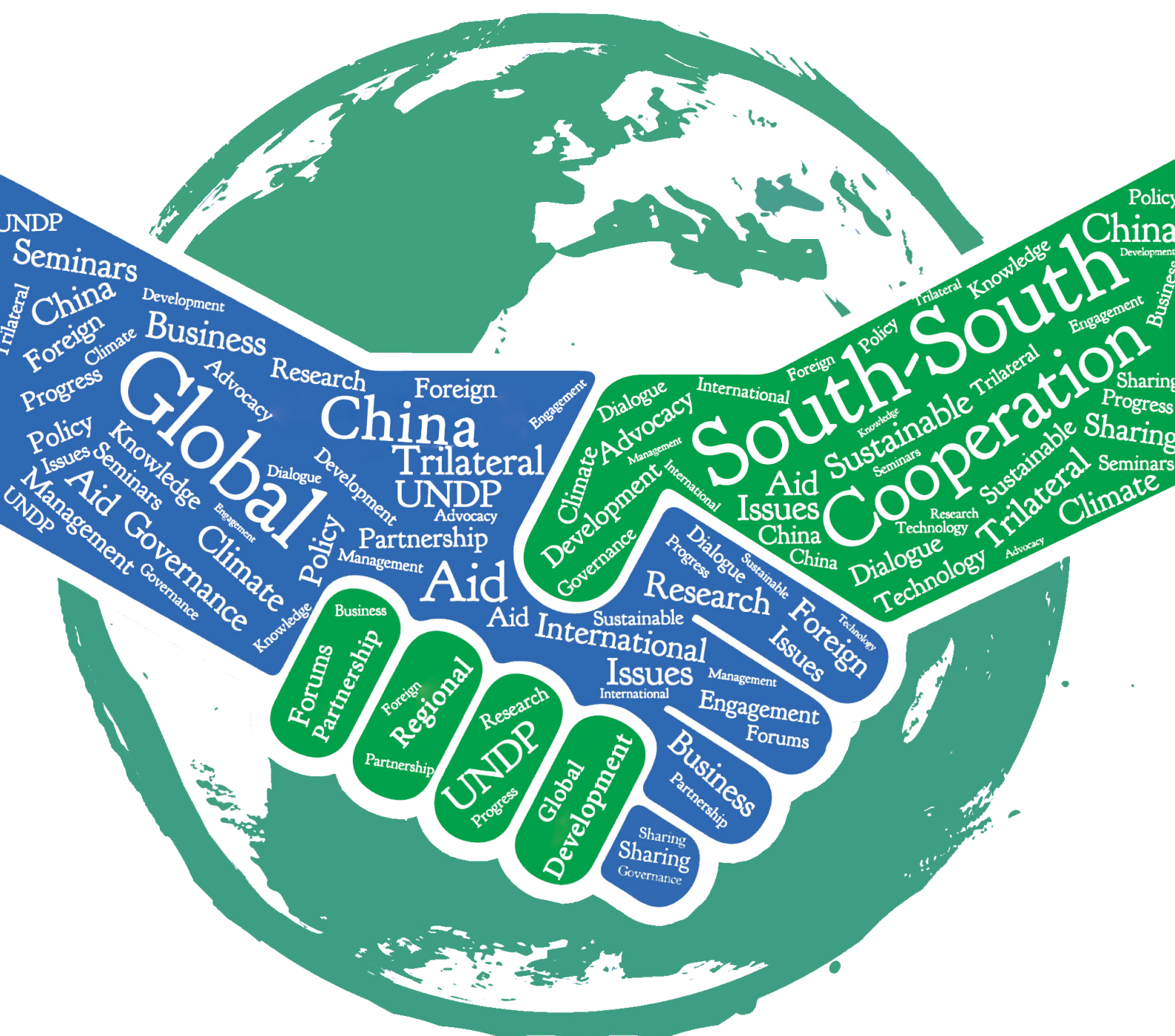


China's Climate Change South-South Cooperation to Date and Future Trends



Research Paper

More money, more impact? China's Climate Change South-South Cooperation to date and future trends

Author: Moritz Weigel, Senior Consultant, UNDP China.

This research paper should be referenced as: Weigel, Moritz (2016). China's Climate Change South-South Cooperation: Track Record and Future Direction. United Nations Development Programme in China, Beijing, China.

This research paper is published in English and Chinese. UNDP China has strived to ensure the consistency between the two versions of the paper. The English version should prevail in case of any ambiguity or conflict in terms of the two versions.

All rights reserved. Any part of this publication may be quoted, copied, or translated provided that the source is indicated. No part of this publication may be used for commercial purposes without prior written permission from UNDP China.

DISCLAIMER: The analysis and policy recommendations of the research paper do not necessarily reflect the views of United Nations Development Programme. The designations employed in the paper do not imply the expressions of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries. The recommendations of the paper are solely the views of the researcher and do not reflect the views of any government or organization.

UNDP China welcomes comments on the research paper via email to Ms. Samantha Anderson (samantha.anderson@undp.org).

This and other research papers can be downloaded from www.cn.undp.org.

Table of Contents

Contents

1. Introduction	8
2. Methodology.....	9
3. Historic development and current status of China's Climate Change South-South Cooperation	11
3.1 Background.....	11
3.2 China's Climate Change South-South Cooperation Policies.....	13
3.3 Delivery of China's Climate Change South-South Cooperation	14
3.4 China's Climate Change South-South Cooperation with participation of the United Nations	16
3.4.1 China's CCSSC in the framework of activities conducted by FAO	16
3.4.2 China's CCSSC in the framework of activities conducted by UNDP	17
3.4.3 China's CCSSC in the framework of activities conducted by UNEP	19
3.4.4 China's CCSSC in the framework of activities conducted by UNESCO.....	20
3.4.5 China's CCSSC in the framework of activities conducted by UNIDO.....	20
3.4.6 China's CCSSC in the framework of activities conducted by the UN Secretary-General's Office.....	21
3.5 China's recent commitments on Climate Change South-South Cooperation.....	21
3.6 China's South-South Cooperation Climate Fund.....	23
4. Developing countries' experiences, needs and priorities in partnering with China on addressing climate change.....	25
4.1 Developing countries' experiences in South-South Cooperation on climate change with China	26
4.1.1 Type of projects	26
4.1.2 Delivery of results	28
4.1.3 Country-drivenness and equal partnership	29
4.1.4 Involvement of institutions and personnel at the local and national level	29
4.1.5 Transfer of knowledge, skills and technology	30
4.1.6 Strengthening or development of local and national institutions.....	30
4.1.7 Long-term sustainability	31
4.2 Developing countries' needs and priorities for South-South Cooperation on climate change with China	31
4.2.1 Thematic areas	31
4.2.2 Types of support.....	32
4.2.3 Specific proposals	32
4.3 China's comparative advantages in Climate Change South-South Cooperation.....	33
4.4 Suggestions on possible ways of enhancing China's Climate Change South-South Cooperation.....	34
4.4.1 Suggestions related to the South-South Cooperation Climate Fund	34
4.4.2 Other suggestions	34
4.5 Recommendations for China's future Climate Change South-South Cooperation	35
4.5.1 Recommendations for overall principles for Climate Change South-South Cooperation	35
5. Ideas for further research	36
5.1 Review of approaches to Climate Change South-South Cooperation of Brazil and India	36
5.2 Review of accomplishments of the India-Brazil-South Africa Fund.....	37
5.3 Review of national climate change funds in developing countries.....	37
5.4 Positioning of Climate Change South-South Cooperation in the context of the UNFCCC Paris Agreement	37
5.5 Design of a global platform or partnership for Climate Change South-South Cooperation.....	37
6. Conclusion	37
7. References	40
Annex I: Questionnaire on China's Climate Change South-South Cooperation: Track Record and Future Direction	45

Acknowledgements

This research paper would have not been possible without the contributions of various experts representing developing countries, Chinese research institutions and United Nations entities. First and foremost, we would like to thank the 31 representatives of developing countries who supported this research by participating in a global online survey and in in-depth interviews conducted in September and October 2015. In particular, we would like to thank H.E. Pa Ousman Jarju (Minister of Environment, Climate Change, Water Resources, Forestry, Parks and Wildlife of the Gambia) for contributing to the research with his insights as seasoned negotiator in the intergovernmental climate change process.

We are immensely grateful for the invaluable discussions with, and expert advice from, Mao Xiaojing (Deputy Director, Chinese Academy of International Trade and Economic Cooperation), Qi Yue (Assistant Professor, National Center for Climate Change Strategy and International Cooperation), Jukka Uosukainen (Director, Climate Technology Center and Network), Gordon Johnson (Regional Practice Leader, Environment and Energy, Asia and Pacific, UNDP) and Alla Metelitsa (Team Leader, Capacity-building Unit, UNFCCC).

We are also extremely thankful for the valuable comments and contributions in an earlier version of the research paper received from Agi Veres (Country Director, UNDP China), Zhang Xiaohua (Senior Policy Advisor on South-South Cooperation, Climate Change Support Team, Executive Office of the United Nations Secretary-General), Gong Weixi (Senior Coordinator for South-South Cooperation, UNIDO), Cassie Flynn (Climate Change Advisor, Low-Emission Climate-Resilient Development Team, UNDP), Benjamin Moore (Programme Manager, South-South Cooperation, Sustainable Business and Climate Change, UNDP China) and Zhang Xin (South-South Cooperation Consultant, South-South Cooperation and Resource Mobilization Division, FAO). Hannah Ryder (Head of Policy and Partnerships, UNDP China) initiated this project and Samantha Anderson (Senior Advisor, Sustainable Cities and Climate Change, UNDP China) managed the project.

We are indebted to the anonymous external reviewers for their very constructive comments, which greatly improved the quality of the research paper.



FOREWORD

As UN Secretary-General Ban Ki-moon remarked at the closing of COP21 in Paris in December 2015, climate change is the defining challenge of our time. At stake are our recent gains in the global fight against hunger, poverty, and disease, and the lives and livelihoods of billions of people from vulnerable communities of the global South. There can be no doubt that addressing climate change effectively will require forging partnerships across the political spectrum and between all stakeholders, with South-South and triangular (North-South-South) cooperation necessarily playing a prominent role.

In recent years the People's Republic of China has truly become a global leader in promoting and supporting South-South cooperation. In September 2015 President Xi Jinping pledged USD 3.1 billion to establish the China South-South Climate Cooperation Fund. This was in addition to more than USD 2 billion already pledged for South-South and climate-related activities. As a result of this generosity, the global community has the resources to continue to address these issues of vital importance.

In this landscaping paper, UNDP has begun to provide a roadmap for ways China, the UN, and other stakeholders can join hands in this area. For the first time we have an overview of China's previous and current work on South-South cooperation and climate change. The report also presents unique insights from a global survey of Southern countries' on their priorities for the areas and means of collaborating with China. Finally, it provides thought-provoking options for China's future delivery of South-South projects in climate change.

This paper could not have been published at a more opportune moment. China is in the process of developing modalities for the operation of its new fund and countries of the South are increasingly keen to partner with China on climate action. At the same time, the United Nations system is expanding its efforts to facilitate South-South cooperation, and is keen to identify ways to support China and other leading countries of the South to become champions of South-South cooperation in climate change.

The United Nations Office for South-South Cooperation, as the lead UN entity mandated by the General Assembly to promote and support South-South and triangular cooperation, stands ready to work with our fellow UN agencies and other stakeholders on this vitally important topic. I am convinced that this research paper will strengthen the understanding of the international community on the unique added value of China's leadership in this area.

My hope is that this is just the first of many studies that will spark discussion on how to enhance existing and new partnerships in this field. I congratulate UNDP on this most impressive work.



Mr. Jorge Chediek
Envoy of the Secretary-General on South-South Cooperation
Director
United Nations Office for South-South Cooperation

List of Abbreviations

ASEAN	Association of Southeast Asian Nations
CAS	Chinese Academy of Sciences
CCSSC	Climate change south-south cooperation
CDM	Clean Development Mechanism
China-CELAC	Forum of China and the Community of Latin American and Caribbean States
CPEIR	Climate Public Expenditure and Institutional Reviews
CNY	Chinese Yuan
FAO	Food and Agricultural Organization of the United Nations
FOCAC	Forum on China-Africa Cooperation
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse gas
GDP	Gross Domestic Product
IBSA Fund	India-Brazil-South Africa Fund
INDC	Intended Nationally Determined Contribution
IOSC	Information Office of the State Council of the People's Republic of China
LED	Light-emitting diode
MOFA	Ministry of Foreign Affairs of the People's Republic of China
MOFCOM	Ministry of Commerce of the People's Republic of China
MOST	Ministry of Science and Technology of the People's Republic of China
MoU	Memorandum of understanding
NAMA	Nationally Appropriate Mitigation Action
NCSC	National Center for Climate Change Strategy and International Cooperation
NDRC	National Development and Reform Commission of the People's Republic of China
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NDA	National Designated Authority
REDD	Reducing Emissions from Deforestation and Forest Degradation
SE4All	United Nations Secretary-General's Sustainable Energy for All Initiative
SS-GATE	South-South Global Assets and Technology Exchange
SSC	South-south cooperation
TNA	Technology Needs Assessment
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environment Programme
UNEP-IEMP	UNEP-International Ecosystem Management Partnership
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organizations
UNOSSC	United Nations Office for South-South Cooperation
USD	United States dollar

Executive Summary

South-South cooperation is becoming an increasingly important dimension of international cooperation for addressing climate change. China is leading this development with its growing support to other developing countries over the last few years and the establishment of the South-South Cooperation Climate Fund to which it recently pledged USD 3.1 billion (CNY 20 billion). This research paper provides an overview of the historic development and current state of China's South-South cooperation on mitigating and adapting to climate change. Based on findings of a global survey and interviews, it considers and analyzes the experiences, needs and priorities of China's partner countries and how China could support other developing countries in the future. To date, such experiences and current priorities for future cooperation have not been compiled in a comprehensive manner. The research paper offers a number of recommendations for overall principles of China's climate change South-South cooperation including the following:

- To focus on priority areas identified by developing countries, namely adaptation, agriculture, disaster risk reduction and preparedness, energy efficiency, renewable energy, and education and public awareness;
- To utilize and build upon the comparative advantages of China's approach to South-South cooperation on climate change, specifically non-bureaucratic and unconditional provision of support, simplified approval procedures and efficiency in delivery of support;
- To enhance developing countries' understanding of the types of support offered by China to showcase opportunities for collaboration;
- To foster the effective engagement of local counterparts in project implementation to ensure long term sustainability of interventions;
- To expand trilateral cooperation with bilateral cooperation agencies and intergovernmental organizations to amplify available expertise;
- To increase coordination on and coherence among Chinese government entities.

