

Riots over access to food skyrocketed in 2008 and have been, it is suggested, at the root of the 'Arab Spring' in 2011.^{3,4} Thus, resilience, conflict resolution, and peace-building go hand-in-hand.

Yet, despite many acknowledgements of this, most recently by the UK government in the recent review of its bilateral aid programme, efforts to operationalise these linked goals remain stilted and silo-ed. Most efforts respond to the direct environmental risks of climate change by switching crops, building flood defences, moving homes, and building dwellings differently.

Adapting Socially?

On the flood plains of the Brahmaputra, in the state of Assam, India, people respond to increased flooding by seeking new livelihood opportunities, often challenging traditional cultural norms on acceptable livelihoods strategies for specific social groups. For instance, agriculture is connected with a certain group in the society, while fishing is connected to another that the local community considers to be a lower-class ethnic group. In some cases, it might be suggested that a shift away from agriculture could reduce their vulnerability. However, a shift from agriculture, weakened by floods and sedimentation, to fishing requires considerably more than equipment and finance. Complementary moral support and capacity-building for cultural change is a vital component for sustaining change.

Though important, they often fail to address the knock-on social consequences that require more attention and resources and that ultimately can undermine the sustainability of development progress. These remain least understood in policy and practice.

In fragile contexts, particularly, this has significant resonance. Changing rainfall patterns and increasing natural hazards will affect national economy, trade, development, equity, governance, and political stability, and these, in turn, affect the ability of people and governments to respond adequately to the challenges of climate shocks.

The humanitarian crisis in Pakistan last year, as a result of floods, rapidly fuelled widespread political unrest, linked to the perceived inability of the national government to adequately respond to people's needs. Individuals often do not necessarily distinguish between climate-driven stressors and other stressors (unequal market-access, population growth) that result in heightened insecurity and deteriorating livelihoods.

Accordingly, a shift to the 'no-regrets' approach of building resilience, writ large, becomes critical. Yet, this remains more concept than reality. Berrang- Ford et al. (2010: 6) found that "most adaptations are occurring at the individual level with weak involvement of government stakeholders, and adaptation activities are more likely to occur in natural resource sectors such as agriculture, fisheries and forestry, or the securing of food resources".

Adaptation mechanisms are more likely to include community-level mobilisation rather than institutional, governmental or

policy tools." Consequently, the appeal of an 'all-risks' approach to development becomes obvious.

How to embark on such an approach?

First, there needs to be greater understanding of the social complexities in adapting to climate change. Second, decisions and institutional mechanisms need to be shaped to address linked problems with linked responses.

Take, for example, a water-related problem such as floods, where the best approach to adapting might actually lie in the education sector.

See the example in the box.

The World Bank (2010:34) acknowledges that "education will also affect a person's ability to anticipate climate events, make proactive adaptation decisions and reduce losses related to disasters." Accordingly, adaptation practice must also begin to reflect that climate change is not just a climate issue.

In considering what makes people and systems resilient, including the availability of information and the ability to digest and act on it, relationships of trust between citizens and authorities, viable livelihoods options and good governance, there is a good chance that adaptation efforts could yield double and triple dividends.

Failure to do so will likely result in maladaptation and the wasting of a rare opportunity to re-engineer development for the benefit of those who need it most.

Berrang-Ford, L., Ford, J. D., and Paterson, J. (2010). 'Are We Adapting To Climate Change?', Global Environmental Change 21 (1), 25–33. Colten, C. E, Kates, R. W., and Laska, S. B. (2008). 'Community Resilience: Lessons from New Orleans and Hurricane Katrina', CARRI Research Report No.3, Oakridge Research Laboratory. Available online at: http:// rwkates.org/pdfs/a2008.03.pdf>.

Levin, K. (2010). 'World Resources 2010 Framing Paper: Decision Making in a Changing Climate', World Resources Report, Washington DC. Available online at: http:// www.worldresourcesreport.org>.

Perch, L. (2011). 'Mitigation of What and by What? Adaptation by Whom and for Whom? Dilemmas in Delivering for the Poor and the Vulnerable in International Climate Policy', Working Paper 79, Brasilia, International Policy Centre for Inclusive Growth. Available at: <www.ipc-undp.org/pub/ IPCWorkingPaper79.pdf>.

Smith, D. and Vivekananda, J. (2009). Climate Change, Conflict and Fragility: Understanding the Linkages, Shaping Effective Responses. International Alert.

World Bank (2010) Economics of Adaptation to Climate Change: Social Synthesis Report. Available online at: <http:// siteres our ces. world bank. or g/EXTSOCIALDEVELOPMENT/Resources/244362-1232059926563/5747581-1239131985528/ EACC Synthesis report final web.pdf>.

World Bank (2011). Africa's Future and the World Bank's Support to It. Africa's Regional Strategy. February 2011. Available online at: http://siteresources.worldbank.org/ INTAFRICA/Resources/Africa_s_Future_ and_the_World_Bank_s_Role_in_it.pdf>.

- 1. A summary from an article by Kates and the report were also included in 'Lessons in Resilience From New Orleans' by Andrew Revkin (2010). Available at:
- http://dotearth.blogs.nytimes.com/2010/08/13/ lessons-in-resilience-from-new-orleans/>.
- 2. See: http://www.worldbank.org/foodcrisis/ food_price_watch_report_feb2011.html>.
- 3. See: http://www.iiss.org/publications/survival/ survival-2011/year-2011-issue-2/global-warming-andthe-arab-spring>.
- 4. See: http://www.ifpri.org/sites/default/files/ publications/bp018.pdf>.

Challenges for the by Leonardo Hasenclever, Research Fellow, IEB1 and Alex Shankland, Research Fellow, IDS2 **Real Participation of Indigenous Peoples in REDD+**

Ambitious claims are being made for the potential of enhanced approaches to the reduction of emissions from deforestation and forest degradation (REDD+) to become a key source of funding for forest conservation. Moreover, the development of REDD+ schemes is expected to bring so-called 'co-benefits' for forest conservation and forest-dependent livelihoods, including biodiversity conservation, forest recuperation, and sustainable harvesting of forest resources.

Indigenous peoples continue to play a critical role in forest and biodiversity conservation through their livelihoods, or ways of living, in the absence of broader policy initiatives. While 'REDD+' recognizes this and promises to deliver significant resources at an unexpected scale, there is some danger that this is more panacea than a fundamental shift in development policy and practice. Indigenous territories, which cover around a quarter of Amazonia (in Brazil) and a substantial proportion of the world's other major forest regions, have been shown to be the most effective

land use category in reducing tropical deforestation (Nelson and Chomitz, 2009). This fact received relatively little acknowledgement before the advent of global climate change. In contrast, references to indigenous peoples are now increasingly common in climate change policy statements, with an apparent international consensus emerging on the importance of involving them in adaptation and mitigation initiatives.

Even so, clear policy frameworks for the effective and equitable involvement of indigenous peoples have yet to emerge. Greater clarity is needed in both the 'what' and the 'how': what these frameworks should contain and how they should be implemented. As Leisa Perch noted in a recent review, policy makers across a range of international agencies agree that "the 'how' remains the greatest challenging in moving forward on sustainable and co-benefits approaches" (2010: 10).

Some of the most important issues for co-benefits debates in the context of

Indigenous peoples play a critical role in forest and biodiversity conservation through their livelihoods, or ways of living, even in the absence of broader policy initiatives.

The extent to which the 'carbon price' accounts for all co-benefits, and thus serves as proper incentive for sustaining pre-REDD environmental stewardship actions, is still unclear.

This article draws on work supported by UKaid $through \, the \, Learning \, Hub \, for \, Low \, Carbon \, Climate$ Resilient Development, a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID, IDS or IEB.

^{1.} IEB - International Education Institute of Brazil - Research Fellow-Climate Change and Environmental Economics.

^{2.} IDS - Institute of Development Studies - Research Fellow-Participation, Power and Social Change Team.

indigenous peoples, indigenous territories and REDD+ relate to the question of how different mechanisms can effectively translate the value of their complex livelihood system into carbon prices, i.e., how they can give economic value to the source of the positive externalities that these territories have historically generated.

As payment for such externalities are discussed in terms of cash (per CO₂ stored/emissions avoided), concerns are being raised about how such communities, whose economies are not cash-based and/or who have very little access to other formal mechanisms such as banks or other financial service providers, will access and benefit from such opportunities.

A further 'how' also needs to be addressed: How can indigenous peoples themselves actually shape the policies that affect them? Alcida Ramos and colleagues note that "sovereignty, self-government and self-determination are core values in the Western world, but they are seldom contemplated in relation to indigenous peoples.

