

CHINA AND THE WORLD: SOUTH-SOUTH COOPERATION FOR INCLUSIVE GREEN GROWTH

Working Paper number 95 October, 2012

Kishan Khoday

United Nations Development Programme

Leisa Perch

International Policy Centre for Inclusive Growth (IPC-IG)

Copyright© 2012
International Policy Centre for Inclusive Growth
United Nations Development Programme

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

Esplanada dos Ministérios, Bloco O, 7º andar

70052-900 Brasília, DF - Brazil

Telephone: +55 61 2105 5000

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

The International Policy Centre for Inclusive Growth is jointly supported by the Poverty Practice, Bureau for Development Policy, UNDP and the Government of Brazil.

Rights and Permissions

All rights reserved.

The text and data in this publication may be reproduced as long as the source is cited. Reproductions for commercial purposes are forbidden.

The International Policy Centre for Inclusive Growth disseminates the findings of its work in progress to encourage the exchange of ideas about development issues. The papers are signed by the authors and should be cited accordingly. The findings, interpretations, and conclusions that they express are those of the authors and not necessarily those of the United Nations Development Programme or the Government of Brazil.

Working Papers are available online at www.ipc-undp.org and subscriptions can be requested by email to ipc@ipc-undp.org

Print ISSN: 1812-108X

CHINA AND THE WORLD:

SOUTH-SOUTH COOPERATION FOR INCLUSIVE GREEN GROWTH

Kishan Khoday, UNDP,* and Leisa Perch, IPC-IG**

1 SUSTAINABLE DEVELOPMENT IN A MULTI-POLAR WORLD

World leaders convened for the UN Conference on Sustainable Development (Rio+20) in June 2012, marking 20 years since the 1992 Rio Earth Summit, and at a time of rapidly increasing pressures on the planet's ecosystems and impacts on the poor and vulnerable members of society. Rio+20 focused on two closely related solutions to the world's challenges — new institutional frameworks for sustainable development, and the drive to a green economy defined as an economy “that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP, 2012).

While the impacts of industrially advanced countries remain at the heart of the world's sustainability challenge, a marked shift from the 1992 Rio Earth Summit to the 2012 Rio+20 Summit has been the role of emerging economies, and China in particular, in driving both challenges and solutions for sustainable development. Rio+20 put forth a vision for a world in which our global economy is guided by concerns of inclusive and green growth.

* *Kishan Khoday* has served with UNDP since 1997, as UNDP Sustainable Development Advisor and Deputy Coordinator for Natural Resources and Environment in Indonesia (1997–2005), UNDP Assistant Resident Representative and Team Leader for Energy and Environment in China (2005–2009) and UNDP Deputy Resident Representative in Saudi Arabia (since 2009). Email: kishan.khoday@undp.org

** *Leisa Perch* serves as Policy Specialist/Team Leader for Rural and Sustainable Development with the International Policy Centre for Inclusive Growth (IPC-IG) in Brasília. She has served with UNDP since 2004, previously with UNDP Sub-Regional Office for Barbados and the OECS as Programme Manager for Poverty Reduction, Gender and HIV/AIDS. Email: leisa.perch@ipc-undp.org

The authors would like to thank the following reviewers for their invaluable feedback and inputs to drafts of this Working Paper. Bhujang Dharmaji, Senior Advisor on South-South Cooperation and Sustainable Development, India; Flora Kan, Senior Advisor, China Energy Research Society, Paris; Eugenia Katsigris, Principal at Parnon Group, Texas Dragon Partners. Li Rusong, Programme Director of the China Carbon Disclosure Project; Guo Xiaoyu, National Officer and Green Economy Advisor, Ministry of Industry and Technology, Beijing; and Wang Yipeng, Energy-Environment Researcher, China Central Party School.

At the core of this change are two critical megatrends — the rise of the South, and the challenges of resource security and ecological change. And at the convergence point of these two trends, attention is needed to ways to prevent the risks which surging levels of outward investments from emerging economies bring to resource-rich, vulnerable communities.

The rapid expansion of outward investments from emerging economies is catalysing new threats to the environment in many developing countries, often constituting serious threats to life, livelihood and health. As noted further below, while expanding cooperation for resources, countries such as China can also support enhanced institutional frameworks for sustainable development within partner countries to bring about social empowerment and freedom from the inequities that resource exploitation has often brought to developing countries in the past.

Many of the natural assets in focus are located in rural areas, where two-thirds of the more than 1 billion people currently living in extreme poverty reside. In an era of record commodity prices and corporate profits, the gap is growing between transnational industrialists and the rural communities who live on a treasure of natural assets but are often excluded from benefit-sharing while suffering ecological impacts (Khoday and Perch, 2012a). Higher expectations have now emerged within global civil society for more effective, accountable and participatory use of the environment as a public good, and to prevent the impact of pollution on poor and vulnerable people. New investors from the South face the challenge of adapting to this context, and moving beyond status quo approaches which tend to deal with social and environmental risk as 'market externalities'.

Moving beyond the Washington Consensus trinity of liberalisation, privatisation and deregulation, today's agenda for change is characterised by the new G20 Development Consensus call for "policies that can counter the negative distributional impacts of market-oriented reforms and globalization" towards the "reconstruction of the world economy in a form conducive to sustainable, inclusive and resilient growth". We live in a time of transformational change, with global society, economy and ecology in a state of flux, and a larger role expected from emerging economies as increasingly influential global citizens.

Debates about sustainable development have historically been characterised by the developed-developing country dichotomy that has defined world order in the post-colonial era. But such lines are increasingly difficult to define and maintain in the face of emerging issues of sustainability. Many emerging economies continue to hold steadfast to their right to development while also adapting to their emerging roles as global citizens and the need to address shared responsibilities for inclusive and sustainable development. As emerging economies come to the centre of the world economy, the interactions between production and consumption are also shifting, in turn shaping efforts to resolve global and national green economy challenges. Events today make it clear that we are moving beyond this dichotomy to a more multi-polar era of global policymaking.

