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Development Cooperation Review

Special Coverage on Cotton-4

Editorial

Special Articles

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Cotton-4

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Editorial

As the global pandemic of COVID-19 rages on, the progress made in the last several years on the socio-economic fronts in various countries has been reversed. Several industries are still suffering from the setback brought in by the pandemic including the textiles sector, more particularly the Cotton sector. The present issue of *Development Cooperation Review (DCR)* presents a special coverage on Cotton-4 countries, which include Benin, Burkina Faso, Chad and Mali, and also tries to capture the impact of the pandemic on the global cotton industry.

In the paper titled "The trajectory of Brazilian South-South Cooperation on cotton in Africa", the authors *Daniel Martins Silva and Álvaro Moreira* analyse the trajectory of Brazil's cotton projects in Africa. The authors discuss how the implementation of the first cotton project established the basis for subsequent ones. Brazil's cotton projects showcase its emergence as an agricultural economic power.

In the next paper, "The Linkage between International Trade and International Cooperation for Development in the Foreign Policy context: The Cotton-4 project (2009-2013)", the author *Adriana Mesquita Corrêa Bueno* discusses Brazil's performance in the WTO's cotton dispute from 2002 to 2014. It also analyses the Brazilian ICD for strengthening of the Cotton sector in the Cotton-4 countries and examines its possibilities and impacts.

The Report on the ICAC Special Issue, "Potential Impacts of COVID-19 on the Cotton Sector" by *Aditi Gupta* captures the impact of COVID-19 on both the global cotton sector and the domestic sectors of various countries in Africa, Asia and Latin America. It discusses the impact on domestic and international demand for cotton textiles, its consumption, international cotton prices and supply chain. It also enumerates the steps taken by national governments to safeguard their cotton industry.

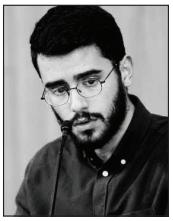
The review of the book titled "Organic Cotton: Is it a Sustainable Solution?" by *Akshay Singh* discusses different aspects of organic cotton relative to white cotton. It also discusses the environmental impacts of white cotton as well as organic cotton farming. The review highlights the need for making organic cotton farming economically sustainable for both producers and consumers. The second book review of "The Cotton Industry and Trade" by *Shriya Singh* presents an analysis of the Cotton Industry's evolution in Europe, particularly in Spain, Egypt, Britain, Germany, France and Russia. The book discusses the problems arising

out of industrialization and commercialization, the initial industrial and technical advancements in the industry and the impact of trade in cotton on the global market.

In the Spotlight section, the article titled "India-Senegal: People-to-People Connections through the Ages" by *Renu Modi* throws light on the common traditions and culture shared by India and Senegal. The author discusses various common political values between the two democracies and several academic exchanges between them that have taken place over the years. The section on SSC in Statistics by *Sushil Kumar* analyses the cotton production in Cotton-4 countries, the export of cotton by C4 countries and the estimated assistance provided by governments to the cotton sector.

The present issue of DCR, in its new format, touches upon many of these prime concerns. Your contributions in the form of full-length research articles, commentaries, comments and reports from the ground would enrich the forthcoming issues in a meaningful way.

The Trajectory of Brazilian South-South Cooperation on Cotton in Africa



Daniel Martins Silva[*]

Álvaro Moreira[**]

"The gestation of Brazil's cotton projects is inscribed in a context that combines a national consolidated expertise on cotton farming (driven mainly by Embrapa), increased influence on multilateral arenas, and the mainstreaming of global cotton trade issues at the WTO"

Abstract: Since 2009, Brazil has been engaged in sharing its accumulated expertise on cotton production and research to 16 African countries. Sub-regional and bilateral projects, coordinated by the Brazilian Cooperation Agency (ABC), are the flagship initiatives of Brazil's "structuring" South-South cooperation model. This model goes beyond isolated knowledge sharing actions, towards more robust capacity development complemented with material and infrastructural support. Despite challenges, those initiatives showed successful results over the course of 12 years and gave to Brazil an international recognition as Southern provider of development cooperation. This paper analyses the trajectory of Brazil's cotton projects in Africa by looking at the development of projects' strategies and mechanisms against contexts of implementation.

Introduction

Brazil's South-South Cooperation (SSC) with African countries have its origins in the 1960s (Leite 2011), but increased considerably in the 2000s (Ferreira and Moreira 2018). Brazil's economic growth and the active foreign policy led to increasingly influence on the multilateral system, alongside other emerging countries. As a result, Brazilian technical cooperation initiatives increased four times in terms of value from 2005 to 2010 (IPEA 2016). In this context, the multiplication of knowledge sharing projects in African countries, based in a peer-learning

* Associate Researcher at South-South Cooperation Research and Policy Center, former IBSA Fellow Researcher at RIS. Views expressed are personal.

** Doctoral Researcher at Institute of Development Studies, University of Sussex. Views expressed are personal.

approach, contrasted with the traditional Official Development Assistance (ODA). Among Brazil's initiatives, projects that focused on the cotton sector embodied simultaneously Brazil's emergence as an agricultural economic power, its pivotal role in multilateral organisations. Because of their consistency throughout the years, the cotton projects also triggered the development of Brazil technical cooperation mechanisms, making them an unique case study. Therefore, this paper aims to bring insights about the trajectory of Brazilian cotton initiatives (from 2009 to 2020), which also reflects Brazil's own trajectory as a Southern provider. In addition, this paper seeks to address a gap in the literature about the history of Brazil's cotton projects.

The remainder of this paper is structured as follows. In the first section, we present the context in which the cotton projects emerged. In the second section, we discuss how the implementation of the first cotton project created the basis for subsequent projects. The third and fourth sections address the second and third generations respectively, marked at first by expansion and lately by changes, which resulted then in a refocus on specific issues and diversification of partners.

The Gestation of Brazilian South-South Cooperation Cotton Projects

In the early 2000s, Brazil was already one of the five world's biggest producers and exporters of cotton. In the 1990s, production increased considerably due to technological progress and strengthening of national research institutions. After the "boll-weevil" pest (*bicudo do algodeiro*) that devastated around 25 per cent of the Brazilian cotton fields in the 1980s, public investments to research on pest management successfully brought new pathways to the Brazilian cotton sector. The main change was the move of the production centre from the Northeastern region to the drylands, the Brazilian *Cerrado*, a region that has a similar geography to the Sahel. As a result, national production of cotton lint went from 0.3 million tons in 1996 to 2.6 million tons in 2019 (ABRAPA 2019), which enabled Brazil to recover from two decades of crisis in the cotton sector. In this context, the Brazilian Agricultural Research Corporation (Embrapa), a State-owned research centre founded in 1973, played an important role in leading the technological advancements that has made Brazil a global agricultural power. Over the decades and through 43 units structured across the country, Embrapa accumulated a valuable expertise on tropical agriculture research and innovation. Beyond its technical excellence, ensured by high-level scientists and technicians, Embrapa also built a significant global network of research institutions, international organisations and universities worldwide for scientific cooperation. Those characteristics allowed the company to become the main national partner of subsequent Brazil's agricultural international cooperation initiatives, including some of the first cotton projects.

The history of Brazil's cotton projects is linked to two parallel processes occurring at the World Trade Organization (WTO). On the one hand,

in the early 2000s, Brazil requested consultations on US subsidies to cotton producers, starting a dispute settlement procedure at the WTO that put a spotlight on Brazilian agricultural development and diplomacy. On the other hand, Benin, Burkina Faso, Chad and Mali, the main West African cotton producing countries, created the Cotton-4 group (C-4 from now on) and requested the WTO to address the cotton market issues specifically. The creation of the sub-committee on cotton development at the WTO followed their request. These two processes, although distinct, brought together Brazil and the C-4 countries, connecting a demand for technical cooperation on cotton growing to the Brazilian experience.