[...] To indigenise development is to take into account the indigenous version of these values" (2009: 5).

In view of the findings of a recent study of the political economy of REDD+ regulation in Brazil, equi-proportionality —or equity and proportionality together, that is, an equity criterion submitted to principles of proportionality— should be an essential element of a more inclusive approach. In the case of REDD+, this applies specifically to redistributive parameters/principles for benefit-sharing, proportional to the relative benefits generated, conserved,

warranted—or, in other words, the area of forest conserved, the degree of preservation of its major ecosystem services and social, cultural and ecological processes.

Consequently, the redistribution of REDD+ benefits would follow equity criteria proportionally on the basis of the relevant aspects of forest conservation for which indigenous peoples (and other local communities) can claim responsibility and that are important for their livelihoods and cultural and social values, including non-use/intrinsic values.

By informing price formation systems that seek to account for the critical co-benefits generated by indigenous peoples, positive incentives for pre-existing conservation activities can also be created. Such a shift would also require compensating for likely underestimations of the opportunity costs of REDD+ for forest-dwelling populations and would clearly require significant political will before implementation.

The literature on environmental economics has already shown that market-based instruments can be a 'dynamically efficient' incentive for the development, innovation and adoption of low-cost abatement technologies that enable adopters to reduce the costs of achieving emissions targets, in line with the principle of equi-marginality³ (Requate, 2005).

However, they may also contain an excessive bias against other seemingly expensive mitigation technologies that have a large potential for cost reductions,

particularly in the long term, bringing into question the extent to which cost-effectiveness alone is a sufficient criterion⁴ for evaluating policy options.

On the one hand, the principle of equi-marginality requires strong market institutions in order to permit economic agents to achieve socially optimal results —often with no explicit effort to address equity. Most of the discussion around REDD+ and related economic instruments (such as benefit-sharing, warranty, and liability) derive from standard welfare economics, but also understand that this is also inherently contradictory and counter-intuitive.

On the other hand, the principle of equi-proportionality requires strong political will, efficient participation, solid institutions and regulation to enable economic agents to achieve equity-optimal results according to well-defined criteria—which dimensions of forest conservation will be the basis for establishing proportionality, for example—within well-defined socially defined objectives.

According to the theory of price formation, prices reflect only the relative scarcity of the goods and services being priced—in this case, tons of carbon or, say, carbon credits via sequestration or storage. In reality, though, these are influenced by many of the aspects cited earlier, a differentiation currently applied without regulation.

The extent to which the 'carbon price' accounts for all co-benefits, and thus serves as proper incentive for sustaining pre-REDD environmental stewardship actions, is still unclear.

In Brazil, concern about the potential for rapid expansion of unregulated REDD+ activities targeting indigenous lands has been growing among policy makers, NGOs and indigenous peoples themselves.

In our recent study of the political economy of REDD+ regulation in Brazil, we examined the different national and subnational processes through which government and non-governmental actors have

Scope and Scale of Indigenous Lands in Brazil

The territory of Brazil comprises 851,196,500 hectares, or 8,511,965 square kilometres. There are 673 Indigenous Lands (TIs), with a total area of 111,523,636 hectares (1,115,236 square kilometres). Thus, 14 percent of the country is reserved for the Indigenous peoples.

The majority of Tls, numbering 405, are concentrated in the "Legal Amazon" (Amazônia Legal), and their combined area of 108,211,140 hectares, equates to 20.67 percent of the total area of that region. The remaining 3,312,496 hectares are scattered across the country's northeastern, southeastern and southern regions and the non-Amazonian parts of the mid-western region.

Source: http://pib.socioambiental.org/en/c/terras-indigenas/demarcacoes/localizacao-e-extensao-das-tis.

BOX 2

Perspectives on Values

Values are important. O'Brien and Wolf (2010: 233) note that "a values-based approach to vulnerability and adaptation recognizes that economic assessments of impacts and responses, as exemplified in the Stern Review, cannot capture the full significance of climate change.

The experiential and cultural dimensions of climate change, largely ignored in assessments by the IPCC, examine the meaning and relevance of climate change for individuals and groups. Vulnerability is not simply about the negative material outcomes associated to climate change. [...] Consequently, what is considered legitimate and successful adaptation depends on what people perceive to be worth preserving and achieving, including their culture and identity".

Source: See O'Brien, K. L. and Wolf, J. (2010).

tried to shape a national REDD+ policy framework (see Shankland and Hasenclever 2011).

We noted that the initial polarization between ideological positions favouring and opposing the use of market mechanisms for REDD+ initiatives, though not yet formalized, seemed to have been overcome through a series of consultation processes, including a civil society-led initiative that shifted the debate towards a consensus on the importance of defining safeguards for any such initiatives involving indigenous peoples or other local communities.

Still, we concluded that this apparent consensus also risked marginalizing indigenous concerns, given the speed of the policy process and the practical and political difficulties in ensuring meaningful involvement not only of indigenous leaders, but also of their grassroots constituents.

Furthermore, we observed that safeguards are not a sine qua non condition for REDD+ project implementation, a situation potentially leading to further risk of marginalization for indigenous peoples and other local forest communities.

Managing these macro-micro dynamics including effective and inclusive communication and representation across different levels from the local to the global—is a key challenge for indigenous peoples' engagement in REDD+ policy processes. Despite strong efforts to ensure inclusion of representatives of indigenous peoples and other forest communities, efforts to

accommodate indigenous peoples' own mechanisms of political deliberation and decision-making, are inconsistent.

So far, Brazil's REDD+ consultation process has not fully taken on board the profoundly different understandings of human beings' relationships with 'nature' among indigenous peoples. These different understandings are linked to equally profound differences in values (see Box 2).

These findings resonate with other critiques of REDD and even REDD+ globally and spotlight the need for local-global (micro-macro) management structures to appropriately match the nature of the issues involved.

There is limited good practice, to date, on managing resources of local, national and global relevance within a single, complementary framework.

The principle of equi-proportionality adds a critical normative perspective, that is, it is concerned with the difference between how things actually are and how they should be and explicitly recognizes the importance of values.

Anything less than a full recognition of and respect for distinctive values and decision-making processes undermines the principles of participation enshrined in many UN human rights conventions, including the International Convention on the Rights of Indigenous Peoples, and broader social justice principles of access and benefit-sharing as also expressed in the Nagoya Protocol of the UN Convention on Biological Diversity. ■

The principle of equi-proportionality adds a critical normative perspective. It is concerned with the difference between how things actually are and how they should be and explicitly recognizes the importance of values.

Nelson, A. and Chomitz, K. M. (2009). Protected Area Effectiveness in Reducing Tropical Deforestation: A Global Analysis of the Impact of Protection Status. Washington: World Bank.

O'Brien, K. L. and Wolf, J. (2010). 'A valuesbased approach to vulnerability and adaptation to climate change, Wiley Interdisciplinary Reviews: Climate Change, Volume 1, Issue 2, pp. 232-242, March/April 2010. John Wiley & Sons, Inc.

Perch, L., with Stahlberg, S. G. and Potiara, C. (2010). 'Maximizing Co-Benefits: **Exploring Opportunities to Strengthen Equality and Poverty Reduction through** Adaptation to Climate Change', IPC-IG Working Paper 75.

Ramos, A. R., Osório, R. G. and Pimenta, J. (2009). 'Indigenising Development', Poverty in Focus 17.

Requate, T. (2005). Environmental Policy under Imperfect Competition: A Survey. **Available at:** http://ideas.repec.org/p/zbw/ cauewp/3198.html>.

Shankland, A. and Hasenclever, L. (2011). 'Indigenous Peoples and the Regulation of REDD+ in Brazil: Beyond the War of the Worlds?', IDS Bulletin 42 (2).

- 3. The basic intuition for the principle of equimarginality is that economic agents interacting in any space (market) and all conscious of their cost structure for some kind of good or service supplied, if left alone, will arrive at the best /optimal social result by, at the margin, adjusting their quantities and prices to the best for each one or, say, by maximizing individual profits. It is an equity principle for private liberal economic interactions, derived from welfare economics.
- 4. By developing mechanisms such as REDD+ based on a criterion like 'cost effectiveness' (STERN, 2007), the results will be those which predict welfare economics or, say, a social Pareto optimum, which have not been positive in the context of equity. Cost effectiveness works under a perspective of economic efficiencythe largest quantity with the minimum prices—but limits space for differential price formation schemes.
- 5. Theoretically, the price system will lead prices to reflect mainly the relative scarcity of the good/service

by Olufunso A. Somorin and Denis J. Sonwa, Central African Regional Office, Center for International Forestry Research (CIFOR)

People, Decentralised Power and Community Forestry in Cameroon

The management boards of some community forests use their connections with external donor agencies to draw on interventions such as technical training and innovations to extend their livelihoods beyond traditional agriculture.