As argued in this *Working Paper*, in addition to being responsive to rising social movements for change and trends in the World Trade Organization (WTO) and other bodies towards global regulation, opportunities also exist for a more proactive approach by China and other emerging economies themselves to lead green solutions through the process of South-South cooperation. Emerging economies such as China are starting to show leadership in crafting new institutional frameworks for sustainable development in their own countries — models which can be of great benefit to partner countries around the world. Meanwhile many emerging economies are likewise now leading on green economy measures, with most of the

world's record US\$386 market capitalisation in the clean technology sector in recent years led by the emerging South and China in particular (Parker, 2011; World Economic Forum, 2011).

The prospects of achieving inclusive green growth will increasingly hinge not only on the duties of advanced industrialised nations, but also on the choices made in China and other emerging economies today and in the future. As national efforts to green the economy take shape, so do new institutional frameworks which are created around them and for them. Those efforts will be shaped not solely by national realities, interests and dynamics. Global cooperation and terms of trade towards a green economy, and the fair and equal treatment of all partners within the process, will also define the nature of transformative efforts.

Beyond standard global institutions, a need now exists to craft new South-South institutions and processes that engage the new role of the South as the engine of global growth and development (UN, 2012). As noted further below, South-South cooperation, and the role of China in particular, will be important parts of this process as the world seeks a more multi-polar form of sustainable development.

2 CHINA AS A DRIVER OF SOCIAL-ECOLOGICAL CHANGE

2012 not only marks 20 years since the Rio Earth Summit; it also marks 20 years since the official launch in 1992 of China's socialist market economy policy, setting the stage for the rapid emergence of China at the centre of the world economy. Today China stands as the world's second-largest economy, with annual per capita Gross National Income (based on purchasing power parity – PPP) above \$7000 and a foreign currency reserve nearing \$3 trillion, the world's largest. By about 2020, China is expected to surpass the USA to become the world's largest economy, already accounting today for almost 20 per cent of world Gross Domestic Product (GDP) growth. The dramatic shift from a centrally planned state to a globally expansive market-based power unleashed a new era of development, for both China and the world.

But as China's Environmental Minister, Zhou Shengxian, notes, “[i]n 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” (Jacobs, 2011). To address these bottlenecks to sustainability, China's 12th Five-Year Plan (2011–2015) sets a vision for China to emerge on a path of inclusive green growth. By 2015, the Chinese government plans to invest \$468 billion in green sectors, more than double the previous five-year period, with a focus on clean technologies, sustainable energy and resource conservation.

Through this catalytic investment, China's greening economy is expected to grow at 15–20 per cent per annum, with output reaching \$743 billion by 2015, from just \$166 billion in 2010 (CCICED, 2012). This is meant to catalyse a 'green leap forward' within China, and it could also support greening of China's outward investments. New sustainable approaches to power, industry, construction, water and food security within China can also be applied in its expanding global cooperation — a win-win South-South opportunity yet to be fully engaged.

In recent years, new levels of Chinese global resource consumption, to which the planet is only now beginning to adapt, have become an issue of particular focus (WWF and CCICED, 2010). In many cases Chinese investments in natural resources have exacerbated issues of

social inequity, rights abuses and ecological degradation in resource-rich communities. New inclusive green growth approaches can potentially help to remedy such cases for the benefit of local communities and China's own ambition of emerging as a global partner in sustainable human development.

China is now the world's fastest-growing source of demand for natural resources, the top consumer of various types of commodities, and has become the primary driver of new South-South natural resource flows. Natural assets from energy and minerals to timber and agricultural products are essential to sustaining current levels of urban expansion and industrial growth within China. And as its share of global markets continues to rise and as domestic consumption becomes a larger part of its growth story, demand for these natural assets will continue to grow in the foreseeable future.

Chinese outward investments grew from \$1 billion per year in 2000 to over \$50 billion per year by 2010, with cumulative stock over \$300 billion today, the majority of which is directed towards Asia and the Middle East (Ministry of Commerce, 2012). Examples of investments in natural resources in 2008–2010 include \$10 billion in Brazil's oil sector and \$8 billion in Argentina's oil sector; \$7.5 billion for copper and \$1 billion for iron ore in Peru; \$4 billion, \$3.5 billion and \$3 billion in the oil sector in Iran, Syria and Iraq, respectively; \$3.5 billion in natural gas in Kazakhstan; \$1.9 billion and \$1.2 billion in iron ore in Chile and Brazil, respectively; \$1.2 billion in the steel sector in India; and \$1 billion in the oil sector in Venezuela (Scissors, 2011).

A particular focus for China has been expanded resource cooperation in **sub-Saharan Africa**, where Chinese demand has catalysed a doubling of economic output since 2000. Chinese investments in Africa have grown from \$500 million in 2003 to over \$15 billion today, with China now the continent's largest trading partner. Africa has the world's highest rates of return on resource investment, driving a surge of new emerging-economy investments which have achieved a 13 per cent annual growth rate in recent times, expected to surpass Organisation of Economic Co-operation and Development (OECD) members' levels by 2020. Six African countries are now in the world's top ten fastest-growing economies, with approximately 24 per cent of Africa's GDP based on natural resources (AU and UNECA, 2011). One key focus has been the agriculture sector, holding prospects for productivity gains and food security, but also bringing risks to land rights, expanded rates of deforestation and loss of biodiversity. Meanwhile, in the mining sector, 2008–2010 saw foreign investments of \$6 billion in the copper sector in Zambia, \$2.8 billion in metals in Congo, \$1.3 billion in iron ore in Guinea and \$1.2 billion in aluminium in Ghana. While such investments bring a boost to development, they also bring confrontation with communities over serious social and environmental concerns.