In September 2002, Brazil requested consultations on the legality of US cotton subsidies, while the price of cotton in the international market had decreased considerably in the end of the 1990s (Heinisch 2006). Brazil (and other cotton producers), argued that US subsidies to the American cotton sector were creating price distortions, and consequently undermining the competitiveness of developing countries in the international cotton market[1]. African growers were especially affected by the American subsidies. In the beginning of the 2000 decade, the raw cotton corresponded from 5 to 10 per cent of the GDP from C4 countries, 30 per cent of the total export gains and 60 per cent of the earnings from agriculture exports (WTO 2003). In West and Central Africa, over 10 million people were dependent directly on the cotton sector (WTO 2003). However, African cotton-producing countries decided not to join Brazil in the dispute, following advice from Geneva-based NGOs (Menezes 2013; Cesarino 2013). Instead, Benin, Burkina Faso, Mali, and Chad, launched their own initiative during the 2003 WTO Ministerial Conference in Cancun. Despite working separately, the common cause of eliminating developed countries' agricultural subsidies approximated the C4 countries and Brazil (Menezes 2013). In 2006, in a context of expansion of Brazil's South-South Cooperation initiatives in Africa, a first Brazilian mission was organised in Benin. In the following years, Brazil signed cooperation agreements with Burkina Faso, Chad and Mali, creating the institutional framework for the C-4 project, whose project document would be completed in 2008.

Therefore, the gestation of Brazil's cotton projects is inscribed in a context that combines a national consolidated expertise on cotton farming (driven mainly by Embrapa), increased influence on multilateral arenas, and the mainstreaming of global cotton trade issues at the WTO.

The First Generation: The Cotton 4 Project

The project "Support to the Development of the Cotton Sector to Cotton-4 Countries (Benin, Burkina Faso, Chad and Mali)", lately known as "C4 project", was Brazil's first structuring cooperation initiative in agriculture with African countries. Different from the small and short-term projects with a strong focus on training that Brazil were used to implement hitherto, structuring cooperation projects aim to implement larger-scale, long term

Cotton First Generation Project Overview

Implementation period	Project title	Countries	National partners	Total budget (US Dollars)
2009-2013	Support to the Development of the Cotton Sector to Cotton-4 Countries (Benin, Burkina Faso, Chad and Mali)	Benin, Burkina Faso, Chad and Mali	Embrapa	5,489,451.00

Source: Elaborated by authors, based on ABC (2018); Plan Políticas Públicas, and Articulação Sul (2015).

and far reaching impact initiatives. The objective of structuring projects is to combine capacity development with material support to have an impact at the individual, institutional, and societal levels, fostering national capacities that could support social and economic development (Vaz 2015). Hence, the C4 project had as desired goal "to contribute to improve competitiveness in the cotton supply chain". Specific objectives focussed on the revitalisation of a research station in Mali (where the project concentrated the most of its activities), on the development of agronomical research on genetic improvement, farming techniques, and pest management, and on strengthening capacities and disseminating knowledge throughout partner countries.

The evaluation of the C-4 Project (Articulação Sul and Plan Políticas Públicas, 2015) states that the project achieved all expected results. The restoration of the Sotuba Station in Mali resulted in the creation of a C-4 cotton centre: a complex of buildings comprising offices, a meeting room, and an entomology laboratory that complemented the revitalisation of the experimental area, strengthening of soil analysis capacities and of biotechnology laboratories. The evaluation highlighted the importance of the Centre in enhancing the visibility of activities to farmers and decision makers, making it a key point of reference within the Sotuba station.

The transfer of Brazilian technology developed by Embrapa was also successful, but the extent of this success varied across partner countries. For example, the Brazilian varieties of cotton introduced by the project were adopted and used to cross with national varieties to improve fibre quality (in Mali and Burkina Faso) or the colour and shine (in Benin). In Chad, however, progress in crossbreeding was hindered by a lack of local human resources. With regards to field experimentations of Brazilian techniques, the combination with other crops was perceived as the main positive aspect. By contrast, no-till farming encountered resistance from researchers and farmers because it required deeper changes in farming practices, hence a greater investment would have been needed to ensure dissemination. In the area of pest management, the project's activities did not progress beyond the experimental stage because of the inherent challenges of biological pest control.

The Brazilian cotton farming techniques shared within the framework of the C-4 Project demonstrated a considerable potential to transform the cotton sector in partner countries. The presence, in Mali, of dedicated

staff with the necessary aptitude, skills, and competences, as well as past experiences in cooperation in Africa were important assets that ensured project implementation. In particular, the project coordinator not only had the mentioned skills but was also a key figure from Embrapa Cotton branch. This certainly contributed to the progress of the project.

The success of the initiative attracted further demand from cotton producing countries in the Global South. In this sense, the meetings of the Cotton Committee at the WTO continued to be a forum where Brazil showcased the project, attracting more demands from cotton producing countries. Togo requested to join the next phase of the C4 Project, and Brazil received demands from Southern African countries. In the meantime, the Brazil-US dispute settlement at the WTO came to an end, with the final payment of approximately 800 million US dollars, of which 10 per cent were to be destined to technical cooperation projects. The Brazilian Institute of Cotton (IBA) was responsible to manage the payment amount, through a specific fund created to that purpose. As such, Brazil started to draft three new regional projects, which became to be known as Cotton 4+ Togo, Cotton Victoria (Burundi, Kenya, Tanzania), and Cotton Shire-Zambezi (Malawi, Mozambique).

The Second Generation: Expansion and Adaptation to Changing Circumstances

The second generation of Cotton Projects built upon the experience of the C-4 Project, both in terms of project design and content. Some recommendations from the independent ex-post evaluation of the C4 Project were reflected on the design of the projects of the second generation. In the beginning of the 2010s, ABC had reached an unprecedented number of technical cooperation projects which demanded stronger project management skills and coordination[2]. The Brazilian South-South Cooperation Manual (ABC/MRE 2013), elaborated with engagement of all agency divisions, provided precise and detailed guidelines to manage projects' cycles, from exploratory missions to final evaluations, giving importance to SSC principles in all stages. It was in this context that the C4+Togo, Cotton Victoria, and Cotton Shire Zambezi project documents were designed. This represented a rupture with the previous C4-project in terms of project management. For example, the C4+Togo project integrated a reflexive specific objective on the set up of participatory mechanisms and observance of the principles of horizontality and sustainability in project management (ABC/MRE 2014). Under this objective were planned activities such as the set-up of project management teams in Brazil and in partner countries, the realisation of annual steering committee meetings[3], the elaboration of progress reports, and the realisation of mid-term, final, and ex-post project evaluations.With regards to project content, while the C4 Project concentrated field experimentations in one partner country (Mali) and targeted researchers as project beneficiaries, the Cotton 4+Togo, Cotton Victoria, and Cotton Shire-Zambezi aimed at working more closely with farmers and supporting agricultural extension in all

involved countries. Three main domains were to be covered in the three projects: farming techniques, pest management, and genetic development, reflecting a continuation of the C4 Project strategy and the configuration proposed by Embrapa, the technical national partner. The C4+Togo project finished in the end of 2019.

Moving now to Cotton Shire-Zambezi project, it followed the same framework of the previous initiatives, with trainings to local researchers, extension workers, local technical staff and lead producers. Those activities aimed at validating and disseminating cotton farming technologies, as well as strengthening national capacities on cotton's seed production. As Cotton 4+Togo, the Shire-Zambezi project was designed to reach cotton producers more directly, instead of working primarily with researchers and agronomists. Thus, the project worked with different implementing organisations in Mozambique and Malawi, which proved to be a good strategy. In Mozambique, for example, the partner's lead institutions were the national agricultural research agency and the Cotton Institute of Mozambique, which is the national representative body of cotton farmers. As such, the direct work with growers led to a significant increase in cotton yields (ABC/MRE 2019).

During the period prior to the second generation, Brazil had also launched a modest initiative with the Federal University of Lavras (UFLA) to provide 3-month technical courses on cotton farming in Brazil for researchers, extension agents, and farmers from African cotton-producing countries. This initiative had gone through other diplomatic channels away from ABC's overseeing. Facing difficulties in the execution of Cotton Victoria, ABC invited UFLA to participate in the project

Cotton Second Generation Project Overview

Implementation period	Project title	Countries	National partners	Total budget (US Dollars)
2014 - 2019	Cotton 4+Togo	Benin, Burkina Faso, Chad, Mali, and Togo	Embrapa	5,719,636.00
2014 - 2019	Cotton Shire Zambezi	Malawi and Mozambique	Embrapa	3,397,750.00
2015 - 2020	Cotton Training Courses	All partner countries + Cape Verde, Cameroon, Cote d'Ivoire, Sao Tome and Principe, Senegal, and Zimbabwe	Federal University of Lavras (UFLA)	1,812,040.00
2016 - 2020	Cotton Victoria	Burundi, Kenya, and Tanzania	Federal University of Lavras (UFLA)	9,580,270. 00

Source: Elaborated by authors, based on ABC (2019).

design after the gradual withdrawing of Embrapa on cotton projects. Since then, UFLA became Brazil's main implementing partner institution. Finally, the Cotton Victoria would be signed and launched in 2016. The project implementation remained based on the other cotton projects, with slight changes due to the new partnership with UFLA. For instance, the project included training of trainers to enable rural extension agents to disseminate project's techniques instead of providing the means for mobile rural extension units, as such was the case in C4+Togo and Cotton Shire-Zambezi projects.