The paper concludes with ideas for further research.

It is hoped that the insights from this research will provide constructive input to the shaping of China's climate change South-South cooperation expansion.

1. Introduction

This study is published on the eve of a new era of China's South-South cooperation for addressing climate change. In a joint statement with the United States' President Barack Obama, President Xi Jinping announced on 25 September 2015 that China will support other developing countries' climate actions with USD 3.1 billion (CNY 20 billion)¹ through its newly established South-South Cooperation Climate Fund (White House 2015).² This exceeds the pledge of USD 3 billion (CNY 19.1 billion) by the United States to the United Nations' Green Climate Fund (GCF)³ and underlines China's commitment to support other developing countries by embarking on climate-resilient low-emission development pathways. This commitment is also part of China's Intended Nationally Determined Contribution (INDC) (NDRC 2015b), which lays out the actions China will take under the new universal climate change agreement adopted in Paris in December 2015.⁴

China's unprecedented economic growth since the late 1970s has led to a steep increase in its carbon dioxide emissions. In 2006 China overtook the United States as the world's largest carbon dioxide emitter and today China's per capita emissions are at the same approximate levels as that of the European Union.⁵ However, China has been undertaking ambitious domestic actions on mitigating climate change over the last few years, stating in 2014 that it will not follow developed countries' path of unlimited greenhouse gas (GHG) emissions during their industrialization period, but will 'endeavor to explore a sustainable development path that can make economic development compatible with the efforts to address climate change' (NDRC 2014a). China lowered its carbon dioxide emissions per unit of Gross Domestic Product (GDP) by 6.1% in 2014, with a cumulative decline of 15.8% since 2010 (NDRC 2015d).

In its INDC China committed to achieve the peaking of carbon dioxide emissions around 2030 or earlier, lower carbon dioxide emissions per unit of GDP by 60-65% from 2005 levels by 2030, and increase the share of non-fossil fuels in the primary energy mix to approximately 20% by 2030 (NDRC 2015b). This would imply a peaking of emissions at significantly lower per capita and income levels than has been the case for major developed countries (NCSC 2015).

These efforts constitute a considerable contribution to reducing climate-induced risks that many developing countries are already severely affected by. China has not only been going through a rapid economic transformation while implementing increasingly ambitious climate policies, but has also emerged as a world leader in renewable energy technologies. The continuously declining global prices of solar and wind power equipment owing to China's technological advances and economies of scale are an important indirect way of how China supports low-emission development in developed and developing countries. China's

¹ The United Nations operational rate of exchange as of 1 November 2015 is applied for the conversion of currencies within this report with USD 1 = CNY 6.357.

² Until President Xi Jinping's announcement, Chinese official sources referred to the fund as China's 'South-South Cooperation Fund on Climate Change'. Given that China's state media now mainly refers to it as 'South-South Cooperation Climate Fund' the latter terminology is used in this research paper.

³ See the Green Climate Fund <<http://www.gcfund.org/about/the-fund.html>>.

⁴ See the text of the Paris Agreement at <<https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>>.

⁵ <<http://data.worldbank.org/indicator/EN.ATM.CO2E.KT/countries?page=1>>.

decoupling of economic growth from carbon dioxide emissions will also be based on shifting its industry towards less emission-intensive sectors. It is estimated that one third of China's carbon dioxide emissions derive from the production of its globally exported goods.⁶ As some of these high-emission heavy and light industries are being relocated to other developing countries, China's South-South cooperation will be crucial for supporting recipient countries in greening these industries and avoiding a lock-in effect on high-emission technologies and fossil fuels. As the world's largest developing country, China seeks to 'become a demonstration model that other developing countries can follow in pursuing sustainable development' by avoiding reliance on the traditional high-pollution and high-emission development pathways (NCSC 2015). Furthermore, China's vast experience in adapting to the adverse effects of climate change is of crucial importance to many developing countries. Acknowledging that 'climate change is a common challenge confronted by humankind' China advocates for the strengthening of international cooperation 'to tackle it together' and has been actively expanding its climate change South-South cooperation, in particular with African countries and Small Island Developing States, through the provision of technical support, technology transfer and capacity building over the past years (NDRC 2014a).

This research paper is organized in five chapters. Following the introduction, chapter 2 defines China's climate change South-South cooperation (CCSSC) and outlines the methodology used in the development of this research paper. Chapter 3 puts China's CCSSC in the context of China's foreign aid and then provides an overview of the historic development and current status of China's CCSSC based on various policy documents, action plans and progress reports issued by the Government of China. So far China's CCSSC has mainly taken place through bilateral projects and programmes. Given that an increasing number of CCSSC projects is undertaken in cooperation with United Nations entities, this chapter also provides an overview of China's trilateral projects under the United Nations framework. Chapter 4 presents, in an aggregated form, views, experiences, needs and priorities of developing countries with regards to CCSSC with China based on the responses to a global survey⁷ and in-depth interviews conducted in September and October 2015. Chapter 5 builds on information contained in chapters 3 and 4 and provides guiding principles for China's future CCSSC with a focus on possible ways to respond to developing countries' needs and priorities.

2. Methodology

As both climate change and South-South cooperation (SSC) are broad topics and concepts, it is important to clearly define the thematic scope of projects and activities that fall under the term 'climate change South-South cooperation' for the purpose of this research.

South-South Cooperation is a broad framework for collaboration among developing countries in political, economic, social, cultural, environmental and technical domains, through which developing countries share knowledge, skills, expertise and resources to meet their development goals through concerted efforts (UNOSSC 2015). SSC on climate change can

⁶ See this summary by the Worldwatch Institute: <<http://www.worldwatch.org/node/5846>>.

⁷ The survey is contained in Annex I.

therefore be defined as any of the above listed collaborations between developing countries that aim to reduce GHG emissions or support the adaptation to the adverse effects of climate change.

In China, international cooperation on climate change falls under the responsibility of the National Development and Reform Commission (NDRC), which also plays a key role in China's national and international climate policy-making.⁸ Based on a presentation held by NDRC in 2013, China's CCSSC focuses on 'best practice transfer' in adaptation, strategic planning, low-carbon technology and energy efficiency as shown in figure 1 (NDRC 2013b).

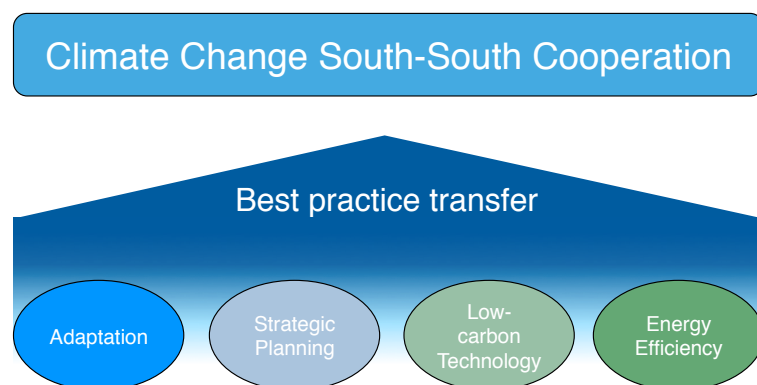


Figure 1: Focus of China's Climate Change South-South Cooperation

Here, China's CCSSC is defined as a partnership with one or more developing countries, as well as with developed countries or United Nations entities. Given the limited public availability of information on China's CCSSC, it is important to note from the outset that the overview in chapter 3 is presented for illustrative purposes only and should not be taken as fully comprehensive. There are some information gaps regarding China's CCSSC at the national level, and due to the lack of official information on China's CCSSC at the provincial, municipal and local levels, these aspects of China's CCSSC are not being considered here.

Chapter 3 is mainly based on information contained in the following key documents, which are publicly available and include sections on 'international cooperation' or 'climate change' and as such provide rare official data on China's CCSSC:

- 'China's Policies and Actions for Addressing Climate Change' published as white papers by the Information Office of the State Council (IOSC) in 2008 and 2011 and as annual progress reports by NDRC in 2009, 2010, 2012, 2013, 2014 and 2015;

⁸ The National Leading Group for Addressing Climate Change and the National Leading Group on Energy Saving and Pollution Reduction are China's supreme climate change policy-making bodies, relying on recommendations developed by NDRC's Department for Climate Change. NDRC's climate change policy work is supported by its National Center for Climate Change Strategy and International Cooperation and by research institutes at the Chinese Academy of Social Sciences, Renmin University and Tsinghua University. In addition to its Department for Climate Change, NDRC's Department for International Cooperation is involved in China's CCSSC.

- China's second national communication under the United Nations Framework Convention on Climate Change (UNFCCC) published in 2012;
- White papers on China's foreign aid published by IOSC in 2011 and 2014;
- Outcome documents of meetings of the Forum on China-Africa Cooperation (FOCAC), the Forum of China and the Community of Latin American and Caribbean States (China-CELAC Forum) and other multilateral fora.

The above is complemented by information contained in other official documents issued by the Government of China, information provided by China's partner countries and United Nations entities, insights from previous academic work in this area as well as official statements and media reports.

Chapter 4 builds on the responses to an electronic survey conducted by UNDP from the 30th of September to the 16th of October 2015 as well as the findings from in-depth interviews conducted via telephone and in-person in Beijing, China, and Bonn, Germany, from the 9th of September to the 23rd October 2015. The survey was comprised of 22 questions on developing countries' previous experience, current priorities and recommendations for future collaboration as well as views on comparative advantages and shortcomings of China's CCSSC. The invitation to participate in the survey was circulated to all 154 UNFCCC national focal points from developing countries.⁹ 26 developing countries responded to the survey. In addition, semi-structured interviews were conducted with representatives from 11 developing countries and two intergovernmental organizations.

Principles for China's future CCSSC presented are developed in chapter 5 and take into account information contained in chapter 3, in particular that regarding China's foreign aid policy, previous approach to CCSSC and announcements regarding its South-South Cooperation Climate Fund. Insights from chapter 4 on perceived comparative advantages and priorities for future CCSSC with China identified by developing countries are also examined.

3. Historic development and current status of China's Climate Change South-South Cooperation

3.1 Background

China's CCSSC is part of China's foreign aid, which follows the principles of non-interference in the internal affairs of recipient countries. Mutual benefit or 'win-win', and 'self-reliance' as a goal of aid. The 'self-reliance' principle has its roots in the philosophy of *zili geng sheng* that

⁹ This research paper is limited to countries not included in Annex I to the UNFCCC and does not cover other countries eligible for support from multilateral financial institutions, such as Turkey and countries with economies in transition. A list of these countries is available on the UNFCCC website at: http://unfccc.int/parties_and_observers/parties/non_annex_i/items/2833.php.

was launched by the Communist Party of China even before the founding of the People's Republic of China in 1949. This became even more important through China's experience as a recipient of aid when the Soviet Union cancelled its aid to China in 1960 due to ideology disputes. China's economy was severely affected by the loss of its then largest donor. The prioritization of economic infrastructure development in China's endeavors to give foreign aid should be seen in the context of supporting 'self-reliance'. Infrastructure networks pave the way for foreign investment thus to the introduction of advanced technology and job creation and strengthen a country's competitiveness (Shimomura and Ohashi 2013). The start of China's *zouchuqu* (going out) policy, stipulated in China's tenth five-year national development plan in 2001, was a turning point in China's foreign aid. It had become an important way to 'build a bridge and pave a way' for Chinese enterprises to 'go out' or invest, in foreign countries (Huang and Wei 2015). Recent work by a leading scholar on China's foreign aid has suggested that the combination of China's foreign aid with trade and investment have led to sustained economic growth in many partner countries over the past decade (Mao 2012).

The People's Republic of China has a long history of providing aid to other developing countries, beginning with the Democratic People's Republic of Korea and Viet Nam in the early 1950s. However, it was only in 2011 that China released a white paper on its foreign aid policy and delivery, which provided an overview of China's aid efforts up to 2009 which covered the previous six decades. In 2014, a second white paper on China's foreign aid was released, which includes a more detailed account of assistance provided to other developing countries from 2010 to 2012. By the end of 2012, China provided a total of CNY 345.63 billion (USD 54.37 billion) in aid to 161 countries.¹⁰ This makes China the largest foreign aid provider among developing countries to date. More than 25% of China's foreign aid was committed between 2010 and 2012 alone, which underlines its rapid increase over the last years (IOSC 2011a and IOSC 2014).