The neighbouring **Middle East and North Africa** region has also been a special focus. As countries in the region proceed through a historic period of transformation, one key factor which will shape the future will be the rise of China as a source of new demand for oil and gas. In Saudi Arabia, for example, China has already emerged as the top destination of energy exports. China's emerging role as a top energy consumer will be central to the future of a region holding 60 per cent of the world's conventional oil reserves and where energy makes up 40 per cent of regional GDP (Khoday, 2011). The region is indeed known as the world's energy capital, but it is less known as home to one of the planet's fastest growth rates in energy intensity. With the goal of saving increasingly scarce energy for future exports, and taking advantage of the world's leading solar radiation levels, a series of new renewable energy

policies and projects are arising *with targets of 5 per cent* of the total energy mix in UAE, 20 per cent in Egypt and Saudi Arabia, and 45 per cent in Morocco (Khoday, 2011). Countries now seek global partnerships to make this happen, with scope for cooperation with China for clean energy technology transfer and development, building on China's clean energy successes in past years.

Further east within **Asia**, Indonesia for one has seen a surge of Chinese resource cooperation, with areas such as the provinces of West Papua and Papua in the country's east hosting some of the planet's largest copper, gold, natural gas and timber resources, but also indigenous communities that have faced a history of rights abuses and ecological degradation. In neighbouring India, cooperation with China has focused on the former's rich iron ore deposits, much of which lies under tribal forested areas where equity and sustainability have risen as major points of contestation (Khoday and Natarajan, 2012). Mongolia too has risen as a top destination for Chinese cooperation, with the world's largest copper reserves and one of the largest coal reserves, while in Afghanistan large, newly discovered mineral reserves are attracting massive levels of Chinese investment, potentially transforming one of the world's most troubled and poorest countries. As Myanmar moves to a new era of governance reform, greater accountability in the use of resources will come into clear focus, including connections to major sources of demand such as China.

While China's resource-based cooperation is welcome by many countries and communities as a new source of growth, capital and technology, many are also concerned with cases where these new layers of investment have caused serious issues of social exclusion, rights abuses and ecological degradation. China is increasingly confronting these issues in its overseas cooperation, with some leaders in China and partner countries now seeking ways to prevent and mitigate these social and environmental risks.

In most resource-rich countries the balance point is shifting away from *laissez-faire* investment promotion schemes in favour of policy regimes that recognise natural assets as public goods and social inclusion as a basis for national inclusion and resilience. Higher expectations have emerged for more effective, accountable and participatory use of natural resources and the environment, and preventing negative impacts on poor and vulnerable people. Through its growing ecological footprints and resource demands, the rise of China will also drive a shift in the public policy landscape of countries around the world. Chinese resource investments are propelling many developing countries themselves into emerging economy status, but they are also catalysing an evolution of social and ecological challenges and local policy responses.

Within this context, South-South cooperation arises as an opportunity to support partnerships for new green economy approaches. As noted further below, the nexus between China's own institutional frameworks for sustainable development and green economy policies, on the one hand, and its policies for Official Development Assistance (ODA) and outward direct investment (ODI), on the other, will be a critical factor for achieving global goals of inclusion and sustainability. New South-South partnerships can help the move towards a model of cooperation where goals of inclusive growth and ecological sustainability are no longer peripheral considerations but central ones.

3 OFFICIAL DEVELOPMENT ASSISTANCE FOR INCLUSIVE GREEN GROWTH

Alongside the rise of China as a centre of demand for natural resources, it is also rapidly expanding its role as a partner for development. The convergence of these two trends presents an opportunity to make progress towards the goal of inclusive green growth. Global sustainable development policy during the 20 years since the 1992 Rio Earth Summit was largely defined by North-South flows of technical assistance and finance. The years after Rio+20, on the other hand, are expected to see a much larger role for Southern providers of ODA, building on platforms such as the G20 Seoul Development Consensus and the Busan Principles on aid effectiveness (UN, 2012). China has risen over the past decade as a large provider of ODA, a new source of technical cooperation and a potentially important force shaping prospects for a green economy. "As it engages in the process of 'going global' China must embrace its responsibilities as a leading player and become a proactive actor in promoting its environmental programmes both at home and abroad" (CCICED, 2012). In doing so, China can also build on the lessons it has learned itself as a large recipient of ODA in decades past, in terms of the local capacities needed to achieve results which can be carried forward to China's new outward ODA partners.

The modern era of Chinese outward ODA took root in the 1955 Asia-Africa Summit hosted in Bandung, Indonesia, after which China increased its ODA to Africa and other Asian countries in the 1960s and 1970s. By the 1980s, this was coupled with greater levels of cooperation through Technical Cooperation among Developing Countries (TCDC) initiatives with UNDP support. Over the decades China has provided a cumulative total of \$40 billion to over 161 countries, 80 per cent of which has been to Africa and Asia, and with 40 per cent as grants, 30 per cent as interest-free loans and 30 per cent as concessional loans, alongside training for over 50,000 technical specialists (State Council, 2011).

The largest share of China's ODA, about 40 per cent, has gone to civil engineering projects via grants and loans in infrastructure, industry, energy, power, transport, water and agriculture sectors, all key sectors in the future for a transition to a green economy. China's ODA has supported 2000 projects to date, including more than 670 public buildings, 635 industrial and resource-processing facilities, 215 agriculture and water projects, 202 roads and transport projects and 97 energy and power projects (State Council, 2011). All such projects can benefit greatly from green economy options by integrating low-emission, resource-conserving technologies and practices. Such projects are most often in countries where China also has expanding levels of resource cooperation, and where a need exists for measures to mitigate the social and environmental impacts of investment and growth.