New opportunities such as the domestication of high-priced wild leaves and fruits, beekeeping, snailry, grasscutter farming, to name just a few activities, have increased household income, potentially reducing poverty by as much as 18 to 30 per cent, especially among women, over about three years.

In the past two decades,

extensive policy reforms have fundamentally transformed the institutional conditions for the governance of natural resources in most developing countries. As centralised and free market-oriented solutions have floundered, new and more decentralised institutional arrangements that seek to incorporate local actors and communities have emerged (Andersson, 2006).

Embedded in these decentralised institutional arrangements is power in the form of 'local authority' given to communities to manage their natural resources. Local authority and decision-making systems pertaining to the management of natural resources affect livelihoods and the overall well-being of the local communities that depend on them.

Central to the global movement for increasing the decentralisation of power, particularly in resource management, is the recognition of the importance of the participation and benefit-sharing of local stakeholders and actors for the success and sustainability of interventions and especially for the effectiveness of development.

The 1994 Forestry Law of Cameroon introduced the decentralisation policy for the forestry sector. Through this law, community forestry was established and the management of forest resources was formally transferred to local actors and institutions. According to the Forestry Law (Article 37) and the Manual of Procedure of the Ministry of Environment and Forestry, community forestry is "a part of the non-permanent forest estate, measuring up to 5000 ha, that is the object of an agreement between government and a community in which communities undertake sustainable

forest management for a period of 25 years." The community can therefore be composed of one or more villages legally represented by an association or common initiative group that represents the local communitarian institution.

The creation of community forests aims above all to improve livelihoods dependent on forest management by empowering precisely the users of local resources. In managing their forests, the members of the community forests generally make rules in the common interest in order to reduce the loss of the forest resources on which they depend, thereby reconciling short-term and long-term interests.

Based on the assumption that community forestry could be a promising and viable approach to reducing rural poverty and to promoting sustainable forest management, many case studies have investigated the success of community forestry in the last decade (Vabi et al., 2000; Somorin, 2011).

The focus has been on its effectiveness in timber logging and forest management, financial returns for socio-economic development, poverty alleviation, cost-benefit analysis of participation and returns, and institutional roles in mediating external interventions.

With respect to poverty alleviation, the findings of these studies show that some communities have benefited monetarily and more broadly economically either through direct cash payments or employment in timber processing. For some households, this income, which supplements their normal gains from agriculture (their main occupation), is financial capital that can be used to diversify into other livelihoods. Many communities claimed to have at least

received financial returns in cash or to have benefited from local infrastructure projects such as the construction of classrooms or the roofing of local houses with aluminum (Oyono, 2005; Brown and Lassoie, 2010). The management boards of some community forests use their connections with external donor agencies to draw on interventions such as technical training and innovations to extend their livelihoods beyond traditional agriculture.

New opportunities such as the domestication of high-priced wild leaves and fruits, beekeeping, snailry, grasscutter farming, to name just a few activities, have increased household income, potentially reducing poverty by as much as 18 to 30 percent, especially among women, over about three years. In other contexts, the communitarian arrangement has increased market opportunities for local traders, where resources (both agricultural and NTFPs) are sold together at negotiated prices in order to maximise returns (Somorin, 2011).

At the heart of the creation of community forestry in Cameroon is the need to achieve better forest management at the local level. Many research findings have shown that communities often develop a simple management plan to regulate the exploitation of timber and to reduce deforestation and degradation as much as possible. Critically, higher ecological goods and services such as biodiversity and carbon in community forests promise new future opportunities for payment for ecosystem services—a potential source of future income for local communities (Ingram, 2010).

It is also noteworthy, though, that community forestry in Cameroon has had mixed results on poverty alleviation for various reasons, which include varying degrees of access to market information, communities' varying technical and managerial capacities, and varying degrees of access to external intervention programmes (Ingram, 2010).

There is also a cultural dimension to decentralising power in the forest sector of Cameroon. Decentralisation of forests and its related benefits have created a sphere of recognition for 'forest peoples' or marginalised groups such as the pygmies. With these changes, marginal groups whose interests and needs were not formerly integrated into formal public legal system of laws and legislations now have access and management rights to the forests.

As a result, financial returns from forest decentralisation have been used for social infrastructure such as community houses, health centres, schools, churches, water wells, and schoolteachers' salaries. Community forestry can also be seen as a space for social negotiation between the old and young generations.

In a sense, where social amenities are provided in the rural areas through the returns from community forestry, some of the younger generations have chosen to remain in their communities rather than to migrate to urban cities in search of a better life. Thus, their innovative ideas and human capacities contribute to the implementation of social and economic innovations (Oyono, 2005).

Community forestry in Cameroon is not totally devoid of challenges. Additional revenue streams from community forestry can be substantial for poverty reduction, but, where such benefits are not equitable, the process can be a source of conflict or social disorder. In most cases, there is a dire need for local communities to strengthen their technical and management capacities in order to maximise livelihood returns from the community forest arrangement.

The uncontrolled exploitation of timber in some community forests, pursued to generate sufficient financial returns to offset the transaction costs of obtaining their legal status as community forests, has weakened sustainable forest management, Furthermore, conflicts between traditional authorities (elders and village chiefs) and community forest management boards (younger and educated) within local forest management authorities have often arisen.

This conflict often affects the social relations between local institutions and authorities, thereby reducing the benefits of the decentralisation of power for livelihoods. Where local customary authority has been reconciled with community forestry, there were reports of 'elite capture', whereby a few elites had mismanaged or embezzled revenues (Oyono, 2005; Brown and Lassoie, 2010).

Still, overall, community forestry as a form of power decentralisation in Cameroon has provided various pathways for participation and benefit-sharing, mainly in the form of legal access to the forest—a natural resource that supports many livelihoods. Additionally, local access and well-defined property and management rights to local resources are value-added benefits of community forestry, enabling sustainable livelihoods.

Critically, the interest of local communities in designing their own rules to regulate resource exploitation is a good step for sustainable forest management, without which the designation of 'formal access' may not necessarily bring about either transformation in the management of forest resources or reconciliation of poverty reduction with conservation and management.

Andersson, K. (2006). 'Understanding decentralised forest governance: an application of the institutional analysis and development framework.' Sustainability: Science, Practice and Policy, 2(1): 25-35.

Brown, H.C.P and Lassoie, J.P. (2010). 'Institutional choice and local legitimacy in community-based forest management: lessons from Cameroon.' Environmental Conservation, 37(3): 261-269.

Ingram, V. (2010). 'Cost-benefit analysis of community forestry in Cameroon', unpublished document.

Oyono, R.N. (2005). 'Profiling local-level outcomes of environmental decentralizations: the case of Cameroon's forests in the Congo Basin.' Journal of Environment and Development 14(2): 1-21.

Somorin, O.A. (2011). 'Forest livelihoods, community forestry institutions and adaptation to climate variability: evidence from southern Cameroon', unpublished report.

Vabi, M.B., Ngwasiri, C.N., Galega, P.T. and Oyono, R.P. (2000). The devolution of forest management responsibilities to local communities: context and implementation hurdles in Cameroon. Yaoundé, Cameroon: WWF.

by Hélène Connor, PhD, Chairman of the Board and Laura E. Williamson, Project Director, respectively, at HELIO International

Ecodevelopment:

One Vision, Two Moral Imperatives, Three Pillars

The vision and overarching principles embodied in the ecodevelopment concept are so powerful that for over forty years they have sustained the environment movement as it strives to meet this elusive goal.

However, achieving ecodevelopment can only be attained if the appropriate relationships between the three pillars of sustainable development are better understood.

The goal of ecodevelopment¹ is to create a lasting harmony between humans and nature. Since the first environmental international conference in Stockholm in 1972, the vision and overarching principles embodied in the ecodevelopment concept have sustained an international social movement concerned with the environment.

The objective of ecodevelopment was also adopted by the world's governments that signed (but did not necessarily ratify) the 1992 Rio Treaties on Climate, Biodiversity and Desertification.
Ecodevelopment also inspires the development of Agenda 21s worldwide. Still, while there is an all-inclusive vision of what ecodevelopment could and should be, few efforts to implement it have been fully successful.

It is widely accepted that development should proceed along the three pillars identified in the Brundtland Report (1987). Numerous lengthy articles and books have been written about the need to protect the environment, the importance of the economy, and the social requirements to be fulfilled in a civilised society.