The new partnership with UFLA enabled the consolidation of the previous training courses. The ABC ended up absorbing this initiative and launching the "Regional Project to Improve the Knowledge of African Professionals in Cotton Cultivation" (Cotton Courses Project, from now on) always in partnership with UFLA. By those means, the Cotton Courses project became an important initiative within the cotton project architecture. Between 2016 and 2018, more than 100 agriculture technicians from 17 countries participated in trainings carried out at UFLA, where they were acquainted with cotton production techniques through technical visits in three different regions of Minas Gerais State (the North, Mineiro Triangle and Alto Paranaíba region).

The Third Generation: Targeted, Small-Scale Projects

The continuation and expansion of Brazil's cotton projects encouraged more countries to request similar initiatives. Those requests originated in different places and were sent through variable channels. The regular meetings of WTO's Sub-Committee on cotton became a privileged space where Northern donors and Southern providers of development cooperation presented project results and cotton-producing countries expressed their needs in technical assistance. Since the end of the C4 Project, ABC has also invited representatives from partner countries to the annual editions of the Brazilian Cotton Congress. Throughout the years, ABC also extended the invitations to other cotton-producing countries. On the one hand, those events became opportunities to showcase the Brazilian expertise in cotton farming to potential partners, and on the other hand, to demonstrate to Brazilian producers the technical assistance efforts ABC were conducting. Additionally, some countries became acquainted with Brazilian technical knowledge through the participation in the Cotton Courses project, which were not reserved to cotton projects' participant members.

In face of uninterrupted demands from Southern partners, ABC adopted a different approach. Until then, the cotton projects were sub-regional initiatives, which required a high amount of resources and complex logistical arrangements. Therefore, ABC put more attention on targeted projects with smaller budget and more specific goals, adapting activities to the local needs and implementation capacity of partners.

Projects of the third generation have a more focused approach as the table above suggests. This appears to be particularly true for the project sequels in countries that were part of previous

Cotton Third Generation Project Overview

Implementation period	Project title	Countries	National partners	Total budget (US Dollars)
2019 - 2022	Cotton Senegal	Senegal	Association of Cotton Producer from Minas Gerais (AMIPA); Federal University of Lavras (UFLA)	950,000.00
2019 - 2022	Cotton Soils	Mali	Federal University of Lavras (UFLA)	1,633,38.00
2020 - 2022	Cotton Zimbabwe	Zimbabwe	Minas Gerais Agricultural Research Corporation (EPAMIG), Minas Gerais Technical Assistance and Rural Extension Corporation (EMATER); Secretary of Family Farming and Cooperatives from Ministry of Agriculture	1,273,548.00
Under negotiation (as of May 2020)	Cotton Mozambique	Mozambique	Federal University of Lavras (UFLA)	Unknown
Under negotiation (as of May 2020)	Cotton Fibers	Benin	Association of Cotton Producer from Minas Gerais (AMIPA);	1,500,000.00
Under negotiation (as of May 2020)	Cotton Cameroun	Cameroun	Federal University of Lavras (UFLA)	1,000,000.00
Under negotiation (as of May 2020)	Cotton Ethiopia	Ethiopia	Federal University of Lavras (UFLA); Association of Cotton Producer from Minas Gerais (AMIPA)	1,000,000.00

Source: Elaborated by authors, based on ABC (2019).

sub-regional initiatives, such as Benin and Mali. The third generation of cotton projects are also characterized by a range of diverse Brazilian implementing partners. From the second to third generation, ABC sought to add Brazilian regional institutions to its portfolio, combining universities, regional rural extension bodies, private sector organisations and public agencies. This diversification addressed possible challenges of implementation and created a sort of safety net that should ensure timely implementation of the cotton projects.

Conclusion

The analysis of Brazil's three generations of cotton projects indicates that over the course of 12 years, Brazilian SSC initiatives on cotton in Africa have grown in maturity and number of projects executed. From an uncertain complaint at the WTO in 2002 to the multiplication of projects in 2020, the trajectory of Brazilian cotton projects went through different phases. The first generation represents the introduction of Brazil as a relevant player on the international development cooperation arena. The C4 Project was Brazil's first sub-regional structuring project in agriculture with African countries and embodied the increasingly influence of emerging powers in world economy. To some extent, this also represented a rupture with traditional aid patterns. The focus was on capacity development through knowledge sharing activities complemented with material support. The C4 Project had a positive impact on partner countries and on Brazil's own technical cooperation mechanisms alike.

On the second and third generation of cotton projects, ABC has incorporated changes needed, to be able to respond to continuous demands from cotton-producing countries. The Agency modified some elements in project design and content. For instance, activities from Cotton 4 +Togo, Cotton Shire Zambezi and Cotton Victoria were especially designed to reach cotton producers more directly, instead of working primarily with researchers and agronomists. Also, regional projects were very demanding in terms of resources, hence, bilateral cooperation initiatives became the new approach, allowing Brazil to address specific needs of each partner country. Furthermore, bilateral projects increased the range of Brazilian organisations that can take part as implementing partners. This strategy allows less dependency on one organisation, which could reduce considerably the risks of overwhelming national partners and thereby affecting project processes. The introduction of UFLA as an implementing partner reflects this concern.

Whereas it is expected that Brazilian cotton projects will keep supporting other African countries, the bilateral frame seems to be the model for the next years. Putting into practice the SSC principles, cotton projects managed by ABC are characterized by built-in elements of horizontality, promotion of ownership and self-reliance as well as demand-driven response. Finally, as the analysis showed, from a historical perspective, the trajectory of Brazilian cotton projects represented the advance of 12 years of continuous solidarity based on knowledge sharing added by structural support. This effort could be an illustrative expression of the relevance and success of the Brazilian structuring cooperation model.

Endnotes

1 To read more about the Brazil-US dispute settlement on cotton sector, see WTO (2019).

2 According to official and independent analysis, in 2010 the budget allocated for Brazil's technical cooperation initiatives totaled around US$ 57.777.554 (IPEA 2013). Compared in a historical series of budget expenses (from 2000 to 2016), that year registered the peak of Brazilian engagement with Southern countries (Lopes and Costa 2018).

3 Every cotton project has its own steering committee, whereby Brazilian and partner's representative deliberate, through consensus, on project activities,

and monitoring and evaluation aspects (including joint elaboration of project indicators, criteria and values). This practice aims to enhance project ownership and, consequently, project sustainability.

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The Linkage between International Trade and International Cooperation for Development in the Foreign Policy Context: The Cotton-4 project (2009-2013)

Adriana Mesquita Corrêa Bueno[*]

"Agriculture has always been one of the most important fields for Brazil's international cooperation, whether received or provided."

Abstract: The present paper analyzes the confluence of two relevant agendas of the Brazilian Foreign Policy: the commercial and the International Cooperation for Development (ICD) one. Brazil, through consistent action in the multilateral field of the World Trade Organization (WTO), contested the United States' domestic policy of cotton subsidies under the Dispute Settlement 267. From the victory obtained and confirmed by the various litigation panels, the country received compensatory funding from the US government totaling just over US$ 800 million - of which US$ 80 million were destined to finance cotton ICD projects with developing countries. Parallel to efforts on the trade agenda, Brazil sought to strengthen its presence in the International System through international technical cooperation, by implementing several projects in African, Latin American and Caribbean and Asian countries. Thus, this paper intends to explore the linkages developed by Brazil between the multilateral trading system and the International System of Development Cooperation (ISDC). To do so, the paper will briefly examine Brazil's performance in the WTO's cotton dispute from 2002 to 2014. Furthermore, the Brazilian ICD for the strengthening of the cotton sector in the Cotton-4 countries (Benin, Burkina Faso, Chad, and Mali) will be analyzed in terms of how the initiative (the Cotton-4 project) was negotiated and implemented. Finally, in its concluding remarks, the paper will examine the possibilities and impacts of the Brazilian ICD through the project.