As China looks to the future and its ever-growing role in the world, it foresees a more strategic role for its ODA as a means of supporting the emerging post-Rio+20 agenda, including ways to build a new green economy through measures from enhancing food, water and energy security for all, to mitigating and adapting to climate change. In addition to financial cooperation is also the opportunity to expand technical knowledge-sharing cooperation on China's own progress on domestic institutional frameworks for sustainable development and the progressive greening of industry. Recent years have seen China pass landmark legislation and policies aimed at achieving a green economy and reducing levels of intensity of resource use and pollution levels that have arisen as a major concern for human welfare.

Examples of policy initiatives include China's Renewable Energy Law and Long-Term Strategy, Rural Electrification Strategy, Energy Conservation Law and the 1000 Enterprise Initiative, Clean Production Law, Circular Economy Promotion Law aimed at expanding waste reduction and recycling, new laws in extractive sectors such as energy and mining, and the emergence of significant efforts at designing new Eco-Cities. The Ministry of Industry, Ministry of Science and Technology and Ministry of Finance have also recently established joint Guidelines on Resource Conservation and Environmental Protection to encourage firms in China to pay more attention to both issues and do their part on the path to a green economy. China's experience in mainstreaming green-economy-related issues into rural development — for example, through expanded access to modern energy for poor people — is one area where South-South experience can be leveraged within new ODA cooperation. These emerging models of institutional frameworks for a green economy can greatly benefit other countries as they move down the path from developing country to emerging economy status.

Recent years have also seen rise of new forms of governance and rights-based approaches to sustainable development in China which can also be of great benefit when applied to its outward cooperation. Driven by thousands of local community protests over the environmental impacts of industry on vulnerable communities, China passed an Environmental Rights Section in its first-ever Human Rights Action Plan (2009) to "strengthen rule of law to safeguard public's environmental rights" alongside establishing 47 local environmental courts and tribunals, a Law on Public Participation in Environment Matters (2006) and Measures on Open Environmental Information (2008). These and other measures are signs of a re-working of China's socialist market economy to engage the transformative nature of socio-ecological change (Khoday and Perch, 2012b). These institutional innovations can likewise be of good comparative value in the South-South context, as can various forms of social technologies (Perch et al., 2012).

Regarding the financial and technical cooperation aspects of South-South cooperation, a particular focus of China's orientation is expanding ODA to Africa and Asia. The emerging BRICS Development Bank (led by Brazil, Russia, India, China and South Africa) is a good example, with interest expressed at its 2012 Summit to place sustainable development and climate change at the core of its future ODA initiatives in less developed countries. The ASEAN+China Environmental Cooperation Centre based in Beijing is another example of new efforts to engage green economy opportunities in official South-South cooperation.

Perhaps the highest-profile process for outward ODA is the Forum on China-Africa Cooperation (FOCAC). At its 2006 Beijing Summit, China confirmed its long-term commitment to a 'new type of strategic partnership' with Africa, based on political equality, mutual trust and economic win-win cooperation (FOCAC, 2006). South-South cooperation is the key mechanism to deliver on such goals. The 2009 FOCAC Sharm-El Sheikh Action Plan began this by emphasising issues of biodiversity, water, desertification and energy as areas for cooperation (Center for Chinese Studies, 2012).

The FOCAC Eight-Point Plan included several green economy entry points including the pledge to establish "China-Africa partnerships on climate change... development and use of new energy, prevention and control of desertification, and urban environmental protection" and "100 clean energy projects in the fields of solar energy, biogas and small hydropower stations" (FOCAC, 2009). It also pledged to intensify scientific and technical

cooperation, and agricultural cooperation for food security. This also mirrored the Six Measures for Foreign Aid pledged by China at the UN High-Level Meeting on the Millennium Development Goals (MDGs) in 2008 and 2010.

As noted by the UN Secretary General at the most recent July 2012 FOCAC Summit, South-South cooperation must be built on as a strategic platform of collective dialogue and for green economy solutions. The recent Summit saw countries agree on placing emphasis on green economy cooperation, an important landmark for the future. China pledged \$20 billion of new ODA to Africa for overall development cooperation, more than double the pledges made at the last Summit in 2009. This now places China's ODA to Africa at a higher level than the World Bank and International Monetary Fund, among others. Mainstreaming the new green economy focus into this process can yield significant positive results.

In the area of climate change and sustainable energy, China has now decided to offer training programmes from 2012–2015 on climate change to 1000 officials and technicians from developing countries to help achieve goals of low-carbon economy, with new agreements reached at Rio+20 with Nigeria, Grenada and Ethiopia. Support will go to enhancing infrastructure for climate adaptation and developing sustainable energy solutions including renewable energy. Much can also be achieved through alignment with the Sustainable Energy for All initiative led by the UN Secretary General, with more than 50 countries and \$50 billion of global commitments now in place following Rio+20. Furthermore, scope exists to learn from China's own lessons on providing sustainable energy for poor people across rural China, adapting such models to suit the needs of ODA recipient countries. A focus on social innovations in the energy sector would be particularly critical in Africa given the unique local challenges for energy equity and access to basic services, such as successful models for energy-efficient stoves and solar ovens (Stoycheva, 2012). Chinese cooperation for sustainable energy should consider options for green, affordable energy in support of rural livelihood opportunities — for example, related to fertiliser, irrigation, agro-processing and transport.

Like China's approach to energy, its engagement with Africa on land and food security has drawn worldwide attention and concern over the nature of investments, and issues of land rights and social welfare (Moseley, 2011). China's achievements in agricultural growth and food security have been impressive and celebrated as a key pillar of its success in lifting hundreds of millions of peasants from rural poverty over the past 30 years (Khoday and Bonnitcha, 2010). Over 44 countries in Africa have benefited from Chinese ODA since 1960, and 20 per cent of China's turn-key projects in Africa have involved agriculture (Fan, Nestorova and Olofinbiyi, 2010). Chinese ODA has been moving away from large-scale state-owned farms to support smallholder farmers, with a key focus on technical knowledge exchange. Regarding support for green economy approaches to food security, like in the sphere of sustainable energy, there are also many lessons and capacities within China to build on within South-South initiatives.