Foreign aid expenditure, including that for CCSSC, is part of China's national expenditure managed by the Ministry of Finance (MOF). The Ministry of Commerce (MOFCOM) receives around 90% of the allocated foreign aid budget. MOFCOM is the *de facto* aid agency as it is also responsible for drafting and implementing foreign aid policy and programmes. MOFCOM is tasked with selecting and implementing foreign aid projects and administering the use of aid funds. Around 20 other Ministries, including NDRC, also handle financial resources for foreign aid in accordance with their respective jurisdictions. These Ministries usually have departments which manage foreign aid activities under the supervision of their respective external affairs departments. For example, within NDRC, the International Cooperation Division of the Department of Climate Change together with the Department of International Cooperation is handling CCSSC.¹¹ The Department of International Cooperation in the Ministry of Science and Technology (MOST) and the Ministry of Agriculture are the overall agencies for scientific and technical aid in this area (Huang and Wei 2015). Each Ministry draws up a budget for foreign aid projects every year and submits it

¹⁰ Both white papers cover only aid figures from the Ministry of Commerce (MOFCOM) and concessional loans from the Export-Import Bank of China, and exclude official aid flows from other Ministries (UNDP 2014).

¹¹ NDRC has been undertaking CCSSC since 2011. Prior to this CCSSC was undertaken by other Ministries, including MOFCOM.

to MOF for examination, and then to the State Council and the National People's Congress for approval and implementation (MOFCOM 2014). The Ministry of Foreign Affairs (MOFA) advises other Ministries on foreign aid and facilitates the implementation of aid projects in collaboration with the Economic Counselors' or the Economic and Commercial Counselors' office at Chinese embassies in partner countries¹² by overseeing the supervision and administration of aid projects without getting involved in project management or implementation (Huang and Wei 2015).

The scope of China's CCSSC is difficult to define, even at the national level. Although NDRC is in charge of international cooperation on climate change, a number of other Ministries are engaged in related work, including inter alia MOFCOM, MOST, the China Meteorological Administration and the Ministry of Agriculture. In theory, other Ministries need to engage NDRC in any of their work on climate change related matters, but in practice it is a challenge due to the broad scope of climate change related work and the absence of a clear definition of what constitutes CCSSC.

3.2 China's Climate Change South-South Cooperation Policies

The first official reference to China's CCSSC can be found in 'China's African Policy' published in 2006, which states that 'China will actively promote China-Africa cooperation in climate change [...] by facilitating technological exchanges'. It states also that China will 'further speed up scientific and technological cooperation in the fields of common interest, such as bio-agriculture and solar energy utilization' (IOSC 2006). The first white paper on 'China's Policies and Actions for Addressing Climate Change' published in 2008 states that China has 'all along' helped African countries and Small Island Developing States 'to improve their ability to cope with climate change' and that 'China's African Policy makes it clear that China will actively promote China-Africa cooperation on climate change' (IOSC 2008). In 2009, China announced eight new assistance measures under the Forum on China-Africa Cooperation,¹³ which included assistance for climate change (FOCAC 2009b) and stated that 'China has increasingly deepened its practical cooperation with other developing countries in various fields, including the field of climate change' and will continue doing so (NDRC 2009). China's first white paper on foreign aid introduced climate change as a new area of Chinese foreign aid of recent years. However, MOFCOM has been engaged in CCSSC since the 1980s through biogas projects in Africa and Asia and has since then undertaken small-scale hydro, solar and wind power projects and training programmes on climate change, forest management and desertification in many countries (IOSC 2011a).

China's support for CCSSC is also featured in its current national development plan, the twelfth five-year-plan (2011-2015), which aims to 'vigorously launch international cooperation in response to global climate change' and 'strengthen international exchange and strategic policy dialogue on climate change, [...] develop pragmatic cooperation in areas like scientific

¹² The Economic Counselors' and Economic and Commercial Counselors' offices are under the direct guidance of MOFCOM.

¹³ The Forum on China-Africa Cooperation is a platform established by China in collaboration with African countries in 2000 for collective consultation and dialogue on political, economic and sociocultural cooperation. FOCAC ministerial meetings take place every three years. The ministerial meetings were elevated to summits with the participation of Heads of State and Government in the years 2006 and 2015.

research, technology research and development and capacity building, [...] and provide help and support to developing countries in confronting the challenges of climate change' (IOSC 2011b). China's National Climate Change Plan (2014-2020) aims at actively strengthening and encouraging local governments, domestic companies and non-governmental organizations to actively promote partnerships on low-carbon and adaptation technologies and products with counterparts in developing countries, achieving mutual benefits in line with China's 'going out' policy (NDRC 2014a). This is in line with China's foreign aid policy described above. Enhancing cooperation on climate change is also listed in China's second Africa policy paper, as one of six areas for which China's assistance will be 'primarily used' (Xinhua 2015). CCSSC also features prominently in the FOCAC Summit Johannesburg Declaration (FOCAC 2015a) and Johannesburg Action Plan 2016-2018 (FOCAC 2015b) adopted in December 2015.

China's growing aspirations on CCSSC are also captured in other outcome documents of Ministerial meetings of FOCAC and the China-CELAC Forum, which will be described in more detail below, as well as in its 'Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road'. The latter is commonly known as the 'Belt and Road' initiative, which provides a comprehensive framework for SSC with more than 55 countries from East, South, West and Central Asia and Eastern Europe, including 'tackling climate-change' and on low-carbon and climate-resilient infrastructure construction and operation (NDRC 2015a).

China's two white papers on foreign aid include information on project implementation in many climate change mitigation and adaptation related areas such as agriculture, disaster relief and prevention, education, health, information technology and renewable energy (IOSC 2011a and IOSC 2014). As there is no detailed information available regarding the extent to which this cooperation has supported partner countries in addressing climate change, section 3.3 synthesizes only examples which were included in the white papers as well as information contained in other official documents with specific reference to climate change.

3.3 Delivery of China's Climate Change South-South Cooperation

China has 'steadily increased' the scope and volume of support to other developing countries in addressing climate change following the worsening of global warming in recent years (IOSC 2011a). From 2005 to 2010 China undertook 115 CCSSC projects with a total value of USD 180 million (CNY 1.17 billion). 30 projects focused on the provision of technology, goods and equipment. 85 projects focused on the delivery of training for a total of 3,506 professionals from 122 developing countries at an average cost of USD 4,300 (CNY 27,200) per person (NDRC 2012b). An overview on the type of support as well as the number and value of projects is included in table 1 below.

Table 1: China's Climate Change South-South Cooperation projects from 2005 to 2010

Type of support	Number of projects	Average number of projects per year	Value of projects in million USD	Average value of projects in million USD	Average value of projects in million USD per year	Value of projects in % of total value
Provision of technology, goods and equipment	30	6	165	5,5	33	92
Training	85	17	15	0,18	3	8
TOTAL	115	23	180	1,57	36	100

China announced in 2012 its intent to ‘roughly double its aid for addressing climate change’ from 2011 to 2015 relative to the 2005 to 2010 period (NDRC 2012b). The increase in resources for CCSSC is intended to be mainly used for capacity-building activities in the areas of adaptation, energy efficiency, low-carbon technology innovation and commercialization, low-carbon urban planning and construction, and low-carbon development policy design (NDRC 2013b). This would represent a major change in China’s delivery of CCSSC given its previous focus on the delivery of goods. However, no data could be obtained that confirms that this shift has happened.

Administrative guidelines dictate that the funds allocated to NDRC for CCSSC need to be spent within China, which is likely to be the main reason for China’s CCSSC having focused to date on the provision of equipment procured, and training conducted within China. Different types of equipment are offered by NDRC to partner countries through regularly changing lists distributed by China’s embassies. Requests by partner countries for equipment that is not included on the current list are considered for inclusion in the next version of the list. Partner countries may apply for listed equipment through an unbureaucratic process. Successful applicants then enter into an official agreement with NDRC, which is signed by both sides and contains specifics on type and scope of the equipment and the training for its use and installation.

It is difficult to clearly set out the results of these processes in terms of how they then translate into largest volume of spending by activity or by country or region. Only broad statements are possible. For example, NDRC’s latest annual progress report on China’s Policies and Actions for Addressing Climate Change published in November 2014 states that China has ‘actively boosted the South-South Cooperation on climate change, intensified collaboration with Asia, Africa and the South Pacific region on satellite monitoring, clean energy exploitation and use, agricultural drought-resistance technology, water resources use and management, desertification prevention and treatment and ecological protection, and provided assistance to developing countries on 182 climate change projects’ (NDRC 2014b). China’s latest white paper on foreign aid includes a dedicated section on CCSSC with Africa stating that China has ‘actively helped African countries improve their ability to cope with climate change, and strengthened cooperation with them in meteorological satellite monitoring, new energy development and utilization, desertification prevention and control, and urban environmental protection’ (IOSC 2014).

3.4 China's Climate Change South-South Cooperation with participation of the United Nations

China actively engages in SSC under the umbrella of the United Nations, including the purpose to address climate change. The United Nations promotes SSC through its Office for South-South Cooperation (UNOSSC), hosted by UNDP, and also through the programmatic work of UNDP's regional and country offices, as well as through dedicated funds of many other United Nations organizations, including the Food and Agricultural Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organizations (UNIDO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The UNOSSC encourages SSC at the global level through the Global South-South Development Academy (GSSD-Academy),¹⁴ the South-South Global Assets and Technology Exchange (SS-GATE)¹⁵ and the Global South-South Development Expo (GSSD-Expo).¹⁶ China has actively contributed to the GSSD-Academy and the GSSD-Expo and hosts SS-GATE in Shanghai. Examples of country-level CCSSC by China in partnerships with UNDP, FAO, UNEP, UNIDO and UNESCO are highlighted in the following sections.

3.4.1 China's Climate Change South-South Cooperation in the framework of activities conducted by FAO

China has been actively involved in, and largely contributed to, FAO's SSC Programme since its launch in 1996. In 2008, the Government of China decided to donate USD 30 million (CNY 191 million) to FAO as a SSC Trust Fund to create the FAO-China SSC programme. The programme has proved to be an effective and efficient means to promote climate-smart agriculture in developing countries. In 2014, China's Prime Minister Li Keqiang's visited FAO's headquarters and pledged a new USD 50 million (CNY 318 million) contribution to the trust fund.¹⁷ As of April 2015, China deployed 1,023 experts and technicians in 25 countries in Africa, Asia, the South Pacific, Latin America and the Caribbean, constituting 56% of the total number of FAO's SSC experts. The scope of their work goes beyond climate change related aspects. Their foci include irrigation, horticulture, livestock, crop production, agroforestry, agricultural mechanization, food processing, marketing of agricultural products, agricultural machinery manufacturing and others.¹⁸

An example of China's CCSSC work under the FAO-China SSC Programme is a project in collaboration with the government of Uganda. The programme's aim is to support the agribusiness sector to adapt to the adverse effects of climate change, such as rainstorms, heat waves, droughts and floods that are already heavily felt. Since 2012, 31 Chinese experts and technicians have worked in Uganda with local partners and successfully transferred 25 new

¹⁴ For more information on the Global South-South Development Academy, see <<http://tcdc2.undp.org/GSSDAcademy>>.

¹⁵ For more information on the South-South Global Assets and Technology Exchange see <<http://ss-gate.info>>.

¹⁶ For more information on the Global South-South Development Expo see <www.southsouthexpo.org>.

¹⁷ See FAO-China South South Cooperatin Programme at <<http://www.fao.org/3/a-i4700e/i4700e00.pdf>>.

Information on the responsibilities of the recipient country, FAO and China as well as the application process for trilateral projects is available on the FAO website at: <<http://coin.fao.org/cms/world/china/SSC.html>>.

¹⁸ <<http://www.fao.org/3/a-i4700e/i4700e00.pdf>>.

technologies, introduced 17 new crop varieties, such as hybrid rice, and provided farmers with agricultural equipment and tools. The new crop varieties and technologies are more suitable to Uganda's changing rain and weather patterns and as such allowed local farmers to increase their income.¹⁹

Another successful CCSSC project under the FAO-China SSC Programme was implemented in partnership with Mongolia,²⁰ where farmers built resilience to climate change through the introduction of new technologies, such as solar energy powered greenhouse cultivation, among others. Furthermore, projects with climate change adaptation related benefits have been carried out in Ethiopia,²¹ Liberia,²² Malawi,²³ Mali,²⁴ Nigeria,²⁵ Senegal,²⁶ and Sierra Leone.²⁷

The successful trilateral cooperation between China, FAO and African countries has been highlighted in FOCAC outcome documents since FOCAC's first Ministerial meeting in 2000 (FOCAC 2000). In 2006 (FOCAC 2006), 2012 (FOCAC 2012b) and 2015 (FOCAC 2015b), China reiterated its commitment to further advance work with FAO in this area.

3.4.2 China's Climate Change South-South Cooperation in the framework of activities conducted by UNDP

China is working with UNDP and partner countries on various CCSSC projects, including Burundi, Ghana and Zambia on sharing expertise and technologies for renewable energy generation as well as in Kenya and Ethiopia on drought management and desertification control (UNDP 2015).

Since 2013 China's MOST, in collaboration with UNDP and funded by Denmark, is undertaking two innovative projects on renewable energy technology transfer in Ghana and Zambia. Building on China's significant progress in rural green energy electrification, these projects aim to facilitate the access to Chinese renewable energy technologies and policy experience while promoting a new method of strategic SSC. In China, the projects support the review and update of SSC policies and guidelines to help China engage more systematically in SSC. The projects do not focus on the transfer of hardware *per se*, but on the institutional framework and capacity required to make the local absorption of renewable energy technologies effective. To facilitate this process, the projects also support China to engage in strategic cooperation with partner countries through the production of surveys, reviews and reports, highlighting key parts of China's development experience in the renewable energy field to inform and inspire Ghana's and Zambia's policy processes. One of the innovative components of these projects is the establishment of a permanent SSC Center,

¹⁹ <<http://www.fao.org/3/a-i4700e/i4700e09.pdf>>.

²⁰ <<http://www.fao.org/3/a-i4700e/i4700e05.pdf>>.

²¹ <<http://www.fao.org/3/a-i4700e/i4700e04.pdf>>.

²² <<http://www.fao.org/3/a-i4700e/i4700e01.pdf>>.

²³ <<http://www.fao.org/3/a-i4700e/i4700e02.pdf>>.