Keywords: Brazilian Foreign Policy. South-South Cooperation for Development. World Trade Organization. Cotton-4.

* PhD in Political Science by the Institute of Social and Political Studies at the State University of Rio de Janeiro (IESP-UERJ). Works at the Brazilian Agricultural Research Corporation (EMBRAPA) as Officer of International Cooperation, with experience on international cooperation for development, scientific diplomacy, global policies, and climate change. The author would like to thank Cíntia Rojo who offered useful comments and suggestions on how to improve an earlier draft of this paper.

Introduction

Cotton is a plant of several uses and is sold in the world market as fiber (fiber and lint), as oleaginous (it is the sixth most important world oil supply) and as a source of high biological value proteins. The cotton fiber is the most important textile raw material in the world, representing more than 40 per cent of the raw material of garments. Shorter fibers are used in the preparation of cotton wool in the manufacture of writing paper, photographic film and x-ray plates among others, and fibrils are used in the chemical industry of plastics and explosives. In turn, the cottonseed has considerable food (edible oil and margarine) and industrial (soap) interest and is one of the most important alternatives for use as raw material for the production of biodiesel. The cottonseed meal is used for animal feed due to its high protein value.

The world cotton agribusiness is one of the most socially and economically important, moving more than US$300 billion per year and about US$ 12 billion in the direct international cotton trade alone, and mobilising about 350 million people among production, logistics and trading. Cotton is explored in more than 60 countries on all continents and currently 35 million hectares worldwide are planted on average, which makes it one of the cultures that most employs workforce and distributes income in the rural sector. According to the Food and Agriculture Organization (FAO), the cotton crop involves about 90 million families worldwide (ABRAPA, website).

In the 2015/2016 season, India, China, the United States, Pakistan and Brazil were, respectively, the largest cotton producing countries in the world (ABRAPA, website).[1] In terms of exports, according to the International Cotton Advisory Committee, the seven largest cotton exporters have been alternating between the US, Brazil, Benin, Burkina Faso, Chad, Mali and Togo since 1999 (ICAC Cotton World Database, website). Of the five African countries, Benin, Burkina Faso, Chad and Mali make up the so-called Cotton-4, which in 2003 launched the Cotton Initiative in the World Trade Organization (WTO), as will be discussed below. In addition, the Cotton-4 countries participated in a technical cooperation project[2] proposed by the Brazilian government called "Support for the Development of the Cotton Sector in the Cotton-4 Countries" (2009-2013) which will be further discussed in this paper.

The Brazilian domestic scenario is also favorable, since the country has the fifth largest consumer market, with nearly one million tons / year of feather consumed. In Brazil, the cotton chain (cotton-textile-garments) is the second sector that most employs workforce (ABRAPA, website). Brazil is also internationally known for the development of its tropical agriculture. In the 1960s, Brazil was a food insecure country and faced a very serious internal supply crisis. Inspired by the Green Revolution[3], the Brazilian government decided to develop a series of public policies aimed at national agricultural development, so that the country would achieve food self-sufficiency. Thus, in addition to creating a new public agricultural research institution (the Brazilian Agricultural Research Corporation – EMBRAPA),

Brazil increased investments in state research institutes, invested in graduate programmes in related areas, expanded subsidized rural credit and invested in improving rural extension. From a logistical and storage perspective, warehouses and roads were built.

Agriculture has always been one of the most important fields for Brazil's international cooperation, whether received or provided. With the significant development of Brazilian agriculture, mainly from important technologies generated by EMBRAPA, such as the correction of soil acidity and the development of new "tropicalized" varieties (such as soybean), Brazil has also started to provide technical cooperation to developing countries interested in knowing how Brazil evolved and exchanging information and knowledge on agriculture. According to Maurício Lopes, former President of EMBRAPA, the institution stands out for supporting projects of greater scope and impact, having implemented 12 structuring projects in Africa and Latin America and the Caribbean by 2016. With an an approximate budget of US$78 million (Almino; Lima, 2017), these projects covered 13 countries in the areas of strengthening research and innovation capacity, food security and cotton. In the latter, EMBRAPA has implemented, since 2009, six projects that started with the Cotton-4 countries, but gained momentum with the resources arising from the cotton dispute and were expanded to other regions of the African continent (Southern, Eastern) and to South America.

Thus, this paper is focused on understanding the negotiation, implementation and the results obtained by the Cotton-4 Project. In order to do so, it is important to analyze the commercial and the International Cooperation for Development (ICD), two of the main relevant agendas of the Brazilian Foreign Policy. Brazil, through consistent action in the multilateral field of the WTO, contested the United States' domestic policy of cotton subsidies under the Dispute Settlement 267 (DS267). From the victory obtained and confirmed by the various litigation panels, the country received compensatory funding from the US government totaling just over US$ 800 million - of which US$ 80 million were destined to finance cotton ICD projects with developing countries, such as the Cotton-4 Project.

The linkages[4] developed by Brazil between the multilateral trading system and the International System of Development Cooperation (ISDC) will also be explored. In order to achieve that, the paper will briefly examine Brazil's performance in the WTO's cotton dispute from 2002 to 2014. Furthermore, the Brazilian ICD for the strengthening of the cotton sector in the Cotton-4 countries (Benin, Burkina Faso, Chad and Mali) will be analyzed in terms of how the initiative was negotiated and implemented. This paper derives from research for a doctoral dissertation, in which the following methodological techniques were used: (i) bibliographic review; (ii) document analysis; (iii) interviews with stakeholders in the cotton dispute and in the Brazilian cotton cooperation projects in the Cotton-4 countries; and (iv) case study of the Cotton-4 Project (2009-2013).

The Cotton Dispute at the WTO: A Historical Overview (2002-2014)

The US programme of credit and subsidies to cotton producers and exporters, defined in the Farm Security and Rural Investment - Farm Bill; GSM-102, GSM-103, and Step 2: Upland Cotton User Marketing Certificate Programme mechanisms, was responsible for a sharp drop in international cotton prices in the period of 1999-2002. In 2001 alone, the estimated loss for the sector in Brazil was about US$ 600 million, for such mechanisms depressed international prices by 12.6 per cent and artificially raised US production and exports by 28.7 per cent and 41.2 per cent, respectively (WT/DS267/1G/L/571G/SCM/D49/1G/AG/GEN/54, 2002).

Thus, in September 2002, Brazil formally requested the opening of consultations with the US in the WTO to discuss the above-mentioned mechanisms and their effect on the international cotton trade. In March the following year, the Dispute Settlement Body (DSB) installed the dispute panel against the US (DS267 case). In May 2003, a manifesto signed by the Cotton-4 countries[5] was directed to the WTO against the practice of subsidising the cultivation of cotton by developed countries shortly after the opening of Brazil's panel against the US in the cotton dispute (WT/MIN(03)/W/2, 2003). The manifesto was named "Poverty reduction: sectoral initiative in favour of Cotton" and reported that the high level of subsidies offered to cotton farmers in some WTO member countries was one of the major causes of the problems faced by the global cotton production.

It is worth mentioning that the problem of subsidies applied to cotton by developed countries was already established as one of the important topics of the Doha Development Agenda at the WTO and it is especially relevant for Least Developed Countries (LDCs). The revised Doha agenda, known as the "July Package", (decision WT/L/579), was adopted by the WTO General Council in August 2004. In this context, the WTO's Director-General created the Consultative Framework Mechanism on Cotton in October 2004. The Forum meets regularly to exchange information and submit claims; notify ongoing activities for the developing community; report on partners' domestic reforms, and dialogue between donors and partners. The mandate of the Consultative Framework was reaffirmed in the Hong Kong Ministerial Declaration (2005)[6].

In March 2005, the DSB's Appellate Body in its final decision ruled that the mechanisms challenged by Brazil were illegal under the multilateral trade agreements of the organisation. After the first defeat in the Appellate Body, the United States Department of Agriculture (USDA) sought to adapt the disputed export credit guarantee programmes, since the Executive could administratively modify it. However, the subsidies related to legislative matters established in the Farm Bill[7] by the US Congress were not modified, because Congress did not act to eliminate them – in part due to the strong lobbying pressure group of cotton farmers in the country. In September the following year, the case was reopened at Brazil's request to investigate the measures taken by the US.