In the early days of the environmental movement, such concerns about nature and people signalled definite progress. More recently, discourse on socioenvironmental justice has led to such questions as: Why is the gap between poor and rich increasing—whether it be among or within countries? Why are women still the most adversely affected group among the poor worldwide? Why is there so much social distress in a very affluent world? Why are there such apparently irreversible failures?

There is real cause for concern. In 2010, gross world output was estimated at

US\$63.17 trillion, with the US, the EU, China, the UK, Brazil, India and Russia contributing collectively 69 percent of this output (CIA WorldFactbook, 2010).² Simultaneously, inequity seems to be increasing and stagnating, in some areas (see Ortiz and Cummins, 2011).

To answer any of these questions requires reflection on the concepts, thinking and politics behind these issues. The idea that development will automatically benefit all is reminiscent of Adam Smith's 'invisible hand' and Voltaire's Candide, where, in the latter, "everything is for the best in the best of all possible worlds". This innate equilibrium in all things has not materialised, and, even in the face of deliberate policy, the record is marked by limited success and multiplying challenges.

China's Environment Minister, Zhou Shengxian, wrote in February 2011 that, "In China's thousands of years of civilization, the conflict between humankind and nature has never been as serious as it is today.
[...] The depletion, deterioration and exhaustion of resources and the worsening ecological environment have become bottlenecks and grave impediments to the nation's economic and social development."

To understand this contrast between 'intent' and 'application', we must dig deeper, analysing behaviour and scrutinising the sources of those failures. We suggest that the characteristics of the three development pillars and the relationships between them, i.e., the power structure that is formed between them, is fundamental in this regard.

The three pillars—environment, society, and the economy—are obvious tools at our disposal to bring about ecodevelopment.

- 1. "Ecodevelopment refers to development at regional and local levels, consistent with the potentials of the area involved, with attention given to the adequate and rational use of natural resources, technological styles and organizational forms that respect the natural ecosystems and local social and cultural patterns. The term is also used to describe an integrated approach to environment and development." See: http://stats.oecd.org/glossary/detail.asp?ID=710.
- ${\it 2. See: {\tt https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html}{\it >}.}$
- 3. Jacobs, A. (2011). China Issues Warning on Climate and Growth. Published 28 February 28 2011. Available online at:
- .">http://www.nytimes.com/2011/03/01/world/asia/01beijing.html?_r=2&adxnnl=1&ref=world&adxnnlx=1300129236-TZEjvuDx2e0asPlfRc/WKA>.
- 4. Daily scientific discoveries prove that there is still much to learn about our environment and that thoughtless initiatives are destroying this capital asset, which we still do not understand fully.
- 5. Out of the availability, use and regeneration of the human-nature relationship comes civilisation that encompasses culture, arts, politics, technologies, social constructs, institutions, and all forms of material and social capital.

Logically, this triad is efficient if each of the tools is well-designed and used appropriately. Sustainability also implies that both quantity and quality are important, i.e., that an internal healthy structure is needed to allow each pillar to play its role and act symbiotically with the other two pillars.

The first pillar, environment (the new name for nature), provides all the goods and services available in the world, directly and indirectly. This refers to energy, raw materials, food, etc. However, these goods and services are subject to physical, biological, and other laws that must be studied and respected.4 For example, humankind must not harm (beyond repair) natural inputs, lest it hamper society's survival. Knowing that we are degrading our environment and thus sawing off the branch on which we sit, renders our existence precarious and uncertain.

There is perhaps no greater manifestation of this than in the worstcase scenarios for global climate change. It is undeniable that our first and main pillar (environment) is under threat from ignorance, short-term thinking, and a cavalier attitude to the importance and relevance of nature, which is often largely defined in utilitarian terms.

The second pillar, society or humankind, is the beneficiary of the natural capital from 'nature'. Humankind is both recipient and steward—whose knowledge is important for defining the balance between supply and demand and in devising new goods. As society evolves continuously, no real 'ideal state' exists. What, for example, can be called social progress? It can be access to more food, clean water, and electricity for refrigeration, health improvement, and light for education and socialising.

But is it 'progress' if people get sick from their jobs? Is more income 'progress' if obtaining it is made at the expense of one's quality of life? A balanced view of progress has to be devised by the beneficiaries themselves and must include the input of women and the economically disadvantaged. As women's political participation has stagnated, gender-based violence persists and

inequality deepens, it is arguable that our collective development and thus view of 'progress' runs the risk of remaining skewed, and mostly towards the rich and powerful. In a recent paper, Ortiz and Cummins (2011:10) calculate that it has taken the bottom billion (the poorest) 17 years to increase its share of world income from 0.77 (1990) to 0.95 (2007) and could take eight centuries (at the current rate of progress) to increase this share to 10 percent.

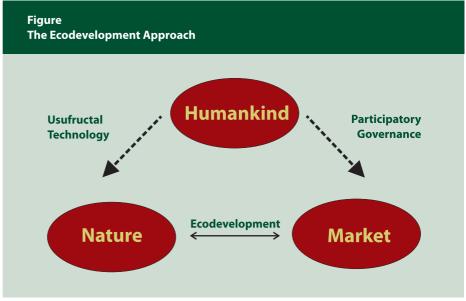
The third pillar of development has been identified as the economy, often restricted to the market. Contrary to current Western thought, which has tended to make this a central pillar to which the others are secondary, this pillar is only one dimension of civilisation and thus is an output generated by humankind⁵ (the second pillar). For some, the predominance given to this third pillar has unbalanced development.

As discussed in Zaman (2008) and Sen (2010), an overreliance on or predominance of any one pillar (in a balanced system) will lead to disequilibrium or inefficient equilibrium. This tension between growth and development continues to play out in the aftermath of the global financial crisis and in the wake of significant bailouts of the private sector. Moreover, despite gargantuan leaps in technology and infrastructure as well as energy innovation, more than 75 percent of subSaharan Africa's total population as well as more than 50 percent of the rural population in South Asia lack access to electricity (UNDP, 2010b: 42).

Implicit in these contradictions is that capital, labour and natural resources are substitutable for each other. Costanza (1997) argues that the environment can never be wholly substituted. So how can a focus on the second pillar (humankind) improve the evolution of development so that it benefits all, equally, fairly and sustainably? We suggest that two principles be systematically applied by decision makers in this context. These two moral imperatives can then mould the interface between the three pillars mentioned above and ensure a convergence of actions towards ecodevelopment.

First, we need to rethink the humankindnature relationship vis-à-vis what has been given to us, i.e., our patrimony, heritage, and nature. Adopting a usufructal approach may better reflect the dual role of beneficiary and steward.

This suggests focusing on using natural capital's 'interest', as opposed to using the basic capital itself, thus escaping the temptation to slowly erode the quality of nature's goods and services. (This is, in fact, the advice any banker or portfolio adviser would give to a potential investor.) We suggest a return to what are known as 'soft' technologies that allow



Source: HELIO International.

for the harvest of nature and protection of its regenerative capacity. Usufructual management approaches show promise in moving us from the 'what' to the 'how', including the reconciliation of competing ideas, approaches and technologies.

Second, we suggest a repositioning of how we think about what we are creating. Humankind can only achieve a fair equilibrium among all its members if there are equality, fairness, and freedom, notions that precipitate social revolutions. In the realm of development, this requires: 1) a balanced approach between needs and resources; 2) the establishment of participatory governance at all levels, from the UN fora to national governments, local and municipal authorities, down to the family sphere; and, 3) the means to monitor the first two requirements. This third component is rarely implemented and has led to the repetition of revolutions, silent or otherwise.

Ecodevelopment therefore entails humans employing usufructal

technologies to use natural resources and applying participatory governance to control and regulate markets. It is through these processes and interactions that ecodevelopment is achieved (Connor, 2008).

We can no longer remain at the stage of the discourse when famine and other silent and not-so-silent emergencies and revolutions continue to take place. The recent Arab Spring suggests that the 'people' are, in fact, no longer willing to wait. From an ecological viewpoint, ecodevelopment must become a reality; it is the basis of our human survival in the Anthropocene era.⁶ ■

Connor, H. (2008). 'Assessing the Energy Contribution to Sustainability', in OECD Sustainable Development Studies', Conducting Sustainability Assessments, pp. 109-118.

Costanza, R. (1997). 'The Value of the World's Ecosystem Services and Natural Capital', Nature 387, 253-260.

Ortiz, I. and Cummins, M. (2011). 'Global Inequality: Beyond the Bottom Billion -

A Rapid Review of Income Distribution in 141 Countries', Social and Economic Policy Working Paper, UNICEF Policy and **Practice Series. Available online at:** http://www.unicef.org/socialpolicy/files/ Global_Inequality_Beyond_the_Bottom_Billion.pdf>.