²⁴ <<http://www.fao.org/3/a-i4700e/i4700e03.pdf>>.

²⁵ <<http://www.fao.org/3/a-i4700e/i4700e06.pdf>>.

²⁶ <<http://www.fao.org/3/a-i4700e/i4700e07.pdf>>.

²⁷ <<http://www.fao.org/3/a-i4700e/i4700e08.pdf>>.

which will initially be hosted by the Administrative Center For China's Agenda 21²⁸ affiliated to MOST and may be transferred to NDRC or act as an independent secretariat upon project completion should required funding be available.

The project in Ghana particularly aims to support off-grid community-based electrification, low-emission development and poverty reduction through employment generation, including through the production of renewable energy technologies in Ghana. The project in Zambia includes support to address regulatory impediments to the promotion of renewable energy, the development of financing options for renewable energy, the establishment of demonstration and the testing of facilities to showcase renewable energy technologies and building capacity. The project also showcases opportunities for rural development through technology transfer through direct financing of a pilot project for rural electrification. The projects aim to contribute to the United Nations Secretary-General's Sustainable Energy for All (SE4All) initiative.²⁹

China is engaged in a project with Moldova and UNDP on supplying Moldova's social public facilities with hot water by installing solar panels and the systems needed to manage these technologies.

A regional project was undertaken by China and UNDP with the participation of Bangladesh, Indonesia, Pakistan, Thailand and Viet Nam on the cost-effective development and implementation of energy efficiency standards and labelling.

China has also worked with UNDP and other partners on the development of a comprehensive manual on 'South-South Cooperation on Science and Technology to Address Climate Change' (MOST 2011), which aims to facilitate 'joint research and development, technology transfer and dissemination, training, building indigenous technological capability and human capital' in developing countries.

Another example of successful collaboration between China and UNDP is a joint study with India and other partners on the design of strategies for low-carbon development in crosscutting areas such as financing, technology, innovation policy and subnational initiatives.

Furthermore, China is working with UNDP to advance the responsible business practices of China's State-owned Enterprises by developing a framework to systemize current ad hoc corporate social responsibility approaches to South-South cooperation, thereby promoting the sustainable development of Chinese enterprises abroad.³⁰

²⁸ See here for more information on ACCA21 <<http://www.acca21.org.cn/index.html>>.

²⁹ For more information on the SE4All initiative see <<http://www.se4all.org>>.

³⁰ Corporate social responsibility increasingly addresses environmental issues, including transparency about, and measures taken to, reduce GHG emissions.

3.4.3 China's Climate Change South-South Cooperation in the framework of activities conducted by UNEP

China has been working with African and Asian countries and UNEP on climate change adaptation projects since 2008. MOST and UNEP initiated the UNEP-China-Africa Cooperation Programme to enhance the capacity of African countries to address climate change through technology transfer and capacity-building. The programme focusses on ecosystem management, disaster reduction, climate change adaptation and renewable energy production. In its first phase from 2008 to 2011, the programme saw the implementation of four demand-driven projects on enhancing the capacity for monitoring shared water resources, drought early warning systems, reusing wastewater for forest plantation and promoting rainwater harvesting. The projects were funded by MOST and jointly implemented by technical institutes in China and the participating countries in Africa with technical support and coordination by UNEP. During the second phase of the programme from 2012 to 2014, six demand-driven projects were implemented on water resources including the planning, development and demonstration of new technologies for safe water supply, water quality and ecosystem monitoring and demonstration of new waste water treatment technologies, drought early warning systems and adaptive technologies, development and demonstration of water-saving techniques for dry land agriculture and agricultural mapping, and development and demonstration on technologies for combating desertification (UNEP 2014, UNEP 2015a and UNEP 2015b).

In 2011, the Chinese Academy of Sciences and UNEP launched the UNEP-International Ecosystem Management Partnership (UNEP-IEMP), which provides a global platform for CCSSC in the context of ecosystem management (UNEP 2011). Since 2014 UNEP-IEMP has been co-hosting the annual South-South Cooperation on Climate Change Forum at the margins of the United Nations Climate Change Conference in November/December with participation of governments, intergovernmental organizations, academia, civil society and the private sector. The 1st Forum was co-organized by UNEP-IEMP, NDRC and UNDP in Lima, Peru in 2014.³¹ The 2nd Forum was organized by UNEP-IEMP in collaboration with NDRC in Paris, France in 2015.³²

China is also cooperating with UNEP through NDRC and the Chinese Academy of Sciences on a global project on 'Enhancing capacity, knowledge and technology support to build climate resilience of vulnerable developing countries' funded by the Global Environment Facility's Special Climate Change Fund. The project seeks to build climate resilience using ecosystem-based approaches in three pilot countries, namely Mauritania (desert ecosystems), Nepal (mountain ecosystems) and Seychelles (coastal ecosystems), by increasing institutional capacity, mobilizing knowledge, transferring appropriate adaptation technologies, and sharing generated knowledge across Africa and Asia and the Pacific (CAS 2013).

In 2014, China's Prime Minister Li Keqiang visited UNEP's headquarters to sign a new agreement on assisting developing countries to combat climate change. During the signing

³¹ For a report on the 2014 forum, see <<http://www.unep-iemp.org/content/forum-promotes-climate-action-through-south-south-cooperation>>.

³² For the 2015 forum website, see <<http://www.sccc-forum.org>>.

ceremony he said “China has contributed USD 6 million (CNY 38 million) to the UNEP trust fund and will continue to make contributions to that fund into the future. China also wants to enhance communication, cooperation and coordination with UNEP and multilateral environmental agreements in support of global environmental sustainability and action to combat climate change at the national and global levels.” (UNEP 2014).

3.4.4 China’s Climate Change South-South Cooperation in the framework of activities conducted by UNESCO

MOST engages with the Naresuan University in Thailand and UNESCO on a major research and knowledge exchange programme on South-South cooperation in climate change adaptation and technology transfer. China’s Beijing Institute of Technology and UNESCO have established the ‘UNESCO Chair in South-South Cooperation on Science and Technology to Address Climate Change’, who supports the programme (UNESCO 2013).

3.4.5 China’s Climate Change South-South Cooperation in the framework of activities conducted by UNIDO

China works with UNIDO and other developing countries on climate change related matters through a number of partnership centers in China, including the UNIDO Center for South-South Industrial Cooperation (China), the International Solar Energy Center for Technology Promotion and Transfer and the International Centre on Small Hydro Power as well as through an agreement between the China EXIM Bank and UNIDO.

The UNIDO Center for South-South Industrial Cooperation (China)³³ was set up in 2008 based on the Memorandum of Understanding (MoU) signed between UNIDO and China’s Ministry of Commerce. The center promotes and facilitates SSC in the field of sustainable industrial development between China and other developing countries by functioning as a matchmaker, catalyst and broker between interested development parties, building partnerships with relevant institutions, counterparts and stakeholders, and undertaking the identification, design and implementation of pilot technical cooperation projects on a demand-driven basis. It has released the “Guidelines for Green Industrial Parks”, which is the first guidance document on green industrial parks formulated by UNIDO in its member states. The International Solar Energy Center for Technology Promotion and Transfer³⁴ advances SSC on the transfer of solar and other renewable energy technologies, the increase of energy conservation and thereby the reduction of GHG emissions and pollution. The International Centre on Small Hydro Power³⁵ is a joint undertaking of China’s Ministry of Water Resources, MOFCOM and UNIDO which aims to promote the development and use of small hydropower technology through triangular cooperation between developed countries, developing countries and international organizations to supply rural areas in developing countries with electricity.

³³For more information on UNIDO’s SSC, see <<http://www.unido.org/en/how-we-work/convening-partnerships-and-networks/networks-centres-forums-and-platforms/centre-for-south-south-industrial-cooperation/ucssic-china.html>>.

³⁴ For information on the Solar Energy Centre, see <<http://www.unido-isec.org/enindex.asp>>.

³⁵ For information on the Small hydro Power Centre, see <<http://www.inshp.org/default.asp>>.

In June 2015, China EXIM Bank signed an agreement with UNIDO³⁶ on advancing SSC in the areas of industrial energy efficiency and renewable energy development focusing mainly on working with developing countries along the Silk Road Economic Belt and Maritime Silk Road. The agreement also foresees projects to scale up investments in inclusive and sustainable industrial development in Ethiopia and Senegal as two pilot countries in Africa.

3.4.6 China's Climate Change South-South Cooperation in the framework of activities conducted by the United Nations Secretary-General's Office

At the United Nations Secretary-General's Climate Summit in New York in September 2014, Vice-Prime Minister Zhang Gaoli, Special Envoy of China's President Xi Jinping committed to support the Secretary-General with USD 6 million (CNY 38 million) for advancing CCSSC within the United Nations System (MOFA 2014). In April 2015, China signed an agreement with the United Nations on jointly promoting CCSSC by using this contribution and United Nations Deputy Secretary-General (UN 2015a). In November 2015, the United Nations Secretary-General's Executive Office, in cooperation with UNEP, hosted the Beijing Consultative Meeting on South-South Cooperation on Climate Change to explore concrete approaches for cooperation between the United Nations system and developing countries to further strengthen South-South cooperation on climate change. Experts from developing countries, United Nations entities and intergovernmental and non-governmental organizations participated in the meeting. The meeting identified the lack of financial resources and limited access to expertise and technologies as key challenges and energy, resilience, smart cities and big data as key areas for CCSSC. Recommendations included the establishment of an international platform with inclusive stakeholder participation to develop a common understanding of CCSSC and match stakeholders' demands and offers (UN 2015b).

3.5 China's recent commitments on Climate Change South-South Cooperation

The Declaration of Sharm El Sheikh of FOCAC adopted in 2009 underlines 'in particular African countries' urgent need for stronger capacity to adapt to climate change and support their legitimate right in combating climate change' (FOCAC 2009a). Noting 'the positive measures adopted by both sides to jointly tackle climate change', China committed to 'step up human resource training for African countries and expand bilateral exchanges and cooperation' to support African countries to adapt to climate change. Furthermore, FOCAC members proposed to establish a China-Africa Partnership on Addressing Climate Change (FOCAC 2009b). At the fifth Ministerial meeting of FOCAC in 2012, FOCAC members 'expressed satisfaction with the progress in cooperation in protecting the environment and addressing climate change in recent years and underscored the willingness to continue exchanges and cooperation in these areas'. China reaffirmed its commitment to continue cooperating with African countries on tackling climate change over the 2013-2015 period, including through capacity-building in meteorological infrastructure and forest protection and management, disaster prevention and reduction, treatment of desertification, environmental

³⁶ The press release on the agreement is available here <<http://www.unido.org/news/press/enhanced-cooperation.html>>.

protection, and environment management. China also aims to ‘advance cooperation with African countries in environment surveillance, through *inter alia* sharing data from the China-Brazil Earth Resources Satellite and promoting the application of the data in land use, weather monitoring and environmental protection in Africa (FOCAC 2012a and FOCAC 2012b). FOCAC members ‘noted the positive response of both sides to the initiative of establishing a China-Africa Partnership on Addressing Climate Change and closer policy dialogue and exchanges in the area of climate change’ and decided to ‘explore the possibility of putting in place a consultation mechanism on climate change at an appropriate time, work together for positive outcome at the international climate change negotiations and jointly enhance capacity to tackle climate change’. In future, China will work more closely with the African Union and African sub-regional organizations to support Africa's economic integration and build the capacities of regional organizations. It will do this by promoting transnational and trans-regional infrastructure development and human resources development in Africa, and also by strengthening cooperation with the African Development Bank and African sub-regional financial institutions. At the same time, China will expand its international cooperative efforts to advance Africa's sustainable development, strengthen cooperation in the fields of agricultural development and climate change, and provide more support to Africa in environmental protection and environmental management (IOSC 2013).

CCSSC features prominently in China's partnership with countries from Latin America and the Caribbean. The China-Community of Latin American and Caribbean States Forum Cooperation Plan 2015-2019 includes provisions on jointly advancing the intergovernmental climate change negotiations; promoting ‘low-carbon, high-quality at reasonable prices, energy-saving and renewable technologies to relevant countries’; enhancing collaboration in the protection of biodiversity and coastal ecological systems and reserves management, environmentally sound technologies, water conservation, desertification combat and pollution control and treatment; enhancing cooperation on natural disaster management, preparedness, prevention and risk reduction, and other impacts of climate change, *inter alia*, developing and sharing human and technological resources in the area; jointly applying space technologies on impacts of climate change and disaster prevention and reduction; strengthening collaboration and investment in the electricity sector, including bioenergy, solar, geothermal and wind power; and promoting training programmes for technicians and experts in management and development of renewable energy (China-CELAC Forum 2015).

In 2011, at the United Nations Climate Change Conference in Durban, South Africa, China pledged USD 31 million (CNY 200 million) to support other developing countries in enhancing their capacity to address climate change over the next three years. The pledge was reiterated by the then Prime Minister Wen Jiabao at the United Nations Conference on Sustainable Development in Rio-de-Janeiro, Brazil, in 2012. At the United Nations Secretary-General's Climate Summit in 2014, Vice-Prime Minister Zhang Gaoli, Special Envoy of China's President Xi Jinping, said that ‘China attaches great importance to climate change and is willing to join the international community to proactively tackle grave climate change challenges’. This commitment was underlined by his pledge to double China's annual financial support to CCSSC, establish a SSC fund on climate change and provide USD 6 million (CNY 38 million) to the Secretary-General for advancing CCSSC within the United

Nations System (MOFA 2014). Three months later, at the United Nations Climate Change Conference in Lima, Peru, Vice-Chairman of NDRC, Xie Zhenhua officially launched China's South-South Cooperation Climate Fund (Chinadialogue 2014).