During the 9th session of the Director-General's Consultative Framework Mechanism on Cotton, which took place in 2007, Brazil set out to elaborate a concept document[8] for the implementation of South-South cooperation (SSC) in the cotton sector together with the Cotton-4 countries. The strategy aimed at strengthening the cotton farmer industry in those African countries. Hence, Brazil sought to strengthen its position in the WTO case by reinforcing its leadership, reducing the potential adverse costs to the Cotton-4 countries, and by seeking to give a strong ideational character to its action against the US in the cotton dispute – especially through the linkage of the dispute with the Doha agenda and the July Package.

The final decision of the DSB's Appellate Body on the case was issued in June 2008. As a result of non-compliance with the provisions of the DSB by the United States, Brazil requested the right to take countervailing measures in the form of direct retaliation on the sector and cross retaliation with the breaking of the intellectual property rights of US pharmaceuticals. In November 2009, the DSB granted Brazil the right of retaliation in the annual amount of US$ 147.3 million. By the end of 2009, the US had not shown political will to change its domestic law, as determined by the DSB, or reach an agreement with Brazil. If the United States did not reform its cotton subsidy programmes, Brazil could impose up to US$ 800 million in retaliatory trade sanctions against US goods, pharmaceuticals and software (Hopewell, 2013).

In March 2010, Brazil notified the DSB it would retaliate against the United States from April 07 on. However, a change in the American position allowed the beginning of discussions for a negotiated solution. The first step in this direction was the signing of the "Memorandum of Understanding between the Government of the United States of America and the Government of the Federative Republic of Brazil regarding a Fund for Technical Assistance and Capacity Building with respect to the Cotton Dispute (WT/DS267) in the WTO" (hereafter DS267 MoU-1) between the two countries on April 20, 2010.

The DS267 MoU-1 established three important points: i) the understanding between the two countries that a mutually negotiated solution to the dispute was in the best interest of both parties; ii) until 22 April 2010, Brazil was to publish in its Official Gazette a 60-day delay in the implementation of any retaliatory measures regarding the DS267 case; and iii) while both countries sought to advance a definitive negotiated solution, a Fund for the benefit of Brazil would be set up with US funds to finance activities defined in the document. As a result, on April 30 that same year, Brazil notified the WTO its unilateral postponement of the implementation of countervailing measures authorized by the DSB.

In order to make the third point effective, the Brazilian Association of Cotton Producers (ABRAPA) created in June 2010 an institution with legal personality to receive these resources. This institution – the Brazilian Cotton Institute (IBA) – became responsible for the administration of the Fund. Under the agreement, the United States held a first transfer of US$ 30 million for the creation of IBA and a second transfer,

in June of that year, of an additional amount of US$ 4.3 million. Furthermore, it was determined an additional transfer of funds in each subsequent month in the amount of US$ 12,275,000 (US$ 147.3 million per year stipulated in an amount equivalent to the annual amount that Brazil had been authorized by the WTO to retaliate against the US).

According to the DS267 MoU-1, the financial resources of the Fund could be used in the following activities:

> Authorized activities are technical assistance and capacity building activities, excluding research, related to the cotton sector in Brazil and related to international cooperation in the same sector in countries in sub-Saharan Africa, in Mercosur member and associate member countries, in Haiti, or in any other developing country as the parties may agree (Brasil; ESTADOS UNIDOS, 2010).

The implementation of this agreement and the additional signing of the "Framework for a Mutually Agreed Solution to the Cotton Dispute in the World Trade Organization (WT/DS267)" in August 2010 between both countries indefinitely suspended the implementation of countervailing measures by Brazil relating to the cotton dispute at the WTO.

The signing of the Framework Agreement by itself did not constitute a final solution to the dispute. It only set guidelines for the discussions between the two countries with a view towards a permanent solution to the case. It also suspended the application of countervailing measures by Brazil while the DS267 MoU-1 and the Framework Agreement were in force. Among the main provisions of this Framework Agreement were: i) the US would not exceed the level of support practiced in the 1999-2005 period; ii) the countries would maintain regular consultations seeking a negotiated solution to the case; iii) DS267 MoU-1 devices would have indefinite application as long as the Framework Agreement was valid; iv) after the enactment of the new Farm Bill in 2008, Brazil and the United States would undertake consultations to determine whether a mutually agreed solution to the dispute had been reached by the new legislation; v) the agreement had indefinite duration; and vi) Brazil committed itself to not impose countervailing measures against the United States under the cotton dispute while the agreement was in force (Canesin; Bueno, 2015).

In October 2013, the United States cut off the monthly transfers to the Fund managed by IBA due to automatic cuts in the US government spending that went into effect in March of that year. Until then, the US had paid approximately US$ 505 million[9] to Brazil as repair. This measure represented the unilateral termination of the 2010 US-Brazil agreement because this could only occur if the US Congress approved a new Farm Bill (which only happened in February 2014). Furthermore, the Bill had to comply with the US obligations under the WTO as set out in the DS267 MoU-1 and the US-Brazil Framework Agreement.

Although the Council of Ministers of Brazil's Foreign Trade Chamber (Camex) had authorized Brazil to open a new panel at the WTO in February 2014 to

assess whether the new American Farm Bill met the recommendations adopted by the WTO DSB under the DS267, Brazil chose to once again seek a negotiated solution. Thus, in October 2014, both countries announced the permanent closure of the DS267 dispute on cotton at the WTO with the signing of a new Memorandum of Understanding between the two countries: "Memorandum of Understanding related to the Cotton dispute (WT/DS267)" (DS267 MoU-2).

Starting from the new agreement, the United States committed itself to adjust its export credit guarantee programme (GSM-102) under the 2014 Farm Bill, whose information on the operation were to be informed to Brazil on a semi-annual basis. Besides that, the DS267 MoU-2 includes an additional – and final – payment of US$ 300 million to IBA and, similarly to the first Memorandum, determines that resources are to be used in authorized activities, related to technical assistance and capacity building, in Brazil and in international technical cooperation with pre-defined countries or any other developing countries agreed by the parties[10]. The main difference, however, resides in the permission to finance activities of research[11], infrastructure and logistics.

Brazil's Performance in the International System of Development Cooperation (Early 1950S Until 2016)

According to Ayllón Pino (2006), the International System of Development Cooperation (ISDC) is a heterogeneous international regime[12] resulting from three historical dynamics: (i) the East-West conflict, characteristic of the bipolar period of 1945-1988, (ii) the decolonisation process, which started in the middle of the 20th century and was intensified from the 1950s, and the consequent shift of the conflict to the North-South axis and (iii) the deepening of globalisation and regional and economic integration.

The initial institutionalisation of the ISDC, which followed the process of legitimising multilateralism, had three main objectives that echoed the Bandung Conference (1955): human rights, decolonisation and development (Mello E Souza, 2014)[13]. International development cooperation[14] was institutionalized after the creation of specialized UN agencies, from bilateral cooperation agencies in developed countries and the Organisation for Economic Cooperation and Development (OECD), between the 1950s and 1970s.

The 1960s represented a milestone for the consolidation of the ISDC in which two relevant facts were harbored: the publication, in the United States, of the Foreign Assistance Act (1961) and the definition of the concept of "aid" (1969). The Foreign Aid Act, signed by President John F. Kennedy in September 1961, reorganized US foreign aid programmes then in force, separated military from non-military aid and created USAID. The newly created agency started to manage the US government's technical, economic, loan, and agricultural surplus distribution activities.

In 1969, the OECD's Development Assistance Committee (DAC / OECD) developed the definitive concept of Official Development Assistance (ODA), to replace the term "aid". ODA is

characterized by occurring strictly at the governmental level and by having at least 25 per cent of the amounts transferred in the form of lost funds, that is, with no prospect of repayment. In this context, the main themes of ODA were: food aid, infrastructure and agricultural development.

In the 1980s there was a downturn in international development cooperation and its projects became part of the structural adjustment programmes originated in the Washington Consensus[15]. With the gradual global economic recovery and the deepening of globalisation in the following decade, the ISDC resumed with an emphasis on cooperation (and no longer on aid) and with the participation of new actors in international cooperation projects like non-governmental organisations (NGOs), such as "Save The Children" and "Oxfam", and non-profit foundations such as the "Bill and Melinda Gates Foundation".