Under the FOCAC Action Plan over 100 senior Chinese experts in agriculture were sent to Africa between 2006 and 2009, with China establishing 14 agricultural technology demonstration centres across the continent (Fan, Nestorova and Olofinbiyi, 2010). Lessons from South-South cooperation between Brazil and Africa on agriculture can also be useful in terms of achieving goals of reducing poverty, inequality, vulnerability and exclusion

alongside issues of land productivity, growth and connectivity to global markets (Amanor et al., 2012). Others have noted the importance of the local context for the effective transfer of knowledge and technologies in the agricultural sector (Qi, 2012).

Of relevance to all ODA initiatives on energy, agriculture, water, infrastructure etc., a key development at the most recent FOCAC Summit in July 2012 was a decision, prompted by the World Wildlife Fund (WWF), to further research and explore ways to apply Strategic Environmental Assessments (SEAs) in China's ODA, with China also pledging to increase efforts to protect forests in Africa. This is important for future cooperation on issues of low-carbon economy, sustainable energy and food security among other things. The decision to officially explore the role of SEAs in China's expanding ODA is an important development.

The SEA is an important approach for integrating inclusive green growth approaches into ODA policies, plans and programmes. Its application to ODA has taken shape in recent years under an OECD Task Force on SEA co-chaired by UNDP and the UK Department for International Development (DFID). SEAs were defined by the Task Force as "analytic and participatory approaches that aim to integrate environmental considerations into policies, plans and programmes and evaluate the inter-linkages with economic and social considerations" (OECD, 2006). SEAs aim to improve the development effectiveness of ODA, by mainstreaming social and environmental risks into upstream ODA policies and plans from an early stage, as opposed to Environmental Impact Assessments (EIAs) which focus solely on project-level interventions.

They can be a strategic tool for comprehensive social-ecological assessment and risk mitigation to ensure that ODA delivers green and social results and does minimal harm to marginalised communities and fragile ecologies. This can build on China's experiences in applying SEAs in its local investments within China in these and other sectors. Examples include SEAs for the East-West Oil and Gas Project, Agriculture Development in the Three-Rivers Plains area and the Qinghai-Tibet Railway (Zhu and Ru, 2008). Furthermore, China's EIA Law of 2002 applies SEA-type principles to assess spatial land use planning and sector planning for the very sectors such as infrastructure, industry and energy in focus for China's outward ODA. By applying SEA to outward cooperation, it can be a strategic process by which to further inclusive green economy prospects within China's ODA in infrastructure, industry, energy, power, transport, water and agriculture.

4 OUTWARD DIRECT INVESTMENTS FOR CLEAN TECHNOLOGY AND A GREEN ECONOMY

Alongside China's expanded ODA as noted above, an equally critical trend has been growing levels of Outward Direct Investment (ODI). In 2002 China passed its landmark Going Global strategy, and over the past decade China has become the largest source of ODI among developing countries and the fifth-largest source among all countries. China's ODI went from about \$33 billion in 2003 to over \$230 billion in 2009, with over \$2 trillion of overseas assets today (CCICED, 2012). A significant component of this expanding ODI has been for natural resource cooperation, with about half of Chinese mergers and acquisitions (M&A) also in the resource sectors in recent years. This includes over 12,000 local Chinese investors who have created 13,000 directly invested enterprises in 177 countries around the world. More than 69 per cent of all ODI has been led by large state-owned enterprises (CCICED, 2012).

As the social and ecological footprint of Chinese ODI expands, it has become increasingly imperative to integrate issues of inclusive green growth into overseas ventures. Some of China's high-profile ODI ventures for natural resources, for example, are concentrated in areas of high poverty and globally critical ecology. As the world's largest wood importer, for example, China's ODI in Southeast Asia and West Africa bring risks to biodiversity and related global public goods, while also bringing risks to indigenous land rights. With most of China's ODI to Asia and Africa, Chinese investors often confront a lack of local institutional capacities to manage social and environmental risks. This, however, need not result in a race to the bottom where ODI proponents seek out the lowest denominator of regulation as a means of avoiding costs. South-South cooperation can support local capacity development towards enhanced institutions for sustainable development.

Today's world of politics driven by social accountability and a globally connected civil society brings higher demands for addressing issues of equity and sustainability than in the past. As the UNCTAD Secretary General noted at a recent 2012 Chinese ODI Summit in Beijing, Chinese overseas investors can "avoid the mistakes made by Western multinationals... Environmental damage or social conflicts associated with a multinational in a particular location can and will hamper the global operations of the company. Therefore I would like to urge Chinese business leaders to take corporate responsibility seriously" (UNCTAD, 2012). While there are many prominent cases of corporate wrongdoings and lack of responsibility for the social and environmental implications of their activities, there are some signs of change. As Chinese multinationals become increasingly aligned with UN global platforms and international standards, government agencies are becoming more involved in incentivising and regulating large state-owned entities, while proactive voluntary measures are increasingly being taken by companies as well, albeit the larger state-owned multinational corporations for the most part.

The China Banking Regulatory Commission (CBRC) for one has issued guidelines on corporate responsibility and a Green Credit Policy encouraging large banks to abide with the UN Global Compact principles and the Equator Principles. One of the single largest financiers of ODI, the China Export-Import Bank, has in recent years issued social-environmental screening guidelines to project proponents, calling on partners to comply with the stronger between Chinese and host country regulations and requiring all ODI projects it finances to undergo environmental impact evaluations before, during and after the project cycle (CCICED, 2012). Furthermore, in recent years the State Council Assets Supervision and Administration Commission issued guidelines on corporate responsibility, calling on state-owned multinationals to abide by social and environmental policies and regulations overseas. The State Forest Administration (SFA) has also joined this process by issuing guidelines on Sustainable Overseas Forest Management by Chinese Enterprises, touching on social and environmental issues around fragile and globally critical ecosystems.