In June 2015, China submitted its INDC under the UNFCCC, which outlines China's planned actions to implement the UNFCCC Paris Agreement. In its INDC, China commits to further strengthening CCSSC, establishing the South-South Cooperation Climate Fund, providing assistance and support, within its means, to other developing countries including the Small Island Developing States (SIDS), Least Developed Countries (LDC) and African countries to address climate change. China will thereby promote mutual learning, mutual support and mutual benefits as well as win-win cooperation with other developing countries. China will engage in extensive international dialogue and exchanges on addressing climate change, enhance policy coordination and concrete cooperation in related areas, share positive experiences and good practices, promote climate friendly technologies and work together with all Parties to build a beautiful homeland for all human beings (NDRC 2015b).

In September 2015, during his first State visit to the United States, President Xi Jinping announced China's pledge to support other developing countries' climate actions with USD 3.1 billion (CNY 20 billion) through its newly established South-South Cooperation Climate Fund.

3.6 China's South-South Cooperation Climate Fund

China's intention to establish the South-South Cooperation Climate Fund was first revealed in its National Climate Change Plan published on 19 September 2014 (NDRC 2014a). The plan includes provisions on exploring the establishment of a South-South Cooperation Climate Fund to expand the scale and improve the effectiveness of CCSSC (NDRC 2014a). An official announcement on the establishment of the fund was made a few days later by China's Vice-Premier Zhang Gaoli at the United Nations Secretary-General's Climate Summit in New York (MOFA 2014). China's then chief climate change negotiator and Vice-Chairman of NDRC, Xie Zhenhua officially launched the fund at a high-level forum on CCSSC held in Lima, Peru, on 8 December 2014 at the margins of the United Nations Climate Change Conference. At the launch, China invited Ministers from other countries and bilateral and multilateral bodies to contribute to the set-up of the fund. Xie Zhenhua announced that the fund would be based on principles of mutual respect, justice, shared benefit, practicality and efficiency. He also indicated that the fund would operate on a grant and interest-free loan basis. 'We think that help and support for developing nations should be in the form of donations. We have no plans to use this fund to go and make money from developing nations. That's not our aim'. In an interview with the Chinese media, Xie Zhenhua further said that the fund would be 'set up as an alternative to direct funding in order to provide a longer-lasting and more formal mechanism' and that an important aim of the fund will be 'to increase the ability of developing nations to get money from the [Green] Climate Fund' (Chinadialogue 2014).

The Director of the Chinese Academy of Sciences' Institute of Policy and Management, Wang Yi, said that the fund may be made up of both governmental and commercial funds in

order to expand its size. He also said that ‘establishing the South-South Cooperation Fund will help developing nations and encourage Chinese firms to expand overseas and as a result bring about structural changes at home’ (Chinadialogue 2014).

The USD 3.1 billion (CNY 20 billion) pledge to the fund in September 2015 is a significant increase in China’s CCSSC work. If spent over a five-year period, it would amount to an annual spending of USD 620 million (CNY 3.94 billion) or about twenty-one times the annual spending from 2005 to 2010 (USD 30 million = CNY 191 million) and about nine times the annual spending (USD 72 million = CNY 458 million) for the 2011-2015 period announced in 2012 (NDRC 2012b). Even if the pledge were only spent over a period of ten or fifteen years, it would represent a significant increase, with respectively approximately four or three times the annual spending of the current period (figure 2).

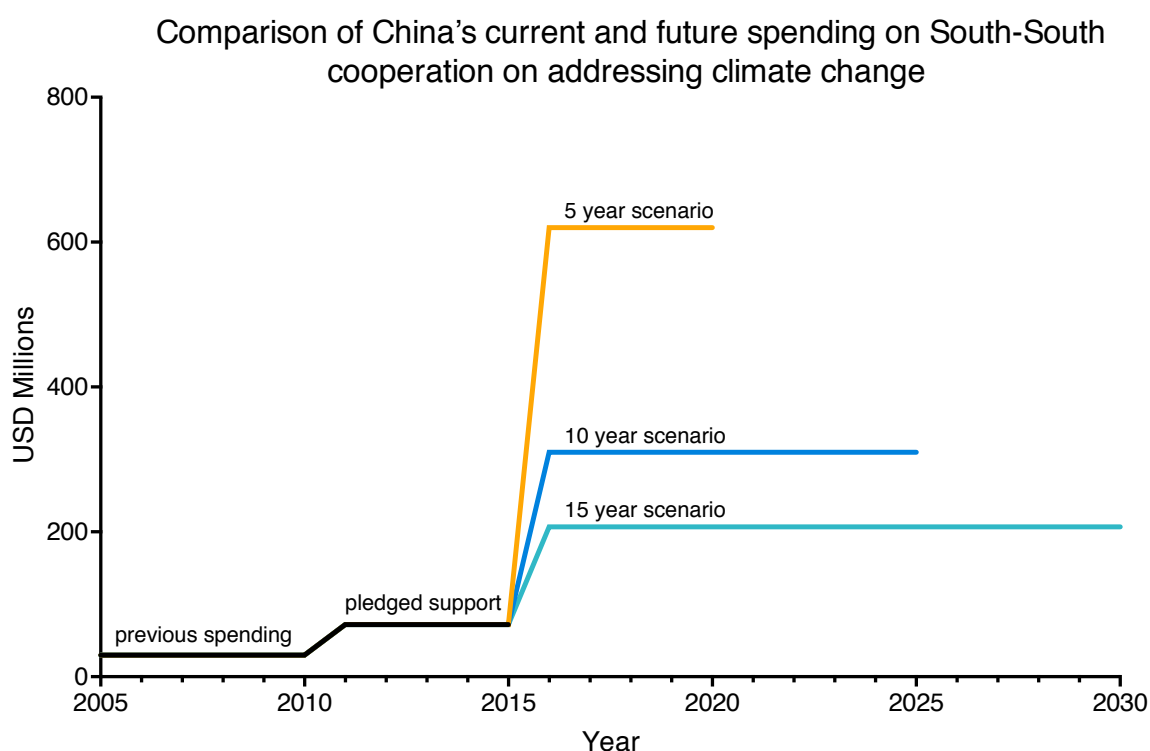


Figure 2: China’s past and current spending on South-South cooperation on addressing climate change compared to three future spending scenarios for 5-year (USD 620 million/year = CNY 3.94 billion/year), 10-year (USD 310 million/year = CNY 1.97 billion) and 15-year (USD 207 million/year = CNY 1.32 billion) time frames

At the Beijing Consultative Meeting on South-South Cooperation on Climate Change held in Beijing, China from 14 to 15 November 2015, Xie Zhenhua said that the fund will focus on supporting LDCs and SIDS on technology innovation and transfer among other areas. He also said that China is willing to cooperate with multilateral organizations to continue advancing South-South cooperation on climate change. Furthermore, he reiterated that the fund will support other developing countries in accessing the GCF.

4. Developing countries' experiences, needs and priorities in partnering with China on addressing climate change

In 2012, China reported having worked with 122 developing countries on addressing climate change (NDRC 2012b). Following the review of the scope and volume of China's CCSSC described in chapter 3, this chapter aims to add the recipients' perspective by presenting the experiences of developing countries in partnering with China on climate action, including comparative advantages and perceived shortcomings of China's approach to CCSSC. Furthermore, this chapter analyzes developing countries' current needs, priorities and recommendations for future CCSSC with China based on responses to a global survey and findings from in-depth interviews conducted by UNDP in September and October 2015. From the 154 developing countries who received the survey, 26 (i.e. 17%) have responded. In addition, interview responses from representatives of 5 developing countries, which have not originally responded to the survey, have been considered. In total 31 out of 154 developing countries have provided inputs to this research paper (i.e. 20%).

Table 2: Survey and interview respondents by region

Respondents by region	Number of countries
Africa	15
Asia and the Pacific	5
Eastern Europe	3
Latin America and the Caribbean	8
Total number of countries	31

Given that China's annual budget for CCSSC previously amounted to approximately USD 40-50 million (CNY 254-318 million), the recent pledge of USD 3.1 billion (CNY 20 billion) to its newly launched South-South Cooperation Climate Fund marks a significant increase in China's cooperation with developing countries on addressing climate change. For putting this increased volume to efficient use it would be beneficial to have an understanding of partner countries' past experiences with, and more importantly current priorities for, CCSSC with China. Insights from partner countries on where they see China's comparative strengths and shortcomings in CCSSC is also important in this context.

Most developing countries have well-articulated needs and priorities for support through their national climate change plans and strategies and, within the context of the UNFCCC, through the formulation of INDCs, national communications, biennial update reports, Technology Needs Assessments (TNA), Nationally Appropriate Mitigation Actions (NAMA), National Adaptation Programmes of Action (NAPA), National Adaptation Plans (NAP) and statements on the new international climate change agreement that were adopted by the Conference of the Parties of the UNFCCC in December 2015. However, in order to develop recommendations for enhancing China's future CCSSC, it is paramount to not only consider developing countries' needs and priorities in general, but to identify those needs that could be most effectively addressed in cooperation with China, including in terms of development

effectiveness principles. As demonstrated in chapter 3, many developing countries have experience with CCSSC with China. To date such experiences and current priorities for future cooperation have not been compiled in a comprehensive manner. The insights from this research may therefore provide a constructive input to the shaping of China's CCSSC expansion.

4.1 Developing countries' experiences in South-South Cooperation on climate change with China

42% of the survey respondents and all interview partners indicated that their country had cooperated with China on addressing climate change. Their responses are synthesized in this section. The relatively low response rate to the survey may be due to the occupation of national climate change focal points with preparations for the United Nations Climate Change Conference that took place in Paris, France in December 2015 and the need to coordinate with various Ministries involved in CCSSC project with China, which may have not been possible within the two-week survey period. Furthermore, it should be noted that a number of countries indicated that their CCSSC with China is at a too early stage to make any kind of assessment. Further research is needed to determine whether a follow-up study conducted over a longer period of time would lead to a more comprehensive picture.

4.1.1 Type of projects

Climate-resilient agriculture, cooperation on climate information systems and climate prediction, the installation of weather monitoring stations, capacity-building activities on adaptation, and the provision and transfer of renewable energy technologies, in particular solar energy technologies were among the most commonly referred to areas of cooperation. A few examples of China's previous CCSSC in these areas are listed below.

Agriculture has been one of the important areas of China's CCSSC, in particular through the establishment of Agricultural Technology Demonstration Centers in recent years. At the United Nations High-Level Meeting on the Millennium Development Goals in 2010, China pledged to establish 30 such centers in other developing countries, dispatch 3,000 agricultural experts and technicians to these countries, and invite 5,000 agricultural personnel from these countries to China for training (IOSC 2011a). By the end of 2012, 22 Agricultural Technology Demonstration Centers were in place on the African continent and 50 Chinese agricultural technology teams were sent to African countries, which trained more than 5,000 local technical personnel (IOSC 2013). It is interesting to note that the concept of Agricultural Technology Demonstration Centers is fully in line with China's foreign aid goal of 'self-reliance' as the Centers are built and operationalized with seed-funding provided by China and designed to be self-sufficient through income generation from agricultural products after three years.

At the last Ministerial meeting of the Forum on China-Africa Cooperation in 2012, China pledged to support the implementation of the Comprehensive African Agricultural

Development Programme³⁷ of the African Union and the New Partnership for Africa's Development.³⁸ It committed to continue sending agro-technology teams and teachers for agricultural vocational education and training to African countries and to help establish agricultural vocational education systems there. Furthermore, China pledged to build more Agricultural Technology Demonstration Centers and jointly carry out production demonstration and technology dissemination (FOCAC 2012b).

From 2000 to 2009 China 'actively cooperated with other developing countries' in the areas of flood control and drought relief, water resources management, sustainable forest management, water and soil conservation, and meteorological information services (NDRC 2009).

NDRC and the State Oceanic Administration conducted a SSC research project on maritime disaster monitoring and early warning systems, produced a guide, conducted seminars on 'Building Capacities of Developing Countries' Marine Disaster Monitoring and Early Warning', and trained 16 students from nine developing countries. The State Forestry Administration organized a seminar on monitoring deforestation and land degradation and 'evaluating SSC within the climate change framework'. The Meteorological Administration conducted training on the linkages between climate change and extreme weather events, early warning systems and climatological service systems (NDRC 2012a).

Furthermore, China assisted other developing countries with the use of satellite monitoring for obtaining climate change related data, including sharing data from the China-Brazil Earth Resources Satellite (FOCAC 2009b), and conducting a number of training courses on climate science (NDRC 2009). In 2012, China started providing African countries with automatic meteorological stations and high-altitude observation radar stations as well as with forest protection equipment and 'carry[ing] out personnel training and exchange, in an effort to support Africa to strengthen its capacity in ecological conservation and response to challenges imposed by climate change' (IOSC 2014). China also provided a vehicle-mounted application system for receiving and processing satellite data to a partner country (NDRC 2013a).

China has been cooperating with Asian and African countries on the transfer and application of renewable energy technologies for the use of biogas and hydropower since the 1980s. In recent years, biogas technologies have also been transferred to Latin America and the Caribbean (IOSC 2014). Since the early 2000s China became a world leader in solar and wind power technologies, which has led to a significant increase in China's CCSSC in this area. From 2000 to 2009, China held 50 training workshops on various climate change related topics, including the development and use of renewable energy resources such as biogas, solar energy, and small hydropower stations, attended by more than 1,400 participants from other developing countries (NDRC 2009). Training on the Kyoto Protocol's clean development mechanism (CDM) and renewable energy was carried out to support African and Asian developing countries to carry out CDM project activities (IOSC 2008).

³⁷ For an introduction to the African Agricultural Development Programme, see <<http://www.nepad.org/foodsecurity/agriculture/about>>.

³⁸ For an overview of NEPAD see <<http://www.nepad.org>>.