The 1990s were marked by important adjustments in the thematic and geographical agendas of international cooperation, which reflected the post-Cold War international context, the deepening of globalisation and the neoliberal economic agenda imposed on developing countries. In this sense, sectorial and programmatic financing was intensified, as well as the dialogues on public policies and programmes aimed at capacity building (Milani, 2012).

The evolution of the ISDC at the beginning of the 21st century has again brought the use of the word "aid" into the vocabulary of international cooperation for development through a growing concern with aid effectiveness. In 2005, the OECD launched the Paris Declaration on Aid Effectiveness for Development, which highlights five guiding principles of aid effectiveness - in the view of DAC / OECD donor countries: ownership, alignment, harmonisation, management oriented towards results and mutual accountability (OECD, 2008)[16]. This document brought clear commitments for both donor and recipient countries, now called partners, and goals to be achieved by 2010, in addition to indicators and mechanisms for monitoring and evaluation.

The ISDC has undergone profound changes, especially since the changes that occurred in the International System at the beginning of the 21st century, such as the financial crisis, the decrease in foreign aid from traditional donors and the emergence of emerging or intermediate state actors. Emerging donors, protagonists of South-South Development Cooperation (SSDC), are characterized by being countries that have reached a high level of development more recently, such as South Africa, Brazil[17], China, India, Mexico and Turkey. In general, emerging donors have a very diffuse cooperation network focused on their geographic region, to guarantee peace, stability and strengthen their regional leadership, through the distribution of public goods (Vigevani; Cepaluni, 2007).

The Brazilian performance at the ISDC initiated with a bureaucratic coordination structure from the 1950s onwards. That year, the National Technical Assistance Commission (CNAT) was created, composed of eleven members appointed by the President to

systematize the international technical assistance received (Milani, 2017). In 1959, the Brazilian Government Office for the Coordination of the Technical Assistance Programme was created, directly linked to the Presidency of the Republic, with the objective of coordinating, above all, the aid received. This Office was replaced in 1969 by the Subsecretariat for International Economic and Technical Cooperation (SUBIN) of the Ministry of Planning and General Coordination, through Decree No. 65,476, of October 21, 1969. Within the Ministry of Foreign Affairs (also known as Itamaraty in Brazil) there was also a department responsible for technical cooperation, the Department of Scientific, Technical and Technological Cooperation (DCT).

The following years were marked by the creation of an inter-ministerial system of technical cooperation (idem, ibidem). Thus, the basic competences of international technical cooperation, mainly planning, negotiation, coordination, execution, monitoring and evaluation, were assigned to SUBIN, in the Ministry of Planning, and to the Technical Cooperation Division (DCOPT), within the scope of the Itamaraty's DCT.

The Brazilian Cooperation Agency (ABC) was created in 1987, linked to the Ministry of Foreign Affairs, with the objective of centralising the political formulation, management and monitoring of the Brazilian system of international technical cooperation (Cervo, 1994). Initially, it was structured with a focus on receiving cooperation from other countries, but over time and with the change in the country's international status, this Agency started to coordinate and manage the cooperation provided by Brazil to other developing countries.

ABC's activities are guided by five principles of South-South cooperation, elaborated by Itamaraty: solidarity diplomacy, absence of conditionalities, acting in response to demands, untying commercial interests and recognition of local experience and adaptation of Brazilian experience[18]. The inflections in foreign policy implemented during President Lula's administrations (2003-2010) started to emphasize cooperation with developing countries as a priority (Lima, 2005).

Up until 2016, ABC was linked to Itamaraty's General Secretariat for Cooperation and Commercial Promotion, and its assignment was:

> [...] plan, coordinate, negotiate, approve, execute, monitor and evaluate, at the national level, programmes, projects and activities for development cooperation in all areas of knowledge, received from other countries and international organisations and that between Brazil and other developing countries, including related actions in the field of training for the management of technical cooperation and dissemination of information. (ABC, 201-, our translation).

It is important to highlight that Brazil is in a transition stage between recipient of ODA and provider of cooperation, as ABC's competence demonstrates. Between 2009 and 2012, the country received more than US$ 2.3 billion in

official development assistance (Milani et al., 2015). Regarding the provision of cooperation, in the period between 2005 and 2009, Brazilian cooperation for international development was divided into the following categories: technical, scientific and technological cooperation; scholarships for foreigners; humanitarian help; peace operations; and contributions from the Brazilian budget to international organisations (Brasil, 2010)[19].

It is worth mentioning that, in that five-year period, a total of 252.6 million Brazilian Reais (R$) was spent on technical, scientific and technological cooperation. Between the years 2005 to 2010, the increase in financial resources invested in technical cooperation was more than 300 per cent, from R$25 million in 2005 to R$101 million in 2010 (Brasil, 2013). The main areas of Brazilian technical cooperation are: health, agriculture, education and professional training.

The third edition of the COBRADI report was published in 2016 and covered the period from 2011 to 2013, that is, the first three years of the first term of President Dilma Rousseff. Regarding international technical cooperation, the Brazilian government maintained a higher level of spending compared to 2005-2009, but below the level of 2010, the year in which the country most invested in the area. R$211.6 million was spent in that three-year period[20] (Brasil, 2016). The fourth edition of COBRADI was released in 2018 and comprehended the period from 2014 to 2016. For this period, Brazil spent a total of R$328 million on technical, scientific and technological cooperation executed mainly through ABC and the Ministry of Science, Technology, Information and Communications (MCTIC) (Brasil, 2018)[21]. Therefore, the examination of Brazilian government spending in the period between 2005 and 2016, through the COBRADI reports, shows a sharp drop in contributions to ABC and to Brazilian cooperation for development in recent years.

Having examined the themes that host the central discussion of this paper - **commercial multilateralism** and **international cooperation for development**, the next section will deal with the first Brazilian ICD initiative with the Cotton-4 countries focusing on the negotiation, implementation and main results of the Cotton-4 project (2009-2013).

South-South Brazilian Cooperation for Cotton Development: The First Project with the Cotton-4 Countries (2009-2013)

Initiated in 2003, eight months after the request of Brazil's consultations at the WTO, which inaugurated the DS267 litigation, the Cotton Initiative was signed by the Cotton-4 countries which had (and still have) in the cotton sector one of the most important sources to develop their economies. The countries' action was politically important to keep the cotton issue on the agenda of the WTO and also represented support for the Brazilian claim, even if not directly, entering into litigation with Brazil as a complaining party.

Then, in 2006, the Brazilian

government, aiming at strengthening the political approach with the Cotton-4 countries and considering the victory obtained at the WTO in September 2004, showed the results obtained in the litigation to the Cotton-4 countries and, in parallel, carried out a political and technical mission to three of these countries - Benin, Burkina Faso and Mali. The mission was composed of representatives from Itamaraty, ABC and EMBRAPA, with the aim of identifying possibilities for technical cooperation in the cotton area. The mission members held hearings and meetings with Ministers of State for Agriculture, Foreign Affairs and Industry and Trade; researchers from Agronomic Research Institutes; association of producers and managers and technicians of processing companies to better understand the local context and reality, to know the productivity data, production characteristics and the way of functioning of the local research institutes.

EMBRAPA's representatives collected the main demands of the three countries for technical cooperation, which is consolidated in Table 1:

Even though the areas of biological pest control, biotechnology and production of yarn and fabrics and specially germplasm exchange were listed by more than one country the EMBRAPA researchers identified the need for a previous and more basic intervention, without which the other interventions would not be sufficient to improve productivity. Concerning the soil correction, it is mentioned:

> Therefore, there is the cultivation of cotton in soils lacking correction and using very inadequate doses of fertilizers. It should be emphasized that there will be no expectations of changes in production performance, even with the improvement in other aspects of the production system, as long as this factor of production is not properly modified. For that, government actions are necessary, in terms of national development

Table 1: Demands for Technical Cooperation in the Cotton Sector of Benin, Burkina Faso and Mali, 2006

Benin	Burkina Faso	Mali
Germplasm exchange	Germplasm exchange	Training in biotechnology and biosafety
Training in biotechnology and biosafety	Economics studies with emphasis on foreign trade	Germplasm exchange, documentation and conservation
Biological pest control	Training in biofuel production from cottonseed processing	Biological pest control
Training in the production of yarn and fabric from the fiber processing	Training in the production of yarn and fabric from the fiber processing	No-till system
		Integrated Crop-Livestock-Forest Systems

Source: The author, 2018, from travel report (Morello; Pereira, 2006).