Sen, A. K. (2010). 'Markets and Freedom', Oxford Economic Papers 45, 519-541. Accessed at: http://tek.bke.hu/korok/sen/ docs/markets.pdf>.

UNDP (2010). The Path to Achieving the Millennium Development Goals: A Synthesis of MDG Evidence from around the World. United Nations Development Programme,

Zaman, M.M. (2008). 'Welfare Dynamics **Based on a New Concept of Inefficient** Equilibrium', Munich Personal RePEc Archive 18. Available online at: http://mpra.ub.uni- muenchen.de/11303/1/MPRA_paper_11303.pdf>.

6. Wikipedia: "The Anthropocene is a recent and informal geologic chronological term that serves to mark the evidence and extent of human activities that have had a significant global impact on the Earth's ecosystems."

For more information about HELIO, please consult our website at: <www.helio-international.org> or write to us at: helio@helio-international.org

Gender, Employment and Economic Crisis: Seeding Social Sustainability in SIDS

by Leisa Perch, Team Leader Rural and Sustainable Development, International Policy Centre for Inclusive Growth

Employment, for example, served as a multiplier for more traditional transmission channels in the crisis.

Several features of informalsector employment exposed households to significant vulnerability and income volatility: seasonality, high mobility and turnover, low skills, little capacity to adapt to dynamic labourmarket needs, and the lack of structural protective mechanisms.

As the global economy emerges from the global economic crisis (GEC) somewhat unevenly and as the global political agenda focuses on Rio+20, it is important to highlight key lessons from the crisis, especially the role that inequality played in predisposing specific groups and households to socio-economic vulnerability. The crisis revealed a worrying picture of localised and structural vulnerabilities within households, heightened by multiplying and escalating risks and shocks. Some of these are explained by a declining economy and sectoral fragility, but others reveal a vulnerability shaped more by structural inequalities within society.

Employment, for example, served as a multiplier for more traditional transmission channels in the crisis. While the structure of the economies in small island developing states (SIDS) often meant that the government served as the 'employer of last resort', other factors also contributed. Youth unemployment and underemployment were particularly acute in the Caribbean and the Pacific, with unemployment especially affecting young men in St. Kitts and Nevis (Perch and Roy, 2010). Moreover, poverty data for the Caribbean reveal significant levels of working poverty (Perch and Roy, 2010), suggesting that employment provided a key 'security function' and that any reductions in

income would be potentially disabling. Findings in the synthesis report on the social impacts of the GEC in the Caribbean identified coping strategies such as acceptance of delayed salary payments and partial payments in order to remain employed (UNDP, 2010: 28).

In this context, gender (at the macro and micro scales) played an important role in conditioning household vulnerability. Several elements highlight how this occurred.

- 1. The labour market itself. In SIDS tends to be segmented by gender and limits opportunities for men and women. The domination of men in the private sector compared to women in the public sector (as in Antigua and Barbuda), exposed men to income losses from the crisis as the tourism and construction sectors, which they dominated, declined sharply (Perch and Roy, 2010). Moreover, several features of informal-sector employment, which seem to dominate the labour-market dynamics of SIDS, particularly in the Pacific, expose households to significant vulnerability and income volatility: seasonality, high mobility and turnover, low skills, little capacity to adapt to dynamic labourmarket needs, and the lack of structural protective mechanisms.
- 2. Gender-differentiated labour market participation. Data from the International Labour Organization (ILO, 2009) indicate that, in the Pacific, 82 percent of men of working age (15 years and older) were active in the labour market, compared to about 57 percent of women (ILO, 2009: 34), with the implication that some households

- had only one source of income. Even where high and sustained investments in education have persisted (on average, about 4 to 6 percent of GDP annually in SIDS), returns have been variable, with many new entrants to the labour market often unable to find jobs (Perch and Roy, 2010).
- 3. Income volatility and related knock-on effects. High informality in the labour market results in stochastic uncertainty,1 with dependent households experiencing greater uncertainty than those involved in regular wage labour, thus being exogenously inelastic² (Perch and Roy, 2010). As a result, households with only one employed adult, particularly female-headed households, were vulnerable to the effects of the crisis. In the Solomon Islands, femaleheaded households seemed to be slightly disadvantaged overall, with slightly higher representation in the three lowest expenditure deciles and higher representation among poor rural households (Perch and Roy, 2010).
- 4. Household structure. Pressure on income did not arise simply from an increased cost of living, but was also highly influenced by the many demands on income in poor and single-income households, which usually include children and elderly people. Before the crisis, 23 percent of poor households in Dominica included a person with disabilities, 10 percent had someone with a long-term illness, and 27 percent had someone who was diabetic or hypertensive (Government of Dominica and Caribbean Development Bank, 2003: 87).

The implied impact of this on the capacity of poor households to meet their needs is significant, often entailing a high susceptibility to 'food poverty' that is, an inability to meet basic food consumption requirements. Between the already relatively high expenditure on food and the increased pressure on income through inflation and prices, diet and nutrition, children's development, health, and education also became susceptible to decline.

Implications for the Broader **Policy Agenda**

These realities suggest some critical lessons for the discourse on making green growth inclusive and for ensuring that the green economy also contributes to poverty eradication and that green jobs also follow the dictates of the globally agreed 'decent work' agenda. They also raise key questions about the capacity of individuals and systems to cope with numerous and cyclical crises.

In the background paper of a major high-level conference, the Nansen Conference on Climate Change and Displacement in the 21st century, held in June 2011,3 numerous critical questions were raised about sudden-onset (disasters) and slow-onset events (crises).

The broad implications of a longer-term loss of assets and livelihoods and of the limited recovery time between events, thrust new light on sustaining poverty reduction and equity.

With the emerging discourse on 'Blue Carbon' and the push for the carbon sequestration of wetlands and mangroves to be fully integrated into the Clean Development Mechanism (CDM), there may be potential new sources of investment financing that could stimulate new sources of growth and employment. Wetlands play a critical role in regulating the climate (IUCN, 2011). On 6 June 2011, the UNFCCC approved the methodology for calculating mangrove carbon storage (ibid.). In this area, large and small countries in the South potentially have much in common—a potential catalyst for enhanced collaboration at the global level.

BOX Blue Carbon with Potential Social Co-benefits?

^{1.} This refers to the fact that it is difficult to predict the level of income, sometimes the payment dates, or the extent to which the employment may last. There are no structural protections such as contracts, so a person could be unemployed the next day and have few resources. Consequently, it becomes harder to predict income and so saving and asset-building become much harder.

^{2.} This means that, due to structural factors, earnings can be inherently volatile. For example, earnings in the tourism sector can depend on highseason or low-season realities. Thus, in high season, staff may be able to earn 50 per cent more than in low season. Additionally, some people work in several sectors, depending on availability, the seasonality of work, and income needs. They face a greater uncertainty of income, payment and duration of employment. This is not something that they control or could be improved by working harder, etc.

^{3.} See webpage and background paper: http:// d2530919.hosted213.servetheworld.no/expose/sites/ clientweb/default.asp?s=1931&id=1937>.

A larger 'security' question for governments and people alike is how to secure development gains, assets and capabilities in the face of escalating uncertainty.

Coastal improvements, including the construction of beach and coastline fortifications and the maintenance of key natural assets such as mangroves, wetlands, sea-grasses and marshes, potentially deliver many benefits for both society and the environment.

Reversing current trends goes beyond addressing women's lack of participation in the economic process; it must also lead to their assumption of more leadership. It spotlights a larger 'security' question for governments and people alike: that of securing development gains and securing assets and capabilities in the face of escalating uncertainty. Insights into this cycle emerges from data on disasters collected for research about the social policy implications of the economic crisis on SIDS (Perch and Roy, 2010). Our findings highlighted a worrying pattern of events, some with a lag time of 4 to 5 years and some within a year or less, and some within the same year.

Given the need to mitigate the impacts of such events, to strengthen social resilience, and to shore up natural defences, a co-benefits approach seems to be an obvious choice for SIDS.

As the 'green growth' concept grows, expands, and is further integrated into the thinking on sustainable development, there is significant potential to improve productivity and reduce environmental impacts simultaneously, achieving many benefits from one intervention. Such an approach maximises resources, bring more timely results, serves to help countries diversify away from public sector-led growth, enables new businesses to develop, and eases some of the fiscal constraints they continue to experience.