In 2009, China offered to assist African countries with 100 renewable energy projects on bio- and solar energy as well as small hydropower plants over the next three years (FOCAC 2009b). China has a long-term experience in the development and use of biogas stations and deployed such technologies to many developing countries, including Cuba, Ethiopia, Guinea, Guyana, Tunisia, Uganda and Vanuatu. China stated that it had ‘achieved the expected results’ on the transfer of biogas technologies and that this had ‘helped the recipient countries reduce their dependence on imported fuels’ (IOSC 2011a). In 2013, while no comprehensive data was released on the location, size or other characteristics of these projects, in a white paper China reported that it had successfully carried out more than 100 renewable energy projects with African partner countries, and noted in particular additional biogas projects with Guinea, Sudan and Tunisia; projects on hydropower technology with Burundi, Cameroon and Guinea; and on solar and wind power technologies with Ethiopia, Morocco and South Africa (IOSC 2013). Thereafter, China also supported the installation of solar powered appliances in Lebanon and Morocco (NDRC 2012b). China further increased its technical cooperation with Burundi, Ethiopia and Sudan on improving their utilization and management of hydropower, solar energy and other renewable energy sources (IOSC 2014).

China has worked with other developing countries on the use of solar energy, particularly with African countries, even before the inception of its domestic solar industry in the early 2000s. Today cooperation on the transfer of solar energy technologies plays a prominent role in China’s CCSSC. Pledges of support for African countries in this area are part of outcome documents of FOCAC since its first Ministerial meeting in 2000 (FOCAC 2000). At the Ministerial FOCAC meeting in 2012, China and African countries agreed to ‘actively advance cooperation in clean energy and renewable resources projects’ (FOCAC 2012b). From 2010-2012, China undertook 64 projects in 58 developing countries on the utilization of solar powered streetlamps and solar power generators (IOSC 2014). In 2013, China provided to partner countries over 4,000 solar-powered road lamps and over 6,000 solar generation systems, (NDRC 2013b).

‘China proactively promoted South-South cooperation on addressing climate change, and signed the Memorandum of Understanding on Complimentary Supplies for Addressing Climate Change’ with 20 countries, including Antigua and Barbuda, Benin, Burundi, Cameroon, Chad, Dominica, Ethiopia, Grenada, Madagascar, Maldives, Nigeria, Samoa and Uganda. Under these frameworks, China has provided approximately 200,000 energy-efficient air conditioners, 1,200,000 energy-efficient light-emitting diode (LED) light bulbs, 9,000 LED street lamps and 8,000 household solar photovoltaic power generation systems (NDRC 2013a, IOSC 2014 and NDRC 2015c).

4.1.2 Delivery of results

All respondents highlighted that China had delivered what it had promised and rated the overall efficiency of China’s delivery of support as ‘excellent’ (18%) ‘very good’(46%) and

‘good’ (36%) as shown in figure 3.³⁹ Respondents highlighted that CCSSC with China is technically sound, predictable and needs-based and usually yields quick results with implementation taking place at a much faster pace than with other partners.

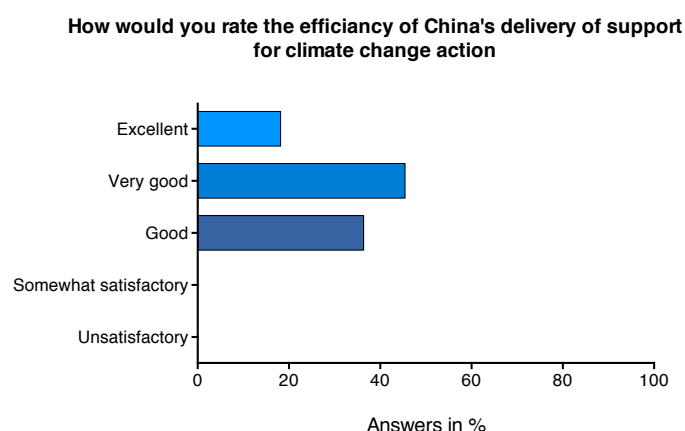


Figure 3: Efficiency of China’s delivery of Climate Change South-South Cooperation

4.1.3 Country-drivenness and equal partnership

All respondents stated that their CCSSC with China was driven by their country’s needs and priorities set out in national development plans or strategies, sectoral policies and action plans. The majority of respondents indicated that their country had initiated CCSSC with China and that they perceived CCSSC with China as an equal partnership. One respondent said that the partnership is unequal in a sense that more is received from China than what is offered to it.

One example of a recent country-driven project is Ethiopia’s initiation of cooperation with China on the use of biogas in line with Ethiopia’s Climate-Resilient Green Economy strategy and its Growth and Transformation Plan 2011-2015, which include specific provisions on the development of renewable energy sources. In 2012, China provided 10,000 biogas appliances worth USD 157, 300 (CNY 1,000,000) tested and installed some of the appliances and trained Ethiopian technicians on the independent installation of the remaining appliances and use of the technology (Tigrai 2012). The construction of biogas pits was also supported by Chinese volunteers (IOSC 2014).

4.1.4 Involvement of institutions and personnel at the local and national level

58% of the respondents said that national and local level institutions and personnel had been involved in implementing climate change projects and activities in collaboration with China. Respondents mentioned that CCSSC projects with China mostly avoided the involvement of international consultants thereby promoting building of local capacities by having locals work in partnership with Chinese counterparts. 7% of the respondents said that involvement of institutions and personnel only happens at the national level. 3% of the respondents said that projects were mainly implemented by Chinese workers with limited involvement of locals. 32% of the respondents did not answer this question.

³⁹ Respondents were asked to select between ‘excellent’, ‘very good’, ‘good’, ‘somewhat satisfactory’ and ‘unsatisfactory’.

4.1.5 Transfer of knowledge, skills and technology

59% of the respondents said that they were not in a position to assess whether the cooperation with China led to transfer of knowledge and skills. 25% of the respondents reported that CCSSC with China had led to the transfer of knowledge and skills, for example, through training of technicians on the installation of solar-powered street lights, which was successfully continued after the Chinese counterparts had left. 16% of the respondents said that no transfer of knowledge, skills or technology was observed to date with some saying that this may be due to the fact that projects were still fairly new.

4.1.6 Strengthening or development of local and national institutions

59% of the respondents said that they were not in a position to assess whether the cooperation with China led to strengthening or development of local or national institutions. 25% of the respondents confirmed that CCSSC with China led to the development or strengthening of local and national institutions through, for example, long- and short-term training courses in China and the creation of a renewable energy department in one of the respondent's countries. 16% of the respondents did not observe any strengthening or development of local or national institutions through the CCSSC with China.

China's efforts to support developing countries to build required capacities is evident from the numerous training opportunities that have been provided. At least three times per year NDRC conducts two to four weeks long training courses in or around Beijing in collaboration with its Academy of Macroeconomic Research.⁴⁰ Courses consist of lectures and workshops on China's climate policies and technologies as well as field visits. Each course is attended by 100-200 government officials from partner countries' Ministries, including from Ministries for environment, planning, education and health.

From 2010-2012, China organized 150 training sessions on environmental protection and addressing climate change for over 120 developing countries, providing training to over 4,000 officials and technical personnel in such areas as low-carbon industry development and energy policies, environmental protection, water resources management and water and soil conservation, renewable energy exploitation and utilization, forest management and desertification prevention and control, and early warning of meteorological disasters (IOSC 2014). In 2013, China conducted 28 seminars on SSC policy and action on climate change and workshops on low-carbon development for more than 1,000 officials from 114 developing countries (NDRC 2013b). These number rose to '130 session of training on climate change and green development' for nearly 3,500 officials, experts and technical personnel in developing countries in 2014 and 2015 (NDRC 2015d). MOST and MOFA hosted the China-ASEAN⁴¹ New and Renewable Energy Technology Utilization and Cooperation Forum (NDRC 2012a).

⁴⁰ See here for an introduction to the Academy of Macroeconomic Research
<<http://www.amr.gov.cn/web/default.aspx>>.

⁴¹ Association of Southeast Asian Nations.

China supported capacity-building of young people from developing countries by organizing international youth events in China, such as the International Youth Leadership Summit on Climate Champions at which more than 70 students from 17 developing countries participated (NDRC 2013b).

4.1.7 Long-term sustainability

36% of the respondents highlighted that CCSSC projects and activities with China are sustainable in the long-term as they either run on a viable commercial basis or can be sustained by the government or local communities independent of China after project completion. 64% of the respondents were not able to assess the long-term sustainability of the results of CCSSC with China with some respondents explaining that this was due to the fact that they had only started recently to cooperate with China in this area.

4.2 Developing countries' needs and priorities for South-South Cooperation on climate change with China

4.2.1 Thematic areas

All survey respondents replied to the question on where China should focus its support to their country in order to address climate change in the future. The respondents were asked to prioritize among ten thematic areas by ranking in order of importance (figure 4).

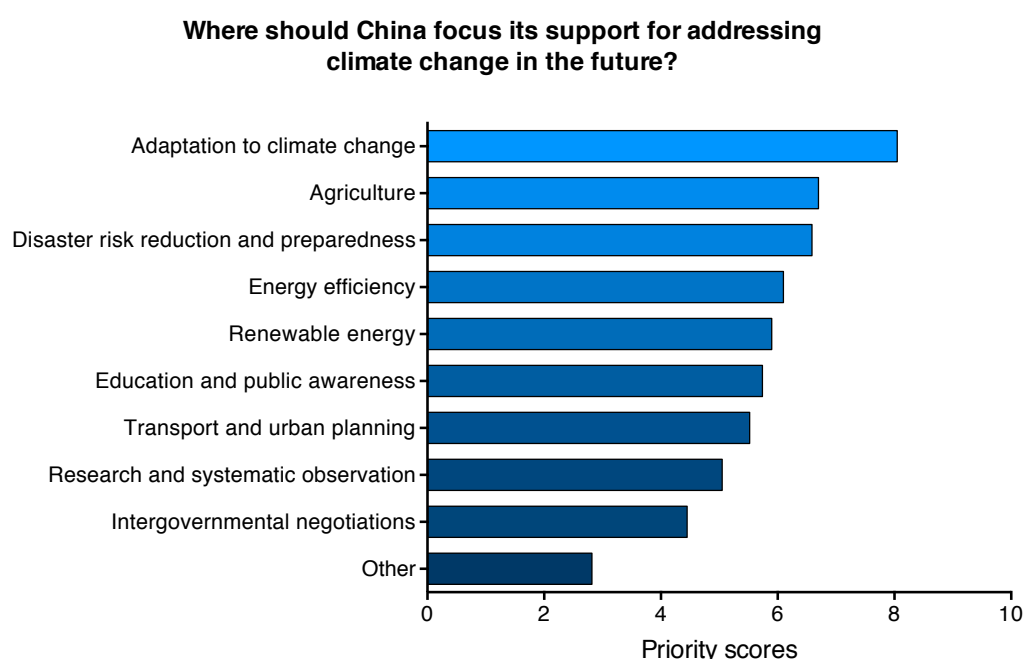


Figure 4: Developing countries' priority areas for Climate Change South-South Cooperation with China

Suggestions for other focus areas for CCSSC with China included off-grid electricity, land degradation and land management, ecosystem conservation, combatting desertification, water

management, waste management, sustainable forest management and REDD+,⁴² health, development of local models on climate change impacts, GHG inventories, and the design and redesign of road systems to allow for low-emission or zero emission transport. Some respondents said that future CCSSC with China should be guided by their INDCs.

4.2.2 Types of support

In response to the question on the types of support that respondents would like to receive from China within their top three priority areas, 63% of the respondents listed individual and institutional capacity-building, 33% technology transfer and 25% financial assistance as shown in figure 5. The respondents had a possibility to list multiple types of support. Use of CCSSC through demonstration projects and joint project implementation were also mentioned as specific ways of preferred support.

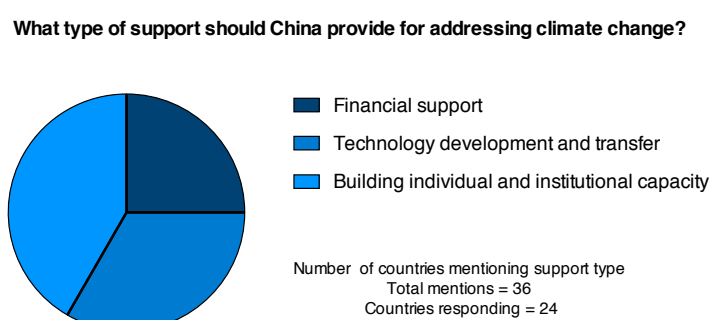


Figure 5: Types of support developing countries would like to receive from China

4.2.3 Specific proposals

Developing countries made a number of specific proposals for potential joint projects for future CCSSC with China in response to the survey and during in-depth interviews. These proposals included:

- supporting readily fundable projects developed under the Africa Adaptation Programme⁴³ and NAPs;
- cooperating on adapting to sea-level rise by preventing beach erosions to protect livelihoods and the beach as a tourism resource and by ensuring that impacts on fresh water sources are minimized;
- providing training on, and the transfer of, irrigation technologies; conducting a comprehensive mapping of climate change vulnerabilities and developing an effective support programme based on mapping, which includes support for early warning systems, evacuation measures, self-sufficient shelters, and decentralized energy generation and water management solutions;

⁴² 'Reducing Emissions from Deforestation and Forest Degradation (REDD) is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. "REDD+" goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks' (UN-REDD Programme: About REDD+. Available at <http://www.un-redd.org/aboutredd>).

⁴³ More information on the Africa Adaptation Programme is available here <<https://www.undp-aap.org>>.