> policy, with programmes to correct acidity and improve soil fertility. From corrected soils, modifications in cultivation practices can be implemented which also contribute to increases in performance (Morello; Pereira, 2006, n. pag, our translation).

Despite this caveat, the report pointed out some areas in which Brazil could support the four countries and taking into account the aforementioned African demands: germplasm exchange, documentation and conservation; biological control of *Helicoverpa armigera*; fiber processing; core processing and chemical correction of the soil and improvement of the physical infrastructure (laboratories). None of the interviewees could explain why Chad, although part of the Cotton Initiative at the WTO and one of the parties to the Cotton-4 TCP, was not covered by any of the initial missions. One can infer that the geographical distance - Chad is the only country that is not in the western region, but in Central Africa -, the internal logistical and infrastructure difficulties, the political instability and the lack of a Brazilian Embassy in the country (the Cameroonian Embassy is cumulative with Chad) were factors that significantly contributed to the fact that Chad was not part of the missions.

Two years later, through ABC, Brazil organized two additional missions to the same countries, the first of which had representatives from the same institutions as in 2006: Itamaraty, ABC and EMBRAPA. In this mission, carried out in October, the elaboration of a technical cooperation project (TCP) with the Cotton-4 countries was already more concrete, as the mission's objective was "*[...] to collect complementary data and technical elements that can solidly support a proposal for a technical cooperation programme, specific to the cotton chain between Brazil and the Cotton-4 countries*" (Netto, 2008). The report brought a diagnosis very similar to that of 2006 and confirmed the findings of the first mission: the control of pests and diseases, the lack of high-performance varieties and, mainly, physical and chemical factors of the soil were the main technological limitations to the increase in cotton productivity and production (idem, ibidem). The report also highlighted the importance of any intervention in the region taking into account local production systems, which integrated cotton with food crops, such as corn and millet.

In the following month, in November 2008, ABC carried out a new mission to the same countries, in order to examine possible locations for the project's headquarters. At that point, the project document was already in an advanced stage of elaboration and would focus on the technical areas of breeding and biotechnology; soil and plant nutrition and integrated pest management, that is, the demands of the countries, as shown in Table 1, were respected in the design of the project. The report also highlighted the similarity of the production systems of the three countries, which justified the project's regional approach (Barbosa, 2008). The team visited eight experimental stations that could house the project's headquarters in the three countries, especially the Farakoba stations, from Burkinabe National Institute for Agricultural and Environmental Research (INERA), in Burkina Faso, and the Sotuba stations,

from the Institute of Rural Economy (IER), in Mali.

After the November 2008 mission, there was a political decision by the Brazilian government to host the new project in Mali, at the Experimental Station of the Regional Agricultural Research Center in Sotuba. With that, the project was ready to officially begin.

The "Support for the Development of the Cotton Sector in the Cotton-4 Countries (Benin, Burkina Faso, Chad and Mali)" project was signed in February 2009, with an original duration of 36 months, being valid from March of that year until February 2012. The TCP had ABC as the coordinating institution, EMBRAPA as the Brazilian executing agency and the National Institute for Agricultural Research in Benin (INRAB), the Burkinabe INERA, the Chadian Institute for Agricultural Research for Development (ITRAD) and the Malian IER, as local co-executing institutions. Its specific objectives were: (i) to revitalize the existing Sotuba Experimental Station, in Bamako, which should function as a Pilot Unit for Adaptive Research and Demonstration of innovative technologies; (ii) to develop adaptive research in the areas of breeding, soils / nutrition / no-till and integrated pest management; (iii) to strengthen the training of researchers, technicians and leading farmers in the Cotton-4 countries in new cotton production technologies; and (iv) to prepare and disseminate materials about the knowledge validated during the project on improving cotton production in the Cotton-4 countries. The initial budget was US$ 5.21 million, with Brazil accounting for almost 96 per cent of the costs (US$ 4.11 million from ABC and US$ 0.89 million from EMBRAPA, through technical hours). The final budget for Cotton-4 Project was US$ 5.48 million, after budget review. Of these, US$ 4.38 million corresponded to the financial expenditure of the Brazilian government, through ABC. According to the quarterly report (July-September / 2013) of the Brazilian Cotton Institute and independent external evaluation report for Cotton-4, almost US$ 1.35 million of the final project budget came from the DS267 litigation resources (IBA, 2013; Centro De Estudos E Articulação Da Cooperação Sul-Sul; Plan Políticas Públicas, 2015). That is, the Brazilian government actually spent US$ 3.03 million on the project.

From these objectives, the following

Table 2: Expected Results of the Cotton-4 Project (2009-2013)

R1	Sotuba Experimental Station, in Bamako, is revitalized, to function as Pilot Unit of Adaptive Research and Demonstration.
R2	Adaptive research in the areas of breeding, soils / nutrition / no-tillage and integrated pest management are validated.
R3	Researchers, technicians and leading farmers from Cotton-4 countries trained in new cotton production technologies.
R4	Dissemination materials on the new cotton production technologies prepared and disseminated to extension technicians and farmers.
R5	Project monitored and evaluated.

Source: The author, 2018, from the Cotton-4 TCP document.

results were designed:

The first result (R1) was the most difficult to be achieved by the project due to the complexity of the processes of contracting works in a third country and the acquisition of goods and equipment for shipment to Mali; some purchasing processes were started in 2009 and completed only at the end of 2013. The revitalisation of the Sotuba Experimental Station involved physical renovations and purchases of equipment for the soil and biotechnology[22] laboratories, painting of the administrative area and paving of access roads inside the Station. In addition to the renovations, an entomology laboratory, a cold storage room, offices and meeting rooms, a support house and bathrooms were built. Also, fences were installed at the Demonstration Unit of the project in Sotuba, with resources from the Brazilian cooperation. In total, more than 300 agricultural equipment, materials and implements were acquired by the TCP.

Result R2, aimed at adaptive research, was divided into three main areas: use and conservation of soils and implementation of the No-Tillage System, Integrated Pest Management and Breeding. Throughout the project, Brazil sent ten varieties of cotton and six varieties of forage plants to all the countries in the project, and coordinated the testing of Brazilian varieties (BRS) and local ones. The No-Tillage System was encouraged as a good soil conservation practice; in addition, as the diagnostic reports had pointed out, the project sought to rotate cotton with food crops (mainly corn and millet). The objective was not to encourage competition between cash crop and local subsistence crops to show the farmers they could earn an income without jeopardising their families' food security. According to José Di Stefano (2016, n. pag), Project Coordinator, "*the idea of the project was really to use cotton as a locomotive so that farmers can produce more food and can earn money surplus*".

The activities towards achieving Result 3 began in 2009, with the participation of 12 researchers from the Cotton-4 countries at the 7th Brazilian Cotton Congress (CBA), in Foz do Iguaçu. In the following year, the training sessions began: two in Brazil and three in Mali. In 2011, due to ABC's budget restrictions (Di Stefano, 2016), the strategy for the result was changed so that the training could only take place in Mali, with a duration extended to two weeks. Only the training session on Breeding remained unchanged, being one in Brazil and the other in Mali. In 2012, Integrated Pest Management and No-Tillage System training sessions underwent new changes in its format and methodology, to take place in all Cotton-4 countries. Within EMBRAPA's logic of action, Brazilian and African researchers played a fundamental role in the training and validation of the technologies commonly defined for the Cotton-4 countries. The final stage of the Cotton-4 project was to consolidate this transfer, which resulted in the elaboration of dissemination materials (Result 4) and continued involvement of the researchers (this time engaged in monitoring and no longer in pure and simple training). In addition, it was necessary to include technology transfer agents to assist in the process of

consolidating access and its use. In total, 22 courses were held and around 425 people were trained (Centro De Estudos E Articulação Da Cooperação Sul-Sul; Plan Políticas Públicas, 2015).

In addition to the theoretical component, result R3 contemplated the implementation of Demonstration Units (UDs), on agricultural best practices and results of validation tests on cotton cultivation, and the organisation of Field Days[23] in the four countries and the participation of researchers from Cotton-4 countries in two editions of the CBA, in 2009 and 2011. The training sessions were coordinated by 38 EMBRAPA professionals, including researchers and analysts, from six EMBRAPA research centers.