Perhaps more important for SIDS is the attractive prospect of public employment serving dual benefits for development by harnessing public works capacity for public environmental goods. Coastal improvements, including the construction of beach and coastline fortifications and the maintenance of key natural assets such as mangroves, wetlands, sea-grasses and marshes, potentially deliver many benefits for sustained employment and improved resilience. Recent research findings and discussions (see Box) on 'blue carbon^{4, 5, 6} suggest that this could be a significant opportunity for a blue-green economy in SIDS.

A new framework to promote a more inclusive labour market also demands innovations in the quality of education and training (ADB, 2009b: 11).

Thinking Ahead

Policy efforts to identify new opportunities for growing the economy and for

stimulating progress on 'low-carbon' pathways in SIDS must therefore consider how gender and other forms of structural inequality may hinder the full and participatory inclusion, particularly that of women, in the benefits of such transformations and opportunities.

In early phases of development, many have been left behind. Reversing such trends goes beyond addressing women's lack of access to and lack of participation in the economic process: it must also lead to their greater involvement and to their assumption of more leadership.

Women's leadership in the green economy was the focus of a parallel event in the wings of this year's Meeting of the Commission on the Status of Women (see: http://www.wedo.org/wp-content/uploads/LocaltoRio_2March_WEDO-GGCA.pdf). Much more is needed in this regard, including research, in order to reconcile macro-level imperatives with micro-level reality.

Asian Development Bank (2009). Vanuatu Economic Report: Accelerating Reform. Executive Summary.

Government of St. Kitts and Nevis and Caribbean Development Bank (2009).

Country Poverty Assessment St. Kitts and Nevis 2007/08: Living Conditions in a Caribbean Small Island Developing State. Volume 1: Living Conditions in St. Kitts and Nevis.

Government of the Commonwealth of Dominica and Caribbean Development Bank. Country Poverty Assessment: Final Report. Volume 1 of 2: Main Report.

ILO (2009). Global Employment Trends. Geneva, International Labour Organization.

Perch, L. and Roy, R. (2010) 'Social Policy in the Post-Crisis Context of SIDS: A Synthesis'. IPC-IG Working Paper 67. Brasilia, International Policy Centre for Inclusive Growth.

UNDP (2010). Social Implications of the Global Economic Crisis in Caribbean Small Island Developing States (SIDS): 2008/2009.

^{4.} Nature 473, 255 (2011) | doi:10.1038/473255a . "Add coastal vegetation to climate critical list".
Posted 18 May 2011 online. Available online at: http://www.nature.com/news/2011/110518/full/473255a.html>.

^{5.} This article, Guest Article #59, focused on Wetlands and Climate Change. Available online at: http://climate-l.iisd.org/guest-articles/wetlands-and-climate-change/.

^{6.} See: http://iucn.org/?7595/Mangroves-to-receive-huge-boost-from-new-carbon-credit-rules.

Access to Food in the Context of **Sustainability and Equity:**

Elements from IBSA

by Darana Souza and Danuta Chmielewska, Senior and Associate Researchers, respectively, at International Policy Centre for Inclusive Growth

Food security has been in the spotlight at the global level as concerns over significant challenges in securing sustained access to food have been mounting. These challenges include the degradation of natural resources and climate change, which are expected to substantially increase risks to agricultural production and people's vulnerability to food insecurity in the coming years; at the same time, food production will need to increase by at least 70 percent by 2050 in order to meet the demands of growing populations (FAO, 2010).

Other persistent concerns such as rural poverty will only exacerbate these expected difficulties; indeed, over 70 percent of the world's extremely poor nearly one billion people—live in rural areas, particularly in Africa and Asia.

Furthermore, the livelihoods of smallholder farmers, who constitute the majority of the rural population in developing countries, are particularly increasingly insecure (IFAD, 2011), given their dependency on the weather for farming and their limited access to human, social and financial capital.

From the outset, it has been clear that one-dimensional answers will not be sufficient to tackle these challenges. Instead, solutions must be comprehensive and integrate factors such as the environment, agricultural production, and rural poverty. Additionally, alternative approaches should provide for socio-economic sustainability and equity by supporting the livelihoods of the rural poor and promoting environmentally sustainable agricultural practices.

Emerging economies have considerable potential to contribute to development

practice. Lessons learned by devising food production systems to reduce hunger, poverty and inequality in their own populations, could apply to efforts in other developing countries.

Each of the IBSA partners—India, Brazil and South Africa—has developed nationally defined policy frameworks that guide each country's food security agenda and distinctively treat the complexity of this phenomenon. This mini-lateral group is thus a noteworthy example for policy debate within the South.

The Brazilian official concept of food security is anchored in its Organic Law of Food and Nutritional Security (LOSAN), which states that "food and nutritional security is the realization of everyone's right to regular and permanent access to quality food in sufficient quantity, without compromising the access to other essential needs, based on health-promoting food practices that respect the cultural diversity and that are environmentally, culturally, economically and socially sustainable" (Brazil, 2006).

Specific threads of the Brazilian policy discourse also reflect this broadly defined approach, wherein questions such as who produces the food, what is produced and how it is produced are pivotal. Brazil's efforts are largely focused on smallholder producers, legally classified as 'family farmers',1 who form the bulk of the rural population.

This support is attentive to the promotion of agro-ecological food production models. Such orientations are present both in the Zero Hunger (Fome Zero) strategy and in the National Food and Nutritional Security Policy (PNSAN), which underpin the guidelines and

Alternative approaches provide for socio-economic sustainability and equity by supporting the livelihoods of the rural poor and promoting environmentally sustainable agricultural practices.

Emerging economies have considerable potential to contribute to development practice. Lessons learned by devising food production systems to reduce hunger, poverty and inequality in their own populations, could apply to efforts in other developing countries.

^{1.} In Brazil, family farmers are legally defined in the National Family Farming Act (Law 11.326), of 2006, according to four requirements: 1) the rural establishment (or undertaking's area of activity) may not exceed four fiscal modules (defined in each municipality); 2) the labour used in the related activities must be predominantly family-based; 3) the family's income must originate predominantly from activities related to farming and the small-holding; and 4) the family must directly manage the establishment.

Each of the IBSA partners—India, Brazil and South Africa has developed nationally defined policy frameworks that guide each country's food security agenda and distinctively treat the complexity of this phenomenon. This mini-lateral group is thus a noteworthy example for policy debate within the South.

objectives of the national public support to food security. Among the Brazilian government's initiatives that respond to these matters, the National Programme for Strengthening Family Farming (PRONAF) is one of the main entry points.

Providing loans nationwide with lowinterest rates to promote diverse rural activities, three of its credit lines (PRONAF Agro-ecology, PRONAF Eco and PRONAF Forest) seek to reconcile environmental concerns with the general support to family farmers.

PRONAF Agro-ecology provides low-cost support to family farmers based on the principles of the National Policy of Technical Assistance and Rural Extension (PNATER). In addition, the newly created *Bolsa Verde* ('Green Grant') provides lumpsum payments for environmental services for extremely poor farmers.

Through the Food Acquisition Programme (PAA) and the National School Feeding Programme (PNAE),² market access promotion delivers a variety of public benefits, particularly in education.

Despite these innovations, the promotion of new production models in the country still needs further consolidation. On the one hand, public support to family farming, measured in terms of budget allocation, is still limited compared to export-led agriculture, despite the critical relevance of family farming for Brazilian food security and rural development.

In the 2009-2010 agricultural year, the agribusiness sector was allocated a budget six times that of family farming—US\$59.3 billion versus US\$9.6 billion (MAPA, 2009).

On the other hand, agricultural production is still significantly tied to the use of agro-chemicals, with Brazil ranking as the world's largest user of these products³ (Souza and Chmielewska, 2011).

South Africa's macro-policy framework treats food security as a multidimensional challenge, acknowledging the definition developed from the World Food Summit of 1996.⁴

This concept states that food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Reflected in the National Integrated Food Security Strategy (IFSS), it underpins a strategy that aimed to harmonise the different food security programmes in the country according to areas of priority (with a focus on household food production and trading), but that remained somewhat limited in its implementation.

The country is currently discussing its Zero Hunger plan, which considers at least three dimensions of the phenomenon: food production, food access, and food use. Important programmes reflect these orientations and include the Comprehensive Agriculture Support Programme (CASP), which is designed to support previously disadvantaged groups, e.g., small-scale and emerging farmers who constitute the majority of the population.

Through the Micro-Agricultural Financial Institutions of South Africa (MAFISA), access to finance is made easier via loans, savings and banking facilities, with a focus on crop production, farming equipment, and production on piggery, ostrich and poultry. It does not, however, have a particular focus on ecologically-based approaches.