- scaling up of the Inter-American Development Bank's Natural Disasters Insurance Facility for Central America and the Caribbean⁴⁴ through the China-CELAC Forum;
- cooperating on mainstreaming climate resilience in infrastructure planning and building standards;
- introducing or scaling up support for solar, wind and geothermal energy technologies and other renewable energy project proposals listed in TNAs and national communications of developing countries;
- providing training on and transfer of advanced technologies on industrial pollution control;
- providing financial support for public awareness raising campaigns;
- designing and redesigning road systems to accommodate alternative forms of transportation, such as walking, biking and public transport;
- enhancing long-term training programmes, including in meteorological, hydrological and climatological services, through the provision of scholarships for Master's and PhD programmes in China. Such programmes would have a more durable effect on building participating countries' capacities in this areas in comparison to regular short-term training and workshops;
- establishing a secondment programme, which would allow technical staff from partner countries to work in Chinese institutions for one to two years to build individual capacities for adaptation and mitigation actions;
- cooperating on short- and long-term training in negotiations skills and the UNFCCC process to allow for a more strategic and effective approach to intergovernmental negotiations.

4.3 China's comparative advantages in Climate Change South-South Cooperation

The respondents highlighted a number of diverse comparative advantages that China has in terms of South-South cooperation on addressing climate change. Many respondents emphasized their long history of political, economic and social cooperation with China, which is seen as having provided China with profound knowledge and understanding of local circumstances in other developing countries. Furthermore, China's broad engagement and physical presence in many partner countries greatly facilitates new cooperation projects on addressing climate change. The fact that China is itself a developing country, but has vast experience in domestic adaptation and mitigation actions as well as access to relevant technologies and a large number of technical experts was also mentioned as comparative advantage by a number of the respondents.

Many respondents mentioned the fact that CCSSC with China is needs-based and recipient country driven is a competitive advantage. One respondent highlighted China's approach to

⁴⁴ An innovative insurance facility to mitigate the economic impacts of catastrophes in the region by providing an efficient transfer of insurable risks from governments to the international financial markets. See also: <<http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35128760>>.

CCSSC in the context of poverty eradication. A number of the respondents stated that China's comparative advantage in CCSSC lies in the quick, unbureaucratic and transparent delivery of pledged support and project implementation.

China's competitive loans for, and cost-effectiveness of, climate change related projects were mentioned as important factors in particular for large scale loan-funded projects. Furthermore, some respondents found CCSSC with China to be more cost effective than bilateral cooperation with developed countries due to lower overhead costs.

4.4 Suggestions on possible ways of enhancing China's Climate Change South-South Cooperation

4.4.1 Suggestions related to the South-South Cooperation Climate Fund

The respondents provided suggestions related to China's South-South Cooperation Climate Fund. Many respondents appreciated the announcement of the new fund as a key initiative that will foster mutual support for addressing climate change between developing countries and constitute an important addition to efforts undertaken by developed countries. China's new fund could provide easy direct access to all developing countries through entities in charge of climate change within the respective countries. The use of a co-financing modality was noted as a challenging requirement of the Global Environment Facility (GEF) for many developing countries, and an impediment for project approval in some cases.

4.4.2 Other suggestions

Many respondents recommended to ensure that coordination of CCSSC projects between China and the Ministry in charge of climate change related matters within the partner country. A number of respondents highlighted that, as most CCSSC projects are agreed with the Ministry of Foreign Affairs, political considerations sometimes outweigh adaptation and mitigation needs. The respondents suggested that effective CCSSC with China would require direct cooperation between China and a technical focal point of the department in charge of climate change matters. Furthermore, funding for CCSSC projects should be provided to countries through national climate finance channels to avoid political issues.

Some respondents recommended making information on China's CCSSC more readily available, including China's and partner countries' previous experiences, good practices and lessons learned. A number of respondents also recommended to increase transparency in China's selection of CCSSC partner countries. One respondent suggested the establishment of a CCSSC focal point within the Chinese government as CCSSC is currently undertaken through different Ministries.

Other recommendations included ensuring wider engagement of stakeholders and local workers in, and transparency of, the implementation of CCSSC projects as well as appropriate monitoring and assessment of project impacts; increasing the amount of available financial resources for CCSSC; implementing demonstration projects on adaptation related

issues; and ensuring flexibility by allowing partner countries to independently procure equipment from other countries.

4.5 Recommendations for China's future Climate Change South-South Cooperation

Recommendations for China's future CCSSC presented in this section are developed taking into account information contained in chapter 3, in particular regarding China's foreign aid policy, previous approach to CCSSC and announcements regarding its South-South Cooperation Climate Fund as well as insights from on perceived comparative advantages and priorities for future CCSSC with China identified by developing countries earlier in this chapter.

This section outlines recommendations on possible overall principles for China's future CCSSC.

4.5.1 Recommendations for overall principles for Climate Change South-South Cooperation

Based on experiences of China as both a recipient and a provider of support for climate change action, lessons learned from the operation of relevant existing multilateral institutions, and the analysis of responses of developing countries to the survey and interviews, it is recommended that China's CCSSC be further expanded and enhanced using the following overall principles and approaches:

- CCSSC should focus on priority areas identified by developing countries, namely adaptation,⁴⁵ agriculture, disaster risk reduction and preparedness, energy efficiency, renewable energy, and education and public awareness.⁴⁶
- Comparative advantages of China's current CCSSC approach, specifically non-bureaucratic and unconditional provision of support, simplified approval procedures and efficiency in delivery of support, should be fully utilized and built upon. This would allow for the swift accommodation of the evolving needs of partner countries.
- Chinese government entities which are engaged in South-South Coordination activities that contribute to addressing climate change without being labeled as such should agree on a more coherent approach and a commonly accepted CCSSC definition.
- Given China's focus on 'self-reliance' as a goal of foreign aid and its intent to make capacity-building a stronger component of its CCSSC work, it is recommended to place emphasis on projects focused on capacity-building, including assistance for projects

⁴⁵ Developing countries' needs and priorities for adaptation-focused CCSSC with China have been explored in a recent research project on 'China and South-South Scoping Assessment for Adaptation, Learning and Development' undertaken by an international non-governmental organization in collaboration with NDRC and other partners (Simson 2012).

⁴⁶ As we have seen in chapter 4.1.1, China has been undertaking CCSSC in these area, which confirms that its previous and current focus areas are in line with developing countries' priorities for CCSSC with China.

focused on education and public awareness activities. This would help fill the existing capacity gaps in developing countries and ensure complementary to the GEF, which does not finance projects focused on capacity-building, and to the GCF, which does not have a dedicated window on capacity-building, but only aims to provide ‘adequate resources’ in this area (GCF, 2011). Projects in this area could build on the work of the newly established Paris Committee on Capacity-building under the UNFCCC.⁴⁷

- While continuing the current practice of capacity-building at the individual level through training courses conducted in China or in partner countries, China should intensify its support to developing national and local institutions and the private sector in developing countries through the transfer of its own institutional strengthening experience and through the fuller and more effective engagement of local counterparts in implementing joint projects. This would help ensure long term sustainability of CCSSC interventions and contribute to preparing partner countries in the implementation of their commitments set out in their INDCs under the UNFCCC Paris Agreement and achieving Sustainable Development Goal 13⁴⁸ on taking urgent action to combat climate change and its impacts.
- When promoting the transfer and diffusion of renewable energy and other green technologies, China should focus on the least costly and innovative technological solutions in areas where it developed advanced scientific and technical expertise and prioritize those technologies that were piloted, tested and found suitable to the particular conditions of developing countries.⁴⁹
- To enhance developing countries' understanding of the types of support offered by China, information on ongoing and completed projects in partner countries should be made accessible through a dedicated website and other appropriate means.
- Trilateral cooperation, with the involvement of both bilateral cooperation agencies and intergovernmental organizations - if expanded - could be a modality to amplify expertise offered to developing countries and facilitate communication with partner governments through, for example, UN country offices and other established channels.

5. Ideas for further research

5.1 Review of approaches to Climate Change South-South Cooperation of Brazil and India

Brazil and India are increasingly pursuing CCSSC and also have a wealth of experiences working in this area. It would merit further research to review their experiences, good practices and lessons learnt as a source of reference for China's future CCSSC.

⁴⁷ <<http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>>.

⁴⁸ All the SDGs are listed here <<http://www.un.org/sustainabledevelopment/sustainable-development-goals>>.

⁴⁹ Past and ongoing projects similar to the China-UNDP project on technology transfer to Ghana and Zambia described in chapter 3.4.1 could serve as a basis, which include components of assessing technologies jointly with local research institutions and the establishment of demonstration and pilot projects.

5.2 Review of accomplishments of the India-Brazil-South Africa Fund

The India-Brazil-South Africa Fund (IBSA Fund) is an example of a successful multilateral SSC fund with now more than ten years of project implementation experience. It may be useful to review how the IBSA Fund was set up, made operational and has been working. Identifying replicable ideas for the operationalization of China's South-South Cooperation Climate Fund may be of particular interest.

5.3 Review of national climate change funds in developing countries

An increasing number of developing countries are setting up their own national climate change funds. A review of the development and operation of these funds, for example those established in Bangladesh, Brazil, Indonesia, Kenya and Rwanda in recent years may provide valuable insights for the work of China's South-South Cooperation Climate Fund. An assessment of the governing structure and operational modalities of the China CDM Fund⁵⁰ would also be beneficial.

5.4 Positioning of Climate Change South-South Cooperation in the context of the UNFCCC Paris Agreement

Given the increasingly important role of CCSSC, further research could focus on defining the scope, objectives, and functions of CCSSC as well as identifying possibilities on how CCSSC could be positioned in the context of the UNFCCC Paris Agreement.⁵¹ Research on possible definitions of the scope of CCSSC may build on UNDP's Climate Public Expenditure and Institutional Reviews (CPEIR), which have been conducted in over twenty countries since 2011, including in China.⁵² The first phase of China's CPEIR was completed by the Ministry of Finance and UNDP in March 2015.

5.5 Design of a global platform or partnership for Climate Change South-South Cooperation

China's South-South Cooperation on Climate Change could also focus on building a global platform or partnership by facilitating the exchange of resources, knowledge and experiences between China's partner countries. Research could be undertaken to develop a potential model of such a global platform or partnership.

6. Conclusion

China is an increasingly active partner and influential voice in development cooperation and international financing. More than 52% of China's global aid from 2010-2012 went to least

⁵⁰ <<http://www.cdmfund.org/eng/index.aspx>>.

⁵¹ <<http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>>.

⁵² <<http://www.cn.undp.org/content/china/en/home/library/south-south-cooperation/china-climate-public-expenditure-and-institutional-review.html>>

developed countries with a focus on schools, hospitals and infrastructure (UNDP, 2013)⁵³. With a growing focus within China on environmental and climate change issues, it is not surprising that the prominence of climate change within China's foreign assistance portfolio is growing. High profile announcements in 2015 such as China's USD 3.1 billion (CNY 20 billion) South-South Cooperation Climate Fund have been enthusiastically welcomed by the international community. This pledge is relatively minor in the context of China's overall aid portfolio; however, it demonstrates a commitment to a new direction for development that recognizes the urgency of addressing climate change before it substantially undermines the achievements China and the world have made in poverty eradication over the past 15 years. As the International Panel on Climate Change has highlighted throughout the Fifth Assessment Report,⁵⁴ mitigation and adaptation is strongly linked to poverty reduction and infrastructure investment. Therefore, China's broader foreign development cooperation and international trade inevitably impacts the global south's ability to address climate change. Even when not specifically dedicated to climate change projects as such, improved infrastructure will help countries cope with climate change impacts. It is to be hoped that recent pledges from the southern-led development banks such as the Asian Infrastructure Investment Bank⁵⁵ and the New Development Bank⁵⁶ to focus more and more on green infrastructure will ensure that infrastructure investment will enhance mitigation efforts.

Furthermore, south-south cooperation is not only about financial support, but also about knowledge exchange and experience sharing. Developing countries are already eagerly learning from China's experience in poverty reduction, and yet the path China took to rapid economic development has had serious environmental consequences. Since the 12th Five-year Plan period, China has increased measures to address its emissions and pollution crises. It is the world's biggest investor in renewables, coal use is beginning to decline, and it will be launching its national emissions trading scheme in 2017. The 13th Five-year Plan provides a substantive framework for the implementation of China's INDC and detailed sector-specific plans are also providing guidance for implementation.⁵⁷ As countries around the world including China accelerate their own green transition, there will be important lessons to be shared to ensure that the world achieves the milestones set out in the Paris Agreement as well as the Sustainable Development Goals. China's experience should increasingly become a key component of its own and others' cooperation on climate change mitigation and adaptation.

However, whatever the mechanism – whether donations of technology, infrastructure building or training – the focus must always be on impact and effectiveness. This paper has outlined the positive elements of China's approach to south-south cooperation that could be

⁵³ <<http://www.cn.undp.org/content/china/en/home/library/south-south-cooperation/fast-facts-on-china-s-south-south-and-global-cooperation-.html>>

⁵⁴ See, for example, IPCC Working Group III Summary for Policy Makers <https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_summary-for-policymakers.pdf> which identifies relevant parts of the Mitigation of Climate Change report.

⁵⁵ See <<http://www.aiib.org/html/aboutus/introduction/aiib/?show=0>> for AIIB's pledge to be 'lean, clean and green', that is efficient, ethical and operating with respect for the environment.

⁵⁶ E.g. see http://www.chinadaily.com.cn/business/2016-02/26/content_23661605.htm

⁵⁷ E.g. Urban Climate Change Adaptation Action Plan, released at the end of February, 2016. <http://qhs.ndrc.gov.cn/gzdt/201602/t20160216_774715.html>

built on and also provides eight specific ideas – drawn from recipient countries – on how to further focus on and increase impact, as well as five ideas for further research that may be helpful in implementing these ideas. For China, this will not be easy, as much of its assistance – especially in the area of climate change – is very input-focused and tied. Yet, there are opportunities to utilize the new climate change funds in an innovative way and opportunities to partner with others to pilot different approaches. This potential is both exciting and urgent in equal measure for the entire world, but especially the poorest and most vulnerable people, in this generation and the next.