Many large state-owned enterprises have also voluntarily taken on board standards such as ISO 14000 on environmental standards and ISO 26000 on social standards, also aligning themselves to increasing attention paid by the State to its overseas reputation and strategic partnerships with host countries. Furthermore, it is often the smaller companies rather than the large state-owned multinationals than come under the spotlight for issues of social exclusion and ecological degradation, thus scope exists to expand green economy solutions into small and medium-sized enterprises, a growing and important component of Chinese ODI.

Those Chinese multinationals with a global vision of leadership and common purpose could well emerge in coming years as a new force in the drive for an inclusive green economy around the world, and as a major force in emerging South-South cooperation potentials. In addressing the increased attention paid by the State to social and environmental issues in Chinese ODI, particular scope exists to capitalise on the rapid rise of China as a global centre of clean technology research and development. Recent years have seen China dominate global clean technology investment trends as it seeks to scale up resource-conserving and pollution-preventing applications at home. For example, 2010 saw a record \$386 billion market capitalisation in clean technology sectors globally, with China accounting for up to half this figure and energy making up the single largest sector component (Parker, 2011). Scope exists to mainstream this into its ODI as well.

“The centres of gravity for clean tech growth in moving East...and will make Asia the largest global clean-tech market within the next five years” (Global Clean-tech Report, 2012). 2012 is expected to be another year of significant growth, with policies under the new 12th Five-Year Plan to set national targets for solar and wind power, water conservation and waste water recycling, and energy efficiency in heavy industry, roads, aviation and vehicles and building sectors (China GreenTech, 2012). In 2011 China also commenced implementation of its new Smart Grid Plan (2009–2020) aimed at dramatically scaling up green measures into power supply, while innovative measures are being explored by some companies for integrating green economy approaches into supply chain management. Meanwhile, China has important success stories on public-private partnership models for energy-environment, which can also improve ODI ventures (China GreenTech, 2012).

China has before it a strategic opportunity to connect expanding domestic green economy policies and investments with its expanding ODI and the global demand for cost-effective green economy solutions. Around the world in regions such as Asia, Africa and Latin America, the drive towards sustainable food, water and energy will expand in the post-Rio+20 era. Scope exists to mainstream China’s rapidly developing and cost-competitive low-carbon, water-saving, pollution-reducing technologies into ODI flows in the infrastructure, power, buildings, industrial and agriculture sectors.

There are multiple co-benefits from such an approach for both China and partner countries. Greening ODI can support China’s global standing on the post-Rio+20 agenda, prevent or mitigate rising impacts of its ODI on vulnerable communities and ecosystems around the world, improve the economic-social-environmental triple bottom line of Chinese multinationals and open up future green economy markets. A greener form of Chinese ODI can help catalyse green economy solutions, support local clean technology development and instigate enhanced public-private partnership frameworks for a green economy (CCICED, 2012). In addition to clear risk management benefits for ODI investors and local communities, a broader view of China’s emerging role would also see it encouraging the transformation of industry-wide sector strategies and policies towards a green economy.

ODI flows into Africa have received particular attention in recent times, parallel to issues and opportunities surrounding Africa-destined ODA as noted above. China-Africa trade in 2011 was \$166.3 billion, and bilateral trade is expected to reach \$180 in 2012. About 2000 Chinese companies have dealings in Africa, with investments totalling \$14.7 billion. The China Africa Development Fund (CADF) may be a vehicle for incorporating sustainability into ODI projects. Operating much like a private equity fund, CADF finances ODI projects in Africa, with the China

Development Bank (CDB), China's largest policy bank serving as its biggest investor. CADF could well be a strategic vehicle for expanding sustainability more broadly, particularly for ODI into smaller companies investing in Africa, which, as noted above, tend to be more difficult to influence on social and environmental agendas.

In engaging the green economy opportunities from expanding ODI and the rise of Chinese green business leaders, another priority could be to explore ways to integrate clean technology transfer, development and investments into Special Economic Zones planned to arise in Africa with Chinese support. The 2006 Forum on China-Africa Cooperation Summit first set a goal of establishing up to five economic and trade cooperation zones in Africa, to build on and learn from China's successes in decades past of the use of Special Economic Zones in its own opening-up and market expansion process (Khoday and Bonnitche, 2010). Special Economic Zones were a vital component of China's economic dynamism and expansion, a base for entry of foreign investments and joint ventures that shared technologies and know-how. As they evolved, these zones played a key role in the broader structural change which has seen China emerge as a major global powerhouse today (Brautigam and Xiaoyang, 2011). While only the Special Economic Zone in Egypt has emerged to date from China-Africa cooperation, plans remain under FOCAC for zones in Zambia, Nigeria, Mauritius and Algeria (SAIIA, 2012).

Thus far the plans for Special Economic Zones have focused on mobilising Chinese ODI for local manufacturing initiatives in Africa in areas such as electronics, textiles and machinery, with the zone in Zambia under development for mineral resource processing. With the zones facing various challenges, the idea of mainstreaming green economy potentials could not only help to bring clean technology and green investment into Africa but could also catalyse new sources of growth for the future of China-Africa cooperation. An opportunity now exists to integrate a specialisation on green growth potentials in the FOCAC plans for Special Economic Zones and related platforms with potentials for new 'Green Economic Zones' (GEZs) in the future.

At the recent Forum on China-Africa Cooperation Summit in July 2012, a voluntary declaration on corporate responsibility was made at the closing ceremony, agreed by the China Council for the Promotion of International Trade, the China Development Bank and the CADF, pledging among other things to enhance efforts to protect the environment. In addition to increased potentials for integrating corporate environmental responsibility into ODI, there is also the potential to engage Chinese companies focused on green business into new economic zones. Companies including Suntech, Broad Group and Zhangzidao Fisheries have been highlighted in recent years as emerging 'sustainability champions' (World Economic Forum, 2011). South-South cooperation and the greening of China's ODI hold the potential to address growing concerns over the social and ecological impacts of Chinese multinationals in vulnerable communities and ecosystems, and growing aspirations as to the role of emerging economies in setting the foundations of a future green economy.