Like South Africa, India adopts the World Food Summit's multi-dimensional definition of food security (1996), as reflected in the concept note for the proposed Indian Food Security Act (NFSA).

The controversial NFSA, which is under consideration by the Cabinet, seeks to enact a bill to ensure food security and statutory standing to related policies in India. Currently, it is at the heart of national debates on the right to food.

^{2.} For further reference on these programmes, see Chmielewska, D. and Souza, D. (2010).

^{3.} This data refers to absolute consumption in tons.

In India, where three quarters of the population live in rural areas, mostly on small properties, with over 40 percent of them below the national poverty line, there is already a range of programmes anchored in benefits that the Supreme Court has declared to be 'legal entitlements' (Souza and Chmielewska, 2011).

Included within the current policy framework is the Targeted Public Distribution System (TPDS), a large programme that ensures that the most vulnerable sectors of society are entitled to a defined minimum quantity of subsidised cereals per month.

This wide-reaching initiative aims to provide mainly food items at subsidised prices to pre-identified poor families. It also offers market opportunities to agricultural products through government procurement.

This support, however, does not consider particular environmental concerns or farmers' specific profiles. TPDS faces numerous challenges and is the focus of debates on reform efforts (Souza and Chmielewska, 2011).

Critically, the food security policies of these three countries represent diverse approaches to reconciling agricultural production, environmental integrity and rural poverty as well as to the contribution these make to sustainability and equity.

Social, economic and environmental sustainability along with equity remain concerns for the Brazilian food security policy agenda, with increasing attention to production models based on family farming and agro-ecological practices.

South Africa's current policy, on the other hand, directs equity and social-economic sustainability efforts through support to household production, while focusing less on environmental issues.

India's policy, in further contrast, concentrates on the right of access to food as an attempt to promote equity and social sustainability, while its connections with environmentally innovative food

production models and with support to marginalised food producers have been less explicit.

The achievements and gaps of these experiences go beyond the national scope and serve to inform South-South dialogue more broadly.

Further debate and research in this regard could help to promote national and global efforts to consolidate comprehensive food security approaches supporting the transition to adaptive and resilient production systems in the face of environmental, economic and social challenges.

Finally, our initial review suggests that there are many pathways to addressing the complexities of the 'right to food', with each pathway having its own strengths and weaknesses.

Our findings highlight that setting these policy objectives at the highest level of policy and policy-making is an important element and can bring numerous benefits. Still, in the absence of consistent monitoring of their multi-dimensions, the full impact and sustainability of such efforts become much more difficult to gauge and adjustments become more difficult to realise.

Brazil (2006). Organic Law of Food and Nutritional Security (LOSAN). Law No. 11,346 of September 15, 2006.

Chmielewska, D. and Souza, D. (2010). 'Market Alternatives for Smallholder **Farmers in Food Security Initiatives: Lessons from the Brazilian Food** Acquisition Programme', IPC-IG Working Paper 64. Brasilia, **International Policy Centre for** Inclusive Growth.

FAO (2010). 'Climate-Smart Agriculture: Policies, Practices and Financing for Food Security, Adaptation and Mitigation', Rome, FAO.

IFAD (2011). 'Rural Poverty Report 2011', Rome, IFAD. Ministério da Agricultura, Pecuária e Abastecimento (MAPA) (2009). Agricultural and Livestock Plan 2009/2010. Brasília, MAPA.

Souza, D. and Chmielewska, D. (2011). 'Public Support to Food Security in India, Brazil and South Africa: Elements for a Policy Dialogue, IPC-IG Working Paper 80. Brasilia, **International Policy Centre for** Inclusive Growth.

Further debate and research in this regard could help to promote national and global efforts to consolidate comprehensive food security approaches supporting the transition to adaptive and resilient production systems in the face of environmental, economic and social challenges.

by Lindiwe Majele Sibanda, PhD, Chief Executive Officer, Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN)

What Is Needed to Ensure An Equitable Deal for Africa at COP 17

Africa's adaptive capacity to climate change is itself constrained by widespread poverty, low human capacity, a lack of appropriate technologies, poor infrastructure, and susceptibility to high food prices.

Agriculture is central to Africa's economies and its peoples' livelihoods. If harnessed, its enormous potential could help the continent meet its wider ambitions of peace and prosperity, becoming a key driver of sustainable growth and development.

The African Challenge

The 21st century has seen renewed efforts to tackle Africa's development problems. Since 2008, there has been greater interest in investing in African agriculture, a sector that is the backbone of the majority of African economies (World Development Report 2008; AlertNet, 2011).

However, Africa's sustained development is often hampered by an unpredictable and unforgiving climate, with 12 of the 25 most-at-risk countries being in Africa (Maplecroft, 2010). The close link between the changing climate and human security has increasingly become part of the global discourse and Africa's climate story is largely defined by its dependence on rain-fed agriculture.

Risks to Africa's well-being are not purely economic, though, but also include the potential for the spread of disease and escalating conflicts over increasingly limited and scarce resources, particularly water. Indeed, the volatile mix of food and water insecurity has already been linked to conflicts in Somalia, lvory Coast, and Burkina Faso.

Yet, Africa's adaptive capacity to climate change is itself constrained by widespread poverty, low human capacity, a lack of appropriate technologies, poor infrastructure, and susceptibility to high food prices.

These factors put millions of Africans at greater risk of poverty and hunger, imperil the region's chances to achieve the Millennium Development Goals (MDGs), and, indeed, increase the likelihood of mass emigration.

Climate change, therefore, is one of the most pressing challenges on the regional political and economic agenda.

Agriculture - Climate Nexus

Agriculture is central to Africa's economies and its peoples' livelihoods. If harnessed, its enormous potential could help the continent meet its wider ambitions of peace and prosperity, becoming a key driver of sustainable growth and development. Yet, in certain systems, agriculture contributes as much as 30 percent of total greenhouse gas emissions (Meridian Institute, 2011).

Thus, sustaining food security will require intense efforts to increase productivity while shifting to low-carbon and zero-waste modes of production. Climate-smart agricultural techniques offer the potential to substantially reduce emissions and increase carbon storage in soil.

For FAO, climate-smart agriculture delivers a critical 'win-win' situation, one that includes higher sustainable productivity, greater resilience, reduced greenhouse gas emissions (GHGs), and progress toward national food security and development goals (FAO, 2010).

Through sustainable intensification, use of alternative crops and changes in farm management practices, African farmers could remain on the same land, enjoy increased yields, and contribute to mitigating climate change by reducing deforestation and the encroachment of agriculture into natural ecosystems (Bellassen, 2010).

Accordingly, Africa's political leadership at the highest level has stated its commitment to address the challenges of climate change.

This is reflected in various decisions and resolutions of African Union (AU) Summits and conferences of relevant African ministerial bodies, most notably the African Ministerial Conference on the Environment (AMCEN), the Joint Annual Meetings of the AU Conference of Ministers of Economy and Finance, and the Economic Commission for Africa (ECA) Conference of Ministers of Finance, Planning and Economic Development (ECA, 2010).

Furthermore, Pillar 1 of the Comprehensive African Agricultural Development Programme (CAADP) advances the development of a Framework on Agriculture Climate Change Adaptation and Mitigation as part of the sustainable land and water use portfolio.

Agriculture in the United Nations Framework Convention on Climate Change (UNFCCC) Process

Still, Africa cannot make such fundamental transformations on its own. Development aid and foreign direct investment are needed, at appropriate levels of scale, particularly in the agriculture sector. To date, though, there has been no decision or work programme dedicated to agriculture within the global climate change policy negotiations in the United Nations

Framework Convention on Climate Change (UNFCCC) process.

Despite the clear recognition of sustainable agriculture under the Kyoto Protocol (Article 2, paragraph 1), the 53 African countries, constituting over a quarter of the 193 member countries of the UNFCCC, have so far not managed to sustain a visible policy space for agricultural adaptation and mitigation in the global climate policy framework.

During COP 16 in Cancun, agriculture was considered under sectoral approaches within the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) text, but was ultimately excluded in the final hours of deliberations.

The Cancun agreements recognise agriculture as a driver of deforestation, thereby making the sector eligible for consideration under adaptation actions, essentially allowing agriculture to piggy-back on deforestation in order to gain eligibility. Overall, the policy message remains mixed and inconsistent.

Pillar 1 of the Comprehensive African Agricultural Development Programme (CAADP) advances the development of a Framework on Agriculture Climate Change Adaptation and Mitigation as part of the sustainable land and water use portfolio.

Still, the policy message remains mixed and inconsistent.