7. References

China-CELAC Forum (2015): China-Community of Latin American and Caribbean States Forum: China-Latin American and Caribbean Countries Cooperation Plan (2015-2019). Available at: http://www.chinacelacforum.org/eng/zywj_3/t1230944.htm.

Chinadialogue (2014): China pledges US\$20 million a year to its new South-South Cooperation Fund. Available at: <https://www.chinadialogue.net/blog/7596-China-pledges-US-2-million-a-year-to-its-new-South-South-Cooperation-Fund/en>.

Chinese Academy of Sciences (2013): New GEF-SCCF Project Launches on Ecosystem-Based Adaptation in Developing Countries. May 2013. Available at: http://english.igsrr.cas.cn/ue/ne/201305/t20130503_101635.html.

Forum on China-Africa Cooperation (2000): Programme for China-Africa Cooperation in Economic and Social Development. Available at: <http://www.focac.org/eng/ltada/dyjbzjhy/DOC12009/t606797.htm>.

Forum on China-Africa Cooperation (2006): Forum on China-Africa Cooperation Beijing Action Plan. Available at: <http://www.focac.org/eng/ltada/dscbzjhy/DOC32009/t280369.htm>.

Forum on China-Africa Cooperation (2009a): Declaration of Sharm El Sheikh of the Forum on China-Africa Cooperation. Available at: <http://www.focac.org/eng/ltada/dsjbzjhy/hywj/t626388.htm>.

Forum on China-Africa Cooperation (2009b): Forum on China-Africa Cooperation Sharm El Sheikh Action Plan. Available at: <http://www.focac.org/eng/ltada/dsjbzjhy/hywj/t626387.htm>.

Forum on China-Africa Cooperation (2012a): Beijing Declaration of the Fifth Ministerial Conference of the Forum on China-Africa Cooperation. Available at: <http://www.focac.org/eng/ltada/dwjbzjjhys/hywj/t954245.htm>.

Forum on China-Africa Cooperation (2012b): The Fifth Ministerial Conference of the Forum on China-Africa Cooperation Beijing Action Plan (2013-2015). Available at: <http://www.focac.org/eng/ltada/dwjbzjjhys/hywj/t954620.htm>.

Forum on China-Africa Cooperation (2015a): Declaration of the Johannesburg Summit of the Forum on China-Africa Cooperation. Available at: http://www.focac.org/eng/ltada/dwjbzjjhys_1/hywj/t1327960.htm.

Forum on China-Africa Cooperation (2015b): The Forum on China-Africa Cooperation Johannesburg Action Plan (2016-2018). Available at: http://www.focac.org/eng/ltada/dwjbzjjhys_1/hywj/t1327961.htm.

Green Climate Fund (2011): Governing Instrument for the Green Climate Fund. Available at: http://gcfund.net/fileadmin/00_customer/documents/pdf/GCF-governing_instrument-120521-block-LY.pdf

Huang, Meibo and Wei, Xiaohui (2015): The Chinese Foreign Aid Management System and its Reform. In Institutional Architecture and Development: Responses from Emerging Powers. Eds. Sidriropoulos et al. South African Institute of International Affairs in association with the Research and Information System for Developing Countries, New Dehli.

Information Office of the State Council (2006): China's African Policy. January 2006. Available at: http://en.people.cn/200601/12/eng20060112_234894.html.

Information Office of the State Council (2008): China's Policies and Actions for Addressing Climate Change. Available at: <http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File419.pdf>.

Information Office of the State Council (2011a): China's Foreign Aid. April 2011. Available at: http://www.gov.cn/english/official/2011-04/21/content_1849913.htm.

Information Office of the State Council (2011b): China's 12th Five-Year Plan for National Economic and Social Development. Available at: http://www.gov.cn/2011lh/content_1825838.htm.

Information Office of the State Council (2013): White paper on China-Africa Economic and Trade Cooperation. August 2013. Available at: http://news.xinhuanet.com/english/china/2013-08/29/c_132673093.htm.

Information Office of the State Council (2014): China's Foreign Aid. July 2014. Available at: http://english.gov.cn/archive/white_paper/2014/08/23/content_281474982986592.htm.

IPCC (2014): Summary for Policymakers in Climate Change 2014: Mitigation of Climate Change. Contributions of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_summary-for-policymakers.pdf

Mao, Xiaojing (2012): “Zhongguo duiwai yuanzhu fangshi huigu yu chuangxi [Reviewing China's previous approach to foreign aid and future innovations],” International Economic Cooperation no. 3 (2012): 89-91.

Ministry of Commerce (2014): Measures for Administration of Foreign Aid. Available at: <http://tfs.mofcom.gov.cn/article/as/201404/20140400556051.shtml>.

Ministry of Foreign Affairs (2014): Zhang Gaoli Attends UN Climate Summit and Delivers Speech. September 2014. Available at: http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1194544.shtml.

Ministry of Science and Technology (2011): South-South Cooperation on Science and Technology to Address Climate Change – Applicable Technology Manual. Available at: http://www.actc.com.cn/UploadFiles/Attached/file/20120605/20120605105916_4745.pdf

National Center for Climate Change Strategy and International Cooperation (2015): An Analysis of China's Intended Nationally Determined Contribution. Available at:

<http://www.chinacarbon.info/wp-content/uploads/2015/07/Comments-on-Chinas-INDC.pdf>.

National Development and Reform Commission (2009): China's Policies and Actions for Addressing Climate Change. Available at:
<http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File571.pdf>.

National Development and Reform Commission (2012a): China's Policies and Actions for Addressing Climate Change. Available at:
<http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File1324.pdf>.

National Development and Reform Commission (2012b): Second National Communication on Climate Change of the People's Republic of China. Available at:
http://unfccc.int/essential_background/library/items/3599.php?rec=j&preref=7666#beg.

National Development and Reform Commission (2013a): China's Policies and Actions for Addressing Climate Change. Available at:
<http://en.ndrc.gov.cn/newsrelease/201311/P020131108611533042884.pdf>.

National Development and Reform Commission (2013b): Enhance Capacity Building through South-South Cooperation, presentation held at the United Nations Climate Change Conference Bonn June 2013. Webcast recording available at: http://unfccc4.metafusion.com/kongresse/sb38/templ/play.php?id_kongresssession=6481&theme=unfccc. Presentation slides available at:
http://unfccc.int/files/cooperation_and_support/education_and_outreach/application/pdf/a6dialogs5p01.pdf.

National Development and Reform Commission (2014a): National Climate Change Plan (2014-2020). Available at:
http://qhs.ndrc.gov.cn/gzdt/201411/t20141105_647419.html.

National Development and Reform Commission (2014b): China's Policies and Actions for Addressing Climate Change. November 2014. Available at:
<http://qhs.ndrc.gov.cn/gzdt/201411/W020141126367753719687.pdf>.

National Development and Reform Commission (2015a): Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road. March 2015. Available at: http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html.

National Development and Reform Commission (2015b): Enhanced Actions on Climate Change: China's Intended Nationally Determined Contribution. June 2015. Available at:
<http://www4.unfccc.int/submissions/INDC/Published%20Documents/China/1/China's%20INDC%20-%20on%2030%20June%202015.pdf>.

National Development and Reform Commission (2015c): Impact and Opportunities for Enhancing South-South Cooperation on Climate Change in China. Presentation held at the Beijing Consultative Meeting on South-South Cooperation on Climate Change. 14-15 November 2015.

National Development and Reform Commission (2015d): China's Policies and Actions for Addressing Climate Change. November 2015. Available at: <http://en.ccchina.gov.cn/archiver/ccchinaen/UpFile/Files/Default/20151120095849657206.pdf>.

National Development and Reform Commission (2016): Urban Climate Change Adaptation Action Plan. Available at: http://qhs.ndrc.gov.cn/gzdt/201602/t20160216_774715.html

Shimomura, Yasutami and Ohashi, Hideo (2013): A Study of China's Foreign Aid – An Asian Perspective. Palgrave Macmillan. New York.

Simpson, M.C. et al. (2012): China and South-South Scoping Assessment for Adaptation, Learning and Development (CASSALD). Adapting to Climate Change in China (ACCC), Beijing, China. Available at: <http://www.smithschool.ox.ac.uk/library/reports/cassald.pdf>.

Tigrai Online (2012): Ethiopia will construct 70,000 bio-gas plants in the Growth and Transformation Period. 30 June. Available at: <http://www.tigraionline.com/articles/article120664.html>.

United Nations (2015a): China and UN to Work to Promote South-South Cooperation on Climate Change. Available at: <http://www.un.org/climatechange/blog/2015/04/china-un-work-promote-south-south-cooperation-climate-change/>.

United Nations (2015b): The Beijing Consultative Meeting on South-South Cooperation on Climate Change, Beijing, China, 13-14 November 2015. Meeting Report.

United Nations Development Programme China (2014): Issue Brief: China's Second White Paper on Foreign Aid. August 2014. Available at: <http://www.cn.undp.org/content/china/en/home/library/south-south-cooperation/issue-brief-china-s-second-white-paper-on-foreign-aid.html>.

United Nations Development Programme China (2015): Fast Facts – Climate Change in China. Available at: <http://www.cn.undp.org/content/dam/china/docs/Publications/UNDP-CH-Fast%20Facts%20on%20Climate%20Change%202.pdf>.

United Nations Educational, Scientific and Cultural Organization (2013): South-South Cooperation in Climate Change Adaptation and Technology Transfer. Available at: <http://www.unescobkk.org/news/article/south-south-cooperation-in-climate-change-adaptation-and-technology-transfer/>.

United Nations Environment Programme (2011): UNEP and China Launch Landmark Ecosystem Management Programme. Available at: <http://www.unep-iemp.org/content/unep-and-china-launch-landmark-ecosystem-management-programme>.

United Nations Environment Programme (2014): New China-UNEP Agreement to Boost South-South Cooperation on Climate Change Adaptation. May 2014. Available at: <http://www.unep.org/NewsCentre/default.aspx?ArticleID=10854&DocumentID=2788>.

United Nations Environment Programme (2015a): The UNEP-China-Africa Cooperation Programme: Enhancing the Role of Ecosystem Management in Climate Change Adaptation Report. March 2015. Available at: <http://www.unep.org/newscentre/Default.aspx?DocumentID=26788&ArticleID=34784>.

United Nations Environment Programme (2015b): UNEP-China-Africa Cooperation on the Environment. Available at: http://www.unep.org/rso/portals/118/documents/unep_china/unep-china-africa.pdf.

United Nations Office for South-South Cooperation (2015): What Is South-South Cooperation? Available at: http://ssc.undp.org/content/ssc/about/what_is_ssc.html.

White House (2015): U.S.-China Joint Presidential Statement on Climate Change Available at: <https://www.whitehouse.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change>.

Xinhua (2015): China's second Africa policy paper. 4 December 2015. Available at: http://news.xinhuanet.com/english/2015-12/04/c_134886545.htm.

Annex I: Questionnaire on China's Climate Change South-South Cooperation: Track Record and Future Direction

1. Please enter your contact details

First name/last name:

Professional title:

Ministry/department:

Country:

Email:

2. Does your country cooperate with China on adaptation to and mitigation of climate change? If your answer is 'No', please move to question 15.

Yes

No

3. If possible, please give examples of specific projects/activities.
4. How do you choose the focus of projects/activities supported by China?
5. Are these projects/activities driven by your country's needs and priorities as set out in national development plans and strategies?

Yes

No

6. How was your country's collaboration with China on addressing climate change started?
7. Do you perceive the collaboration between China and your country as relates to climate change action as an equal partnership? Please elaborate on you answer.
8. How would you rate the efficiency of China's support on climate change action?
Excellent
Very good
Good
Somewhat satisfactory
Unsatisfactory

9. Please elaborate on your answer to question 8.
10. To what extent have national/local personnel and institutions been involved in implementing climate change projects/activities supported by China in your country?
11. Has the cooperation between China and your country led to the transfer of knowledge and skills? If so, how?
12. Has the technology transferred as part of a project/activity supported by China been adapted to local conditions in your country? Has the technology spread beyond this project? If so, how?
13. Has the cooperation between China and your country led to the development or strengthening of national and local institutions? If so, how?

14. What approaches has China used to ensure long-term sustainability of the results of climate change projects/activities implemented in your country?
15. Where should China focus its support to your country for addressing climate change in the future? Please rank in order of importance from 1 (most important) to 9 (least important):
- Adaptation to climate change
 - Agriculture
 - Disaster risk reduction and preparedness, including early warning systems
 - Education and public awareness
 - Energy efficiency
 - Intergovernmental negotiations
 - Renewable energy
 - Research and systematic observation, including meteorological, hydrological and climatological services
 - Transport and urban planning
 - Other (please specify)
16. Please specify “Other” as listed in question 15.
17. Please specify the type of support that you would like to receive from China within the top three priority areas that you indicated above (e.g. building institutional or individual capacities, technology transfer etc.)
18. In your opinion, what are the comparative advantages and strong aspects of China’s support to other developing countries on climate action?
19. What do you see as shortcomings of this support? How can these shortcomings be addressed in relation to your country?
20. Based on your experiences of collaborating with China but also with bilateral and multilateral agencies, including the Global Environment Facility and the Climate Technology Center and Network, how should China’s new South-South Cooperation Fund on Climate Change operate to meet your country’s needs?
21. What additional recommendations can you offer to the government of China to help increase the impact and effectiveness of its South-South cooperation?
22. Would you be available to provide further details relating to your responses to this questionnaire via email, phone or Skype if needed?



*Empowered lives.
Resilient nations.*

United Nations Development Programme in China
2 Liangmahe Nanlu
Beijing, 100600
China

Tel: (8610) 8532 0800
Fax: (8610) 8532 0900
Email: registry.cn@undp.org
Website: www.cn.undp.org