5 CONCLUSIONS

Two critical megatrends are of central importance in implementing the green economy agenda launched at the recent Rio+20 Summit on Sustainable Development: the rise of emerging economies across the South, and the global challenges of resource security and ecological

change. This *Working Paper* has focused on the convergence point of these two trends. Surging levels of outward investments by emerging economies have brought social and ecological risks to resource-rich, vulnerable communities around the world. Meanwhile, as emerging economies face rising social movements at home related to environmental degradation, progress is being made in advancing the green economy agenda in their own economies.

This *Working Paper* has argued that an opportunity now exists, through the process of South-South cooperation, for emerging economies to mobilise their new green economy advances to improve the nature of outward investments and, therefore, the state of social and environmental issues in developing countries around the world. Through the expanded reach of emerging economies in global development affairs, such a process can be an important contributing factor to achieving the post-Rio+20 goal of expanding green economy solutions.

As explored in this paper, China now stands as a primary driver of new South-South sustainable development challenges and opportunities. With its large and growing levels of Official Development Assistance (ODA) and Outward Direct Investments (ODI) around the world, China will, by its policies and actions at home and abroad, play a central role in shaping the future of global green economy goals and the state of social and ecological well-being in developing countries around the world. Serious attention needs to be paid to prevent and mitigate the impacts on communities and ecosystems from these expanding levels of ODA and ODI. An opportunity now exists, through the process of South-South cooperation, for China to mobilise its emerging green economy advances at home to improve the nature of ODA and ODI. Greening ODA and ODI can support China's global standing on the post-Rio+20 agenda, prevent and mitigate impacts on vulnerable communities and ecosystems around the world and engage triple wins from social, economic and environmental sustainability in China and partner countries. This will be of benefit to China, and the entire world, as China seeks a greater role as a global environmental citizen, and as countries seek a more multi-polar form of global cooperation towards an inclusive green economy.

Areas for **policy attention** include:

- Integrate China's emerging good practices in low-emission, resource-conserving technologies into its ODA and ODI in the infrastructure, industry, energy, power, transport, water and agriculture sectors.
- Monitor and analyse lessons from the emerging green economy pilot initiatives in China's ODA and ODI, under the Forum of China-Africa Cooperation (FOCAC) process, for example, as a way to enhance approaches and support future expansion of good practices.
- Strengthen regulatory regimes — mandatory and voluntary — within China, to ensure that overseas ODA and ODI into developing countries achieve goals of social inclusion and environmental sustainability, building in particular on new green incentive systems in China's banking and financial sector.
- Building on trends of corporate responsibility in large Chinese multinationals, integrate principles for environmental, social and governance (ESG) performance

into investment decision-making and align the sector with emerging global frameworks such as the new UN Principles for Responsible Investment (UN-PRI).

- Integrate principles of accountability in contracting between government and the private sector; transparency to the public in China and partner countries; integrating green economy principles into investment agreements; and providing host countries and affected communities with access to remedies.
- Support green economy solutions in ODI by Chinese small and medium-sized enterprises in particular, building on positive frameworks of greening such companies within China in recent years in areas such as energy efficiency, low-carbon growth, green business development etc.
- Explore the use of Strategic Environmental Assessment (SEA) and strong poverty and social impact assessment tools in greening ODA and ODI, building on China's own pioneering of SEA in recent years in the local economic development within China as well as lessons learned from using SEA in the ODA frameworks in OECD countries.
- Mobilise public-private partnerships and cooperation with multilateral institutions to implement the new green economy focus of FOCAC, building on lessons learned over the past 20 years of international cooperation on issues of climate change, energy access, biodiversity, and food and water security.
- Integrate green economy frameworks in newly emerging Special Economic Zones in Africa and elsewhere, and explore potentials for new Green Economic Zones as hubs for China-Africa cooperation on clean technology transfer, development and investments.
- Support capacity development in developing countries as a way to enhance local institutional frameworks for sustainable development and to improve compliance by Chinese investors with local regulations to prevent social and ecological impacts on local communities.
- Expand South-South knowledge exchanges between China and partner developing countries on China's progress in crafting new green economy policies and institutional frameworks for sustainable development, on issues such as sustainable energy for all, low-carbon industry and access to environmental justice.
- Capture the lessons learned from China's own successes in using incoming ODA and ODI for goals of inclusion and sustainability, and analyse ways in which these lessons and the capacities built within China on ODA and ODI systems can be effectively translated into its own outward cooperation systems.
- Engage new South-South knowledge-sharing platforms to exchange experiences from China and other emerging economies such as Brazil and India in integrating inclusive green economy approaches into outward ODA and ODI. This can build on positive and negative lessons across emerging economies and catalyse innovative joint solutions among emerging economies such as through the new BRICS Development Bank.

- Engage the benefits of cooperation in multilateral platforms for South-South cooperation and green economy that are emerging in the post-Rio+20 era. In particular, align South-South ODA and ODI with emerging post-2015 development goals, the new Sustainable Energy for All initiative, new climate change initiatives set to emerge in the post-2015 climate regime and various multilateral initiatives meant to achieve greater food, water and energy security for all.