BOX

African Ministerial Conference on the Environment May 2009 Nairobi Declaration on the African Process for Combating Climate Change

- 1. To call upon Governments of Africa to promote further the common African position on the comprehensive international climate change regime beyond 2012 and participate actively in the continuing international negotiations, knowing that failure to reach a fair and equitable outcome will have dire consequences for Africa.
- 2. To agree that the African common position forms the basis for negotiations by the African group during the negotiations for a new climate change regime and should take into account the priorities for Africa on sustainable development, poverty reduction and attainment of the Millennium Development Goals.
- 3. Also to agree that the key political messages from Africa to inform the global debate and negotiating process, in terms both of the commitments that it seeks from the international community, and also of the actions that African countries can take themselves, should be based on the established principles of equity and common but differentiated responsibilities and respective capabilities.
- 4. To urge all Parties and the international community that increased support to Africa under the future climate regime should be based on the priorities determined by Africa: adaptation, capacity-building, research, financing and technology development and transfer, including support for South-South transfer of knowledge, in particular indigenous knowledge.

For a complete list of the recommendations, see: see: see: see: see: see: see: see: see: see: see: see: see: see: see: <a href="mailto:shttp://www.unep.acm.nairo

BOX

FANRPAN High Level Policy Dialogue, September 2010Key Recommendations on Climate Change

- Emphasis should be placed on designing more coherent and dynamic research and policy agendas, necessary to reduce poverty and vulnerability in the face of climate change.
- Policy frameworks and development planning should be climate proofed so they do not become obsolete as environmental and economic conditions change.
- Sufficient resources should be devoted to adaptation, including infrastructure and market development, to mitigate effects of climate change on rural populations.
- 4. Increase investments in research for mitigation, the development of the capacity to undertake the research and technology development to help support political will and commitment to address impacts of climate change on agriculture, fisheries and rural livelihoods.

Agriculture's position in the discourse is not without its value-laden context, often portrayed as a villain in the context of emissions. In contrast, its socio-economic role—livelihoods, nutrition and health—calls for a broader and more developmental approach in which social and environmental benefits have priority.

What is Needed for Africa to Be Successful in Durban, COP 17?

The next round of climate talks is poised to take place in Sub-Saharan Africa in November 2011 for the second time; in Durban, South Africa.

Supported by the African Union (AU), the African Development Bank (AfDB), and the New Partnership for Africa's Development (NEPAD), African states are now in the driver's seat and have a real chance to push for the operationalisation of the agreements reached in Copenhagen (COP 15) and Cancun (COP 16).

Africa must maximise this singular opportunity to score a victory based on a dedicated track for agriculture within the UNFCCC process.

Success will rely on a number of key strategies:

1. Increasing Advocacy though Smart Global Partnerships

Since 2009, the climax event for key policy advocates of the agriculture-climate nexus, including FANRPAN, has been Agriculture and Rural Development Day (ARDD), held in parallel with the annual UNFCC COP meetings.

The event brings together hundreds of pro-climate, smart-agriculture proponents, including researchers, governments, farmers, the private sector, NGOs and, unfortunately, only a small crop of negotiators (http://www.agricultureday.org/).

Such efforts should be increased in the run-up to COP 17, with greater involvement of negotiators.

2. Training Journalists

A well-informed and well-prepared media can help to give prominence and visibility to key issues, also making them more easily understood by policy makers and the public alike.

FANRPAN's training workshops for the media help to build capacity and knowledge in accurately covering agricultural development issues in the region.

These are usually held alongside the FANRPAN Regional Food Security Policy Dialogues (http://www.ips.org/africa/library/ FANRPAN-newsletter-2010-SML.pdf).

3. Empowering African Negotiators

Agriculture's position in the discourse is not without its value-laden context, often portrayed as a villain in the context of emissions.

In contrast, its socio-economic role—livelihoods, nutrition and health—calls for a broader and more developmental approach in which social and environmental benefits have priority.

Progress toward this has been slow partially due to a lack of information and knowledge, a situation requiring urgent attention.

The poorest countries, significantly affected by such inconsistencies in global policy, must strengthen their influence and advocacy in the global climate institutional framework.

Scientific evidence grounded in the local context is a key ingredient to more meaningful engagement by African negotiators.

The UNDP and the Climate and Development Knowledge Network (CDKN), amongst others, provide UNFCCC negotiators with the tools to make evidence-based, pro-development interventions (http://www.unitar.org/deliveringone-undp-and-unitar-join-forcesstrengthen-african-participation-keymultilateral-negotia; http://cdkn.org/ resource/defining-climatecompatible-development/).

4. Supporting Bottom-up **Advocacy Campaigns**

Bringing the voice of affected rural communities, where the greatest sense of urgency exists, more directly into the negotiation process is key.

Civil society organizations have a pivotal role in advancing bottom-up and people-centric policies, including the scaling-up of 'good practice' multi-focus adaptation interventions.

Farmer participation and the use of innovative techniques such as theatre for policy advocacy (http://www.fanrpan.org/documents/ d00958/) are ideal for bringing an African flavour to COP 17.

5. Engaging in Multi-stakeholder **Intersectoral Policy Dialogues**

Adding voice to the 'triple win' of improving agricultural productivity and food security, addressing climate change, and improving the lives and livelihoods of rural populations that live in poverty, through multistakeholder policy dialogues, creates unique opportunities for policy innovation.

In 2010, the FANRPAN Regional High Level Multi-stakeholder Food Security Policy Dialogue focused on livestock and fisheries policies for food security and trade in a changing climate.

Looking to Durban

To ensure that Africa emerges from the 2011 UNFCCC negotiations with a fair deal, strengthened coordination and negotiation structures are needed.

A more development-oriented approach is central to a long-term and sustained solution to climate change.

Africa has not been idle. However, sustaining home-grown good practice and innovation depends on equitable and fair partnership arrangements and an enabling policy framework.

The clarion message for COP 17, hosted on African soil, should be "NO AGRICULTURE, NO DEAL".

AlertNet (2011). 'Climate Conversations -Beat back African poverty and emissions with ag green growth'. Available online at: http://www.trust.org/ alertnet/blogs/climate-conversations/beatback-african-poverty-and-emissions-with-aggreen-growth/>.

Bellassen, V., Manlay, R.J., Chéry, J.P., Gitz, V., Touré, A., Bernoux, M. and Chotte, J.L. (2010). 'Multi-criteria Spatialization of Soil Organic Carbon Sequestration Potential from Agricultural Intensification in Senegal', Climatic Change, Volume 98, Numbers 1-2, January 2010, pp. 213-243 (31). Available online at: http://www.springerlink.com/content/ 0522527xq630622g/fulltext.pdf>.

ECA (2010). Report on Climate Change and Development in Africa Meeting of the Committee of Experts of the 3rd Joint Annual Meetings of the AU Conference of Ministers of Economy and Finance and ECA Conference of African Ministers of Finance, Planning and Economic Development, Lilongwe, Malawi, 25 - 28 March 2010. Available online at: http://www.uneca.org/cfm/2010/ documents/English/Report-onClimateChangeandDevelopment-inAfrica.pdf>.

Food and Agriculture Organization of the United Nations (FAO) (2010). "Climate-Smart" Agriculture: Policies, **Practices and Financing for Food** Security, Adaptation and Mitigation, FAO. Available at: <www.fao.org/docrep/013/ i1881e/i1881e00.pdf>.

Maplecroft (2010). 'New Maplecroft Index **Rates Pakistan And Egypt Among Nations** Facing "Extreme" Water Security Risks', retrieved 10 July 2010 from Maplecroft website: http://www.maplecroft.com/ about/news/water-security.html>.

Meridian Institute (2011). Modalities for REDD+ Reference Levels: Technical and Procedural Issues, prepared for the Government of Norway by Arild Angelsen, Doug Boucher, Sandra Brown, Valerie Merckx, Charlotte Streck, and Daniel Zarin. Available online at: http://www.REDD-OAR.org.

World Development Report 2008. Available online at: <www.worldbank.org/wdr2008>.

Adding voice to the 'triple win' of improving agricultural productivity and food security, addressing climate change, and improving the lives and livelihoods of rural populations that live in poverty, through multi-stakeholder policy dialogues, creates unique opportunities for policy innovation.

Bringing the voice of affected rural communities, where the greatest sense of urgency exists, more directly into the negotiation process is key.



International Policy Centre for Inclusive Growth (IPC - IG)

Poverty Practice, Bureau for Development Policy, UNDP Esplanada dos Ministérios, Bloco O, 7º andar 70052-900 Brasilia, DF - Brazil

70052-900 Brasilia, DF - Brazil Telephone: +55 61 2105 5000

E-mail: ipc@ipc-undp.org • URL: www.ipc-undp.org