REFERENCES

- African Union and United Nations Economic Commission for Africa (UNECA) (2011). *Minerals and Africa's Development Report*. Addis Ababa, African Union/UNECA.
- Amanor, K., Chichava, S., Chinsinga, B. and Mukwereza, L. (2012). 'Towards an Even-handed and Effective Africa-Brazil Exchange for Agricultural Development: African Perspectives' in A. Bahalim, L. Cabral, L. Perch and A. Shankland (eds), 'The Role of South-South Cooperation in Inclusive and Sustainable Agricultural Development: Focus on Africa', *Poverty in Focus*, Vol. 24. Brasília, International Policy Centre for Inclusive Growth.
- Brautigam, D. and Xiaoyang, T. (2011). 'African Shenzhen: China's Special Economic Zones in Africa', *Journal of Modern African Studies*, 49:1.
- Chinese Studies Center (2012). *FOCAC: Addressing joint environmental challenges*. Stellenbosch, South Africa, Stellenbosch University.
- China Council on International Cooperation for Environment and Development (2012). *Going Global, Going Green: Investment, Trade and Environment*. Winnipeg, IISD.
- Ministry of Commerce (2012). *Statistical Bulletin of China's ODI: 2011*. Beijing, Ministry of Commerce.
- China State Council (2011). *White Paper on International Cooperation*. Beijing, China State Council.
- China Greentech Initiative (2012). *China Greentech Report*. Beijing, China Greentech Initiative.
- Copenhagen Cleantech Cluster (2012). *Global Cleantech Report*. Copenhagen, Copenhagen Cleantech Cluster.
- Fan, S., Nestorova, B. and Olofinbiyi, T. (2010). *China's Agricultural and Rural Development: Implications for Africa*. Bamako, China-DAC Study Group on Agriculture, Food Security and Rural Development.
- Forum on China-Africa Cooperation (FOCAC) (2009) *Sharm El-Sheikh Action Plan*. Beijing, FOCAC.
- FOCAC (2006). 'Declaration of the Beijing Summit of the Forum on China and Africa Cooperation', <<http://www.fmprc.gov.cn/eng/zxxx/t279852.htm>> (accessed 10 October 2012).
- Jacobs, A. (2011). 'China Issues Warning on Climate and Growth', *New York Times*, 1 March 2011, <<http://www.nytimes.com/2011/03/01/world/asia/01beijing.html>> (accessed 10 October 2012).

- Khoday, K. (2011). *Sustainable Development and Green Economy in the Arab Region*. Cairo, UNDP Arab Regional Centre.
- Khoday, K. and Bonnitcha, J. (2010). 'Foreign Investment, Land Rights and Legal Empowerment of the Poor: Lessons from China and India' in M. Gehring, M.-C. Cordonier Segger and A. Newcombe (eds), *Sustainable Development in World Investment Law*. London, Kluwer Law International.
- Khoday, K. and Natarajan, U. (2012). 'Fairness and International Environmental Law from Below: Social Movements and Legal Transformation in India', *Leiden Journal of International Law*, Vol. 25: 415–441.
- Khoday, K. and Perch, L. (2012a). 'Development from Below: Social Accountability in Natural Resource Management', *Working Paper*, No. 91. Brasília, International Policy Centre for Inclusive Growth.
- Khoday, K. and Perch, L. (2012b). 'Environmental Justice for Inclusive Growth', *Policy Research Brief*, No. 23. Brasília, International Policy Centre for Inclusive Growth.
- Moseley, W.G. (2011). 'China's farming history misapplied in Africa', *Aljazeera*, 27 October 2011, <<http://www.aljazeera.com/indepth/opinion/2011/10/201110241502249406.html>> (accessed 10 October 2012).
- Moyo, D. (2012). *Winner Take All: China's Race for Resources and What It Means for the World*. Toronto, Harper Collins Canada.
- OECD (2006). *Applying Strategic Environmental Assessment*. Paris, OECD.
- Parker, N. (2011). 'The Emerging Global Clean Economy: The Race for Sustainability Prosperity Goes Mainstream'. Cleantech Group, Presentation to the Global Competitiveness Forum, 24 January 2011, Riyadh.
- Perch, L., Narasimhan, P. and Wragg-Morris, T. (2012). 'Social Technologies for Sustainable Development: Valuing Social Capital', *Policy Research Brief*, No. 25. Brasília, International Policy Centre for Inclusive Growth.
- Qi, G. (2012). 'Agricultural Cooperation between China and Africa — Opportunities and Challenges' in A. Bahalim, L. Cabral, L. Perch and A. Shankland (eds), 'The Role of South-South Cooperation in Inclusive and Sustainable Agricultural Development: Focus on Africa', *Poverty in Focus*, Vol. 24. Brasília, International Policy Centre for Inclusive Growth.
- South Africa Institute of International Affairs (2012). *Chinese Economic & Trade Coop Zones in Africa*. Johannesburg, South Africa Institute of International Affairs.
- Scissors, D. (2011). *China Global Investment Tracker*. Washington, DC, Heritage Foundation.
- Stoycheva, D.P. (2012). 'Green Innovations: Reducing Energy Poverty and Inequitable Access', *Policy Research Brief*, No. 24. Brasília, International Policy Centre for Inclusive Growth.
- United Nations (2011). *South-South Cooperation for Development*, UN Document SSC/17/3. New York, NY, United Nations.
- United Nations Environment Programme (UNEP) (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. Nairobi, UNEP.

United Nations Conference on Trade and Development (UNCTAD) (2011). *Global Commodities Forum Report*. Geneva, UNCTAD.

World Economic Forum (2011). *New Sustainability Champions*. New York, NY, World Economic Forum/Boston Consulting Group.

World Wildlife Fund (WWF) and China Council for International Cooperation on the Environment and Development (CCICED) (2010). *China Ecological Footprint Report*. Beijing, WWF/CCICED.

WWF (2012). *China and Africa: Cooperation for Sustainability*. Geneva, WWF.

Zhu, D. and Ru, J. (2008). 'Strategic environmental assessment in China', *Journal of Environmental Management*, Vol. 88: 615–626. .



International Policy Centre for Inclusive Growth (IPC - IG)

Poverty Practice, Bureau for Development Policy, UNDP

Esplanada dos Ministérios, Bloco O, 7º andar

70052-900 Brasília, DF - Brazil

Telephone: +55 61 2105 5000

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