Result R4 stipulated the elaboration of dissemination materials on new cotton production technologies for extension technicians and farmers. The last 18 months of the project were dedicated to the development of these materials and resulted in the joint elaboration of 10 publications, three volumes of a Manual of Best Practices for Cotton[24], five technical documents[25] and two publications for the dissemination of the project. The resulting material was aimed at researchers; thus, the language should be first revised and adapted to, then, be used by field technicians and farmers (Centro De Estudos E Articulação Da Cooperação Sul-Sul; Plan Políticas Públicas, 2015).

Activities towards the achievement of result R5 began in 2010, with the first meeting of the project's Steering Committee, held in Brasília. In all, the Cotton-4 Project held six meetings of the Steering Committee, with an average duration of three working days and rotating among the five countries participating in the Project (one in Benin, one in Burkina Faso, one in Chad, one in Mali and two in Brazil). The Steering Committee produced six minutes with a summary of the activities developed during the period examined by the Committee meeting and recommendations for improving management and technical execution. In addition to the meetings of the Steering Committee, R5 also counted on a mid-term evaluation in February 2011, an internal evaluation by EMBRAPA, between September 2013 and January 2014[26], and an external evaluation carried out by the public notice's winning consortium – Articulação Sul and Plan Public Policies.

The Cotton-4 Project should have been completed in February 2012. However, in March of that year, Mali, which hosted the project's HQ, suffered a coup when the military declared the country's constitution suspended and removed President Amadou Toumani Touré, who formally resigned on April 8. The strong political instability that followed meant that some activities of the project were suspended, postponed or occurred without monitoring by the Brazilian side. The Project Coordinator, José Di Stefano, returned to Brazil until the situation stabilized again. This fact contributed to the project being extended on three occasions (until December 2012, until June 2013 and, finally, until December 2013). As a result, it was the first Brazilian TCP to benefit from the DS267 litigation resources, having received approximately US$ 1.35 million.

The extensions and budget increase allowed the project to better achieve the proposed results and become one of the most well-known and valued Brazilian SSDC projects. The good results of the Cotton-4 Project are due to several reasons. In an interview with the author, the Project Coordinator makes reference to the former Head of the IER's Sotuba Station, Dr. Abdoulaye Hamadoun, citing the reasons for the project's success:

> Hamadoun said that the project worked for three reasons: one, because they came to Brazil and saw what we know how to do; the second reason is that the EMBRAPA employee who coordinates the project does not stay in the office, and he said that an important reason was that [Brazilian] Ambassador to Mali, Jorge, went to the field. Jorge along with [his wife] Tânia are largely responsible [for the success], because it was useless to do a good job without the Embassy support (Di Stefano, 2016, n. pag, our translation).

In an interview with the focal points of the co-executing institutions for the project, the author asked about the principles[27] of the Brazilian SSDC and its practical application in the Cotton-4 Project. **Solidarity diplomacy** (fully applied to 100 per cent of respondents), **acting in response to demands** and **untying commercial interests** (both considered fully applied to 75 per cent of respondents) were the principles with the greatest application during the execution of the project. Regarding the **recognition of local experience and adaptation of the Brazilian experience** and **absence of conditionalities** principles, it is noteworthy that only half of the interviewees considered it fully applied.

Interviews with stakeholders from the four countries have revealed the project's strengths and weaknesses. The latter are mainly related to the lack of clarity in procedures, especially financial and management ones. All the interviewed researchers reinforced, to a greater or lesser extent, the difficulty of timely purchasing inputs for agricultural campaigns and, at the same time, being accountable in order for Brazil to pay the previous expenses (sending receipts and invoices to ABC, for example). This difficulty reveals one of the characteristics of the Brazilian cooperation: the fact that Brazil does not allocate financial resources directly in partner countries.

The project's positive points were also highlighted in the interviews. Below, there are some elements mentioned by them:

> **Benin:** First, it is friendly. And what is also positive is the freedom to adapt technologies. It is not uncompromising. These are really close realities: Brazil and Benin have similar realities. We are here in an arid region and in Brazil there are also arid regions. These are two countries that start from the same reality, that is part of the [*project's*] strength (Hougni, 2017, n. pag, our translation).

> **Burkina Faso:** I believe that, in terms of the project in the first phase [*2009-2013*], it was all about discovering the potential of Brazilian technologies in aspects of improving production

> and being able to evaluate Brazilian [*genetic*] material; it was a positive aspect. But, in terms of no-tillage system, we were also able to discover this approach to sowing under plant cover and its adaptability to the African context was also a positive aspect (COULIBALY; NAITORMBAIDE, 2017, n. pag).
>
> **Chad:** What I liked about the courses is the capacity building; it is a special resource, and when you train someone, it is a tremendous wealth that you give to that person. Giving money, or anything like that, is nothing. But, when we strengthen someone's capacity, the level of development of the country itself... The level of education of the people allows to evaluate the level of development of a country (COULIBALY; NAITORMBAIDE, 2017, n. pag).
>
> **Mali:** Training provided; equipment and infrastructure supplied; field days and study visits [*to Brazil*] conducted (Yattara, 2017, n. pag).

Therefore, the Cotton-4 Project has specificities that set it apart from other TCPs executed by Brazil. By agreeing with the assertion that technical cooperation is a tool of foreign policy, this paper understands that the relevance of implementing cooperation projects lies in its political character and not purely and simply in the technical aspect. In the Cotton-4 Project, this characteristic is even more significant, as Brazilian support for the four African countries began in a multilateral international trade forum and technical cooperation was the instrument that the Brazilian government chose to give concrete form to its political performance in the International System.

Concluding Remarks

Even before the final decision of the DSB Appellate Body of 20 June 2008, and before starting bilateral negotiations for the creation of a financial compensation fund (2010), Brazil decided to promote a linkage between the trade and development cooperation agendas, based on the developments of the WTO dispute, which took place within the scope of the Doha Round and the Director-General's Cotton Consultative Mechanism. In 2005, Brazil decided to have a technical cooperation programme with the Cotton-4 countries (Amorim, 2017).

The Brazilian SSDC seeks to differentiate itself through the implementation of the five guiding principles already mentioned. Although the examination of the Cotton-4 Project (2009-2013) shows that these principles have been, to a large extent, respected and applied[28], it should be borne in mind that the South-South Development Cooperation of the country is an instrument of foreign policy and, as such, it has to balance political interests, economic development motivations - of all related parties - and moral and humanitarian reasons (DEGNBOL-MARTINUSSEN; ENGBERG-PEDERSEN, 2003).

The decision to establish cooperation with the Cotton-4 countries was based on a political-strategic calculation, in order to maintain the discussion on subsidies on the agenda at the WTO and

to give greater legitimacy to the Brazilian position, since the Cotton-4 countries faced similar problem to the Brazilian one regarding subsidies and their distortive effects. The good technical and political outcomes of the Cotton-4 Project, plus the availability of US$80 million specifically for technical cooperation from the DS267 compensation fund, led other African and Latin American countries to request Brazil's partnership to develop agricultural TCPs. Between 2014 and 2018, the country developed four SSDC regional projects[29] on cotton with African countries and five trilateral TCPs with South American countries[30] and the FAO.

The Cotton-4 Project is considered a success story of the Brazilian development cooperation. According to the findings of the empirical research carried out, the success is the result of both political and technical aspects. The former is related to the successful promotion of linkages between commercial (WTO) and international cooperation agendas. The latter is based on the participation of a renowned Brazilian research institution (EMBRAPA), which has developed robust technological solutions for tropical agriculture, as well as the engagement and sound knowledge of the local realities of the African institutions and their researchers and technicians.

Endnotes

1 India produced 6.7 million tons of cotton, China, 5.4, the United States produced 2.9 million tons, Pakistan, 2.05 and Brazil 1.46.

2 In 2014, the Togolese government requested participation in the Cotton-4 agricultural project. Thus, all the five largest African cotton exporters are part of the "Technological Strengthening and Dissemination of Agricultural Best Practices for Cotton in the Cotton-4 Countries and Togo" (2014-2018) project.

3 A world movement which started in the late 1960s that aimed at the development and diffusion of new agricultural technologies.

4 The meaning of linkage used in this chapter is that of linking or connecting two different foreign policy agendas of the same state. It differs, therefore, from what is conventionally called linkage politics, that is, the policy of State "A" to make its course of action on a given subject (AOD, for example) contingent on the behavior of the State "B" on a different issue (human rights, for example) (see Stein, 1980; Lohmann, 1997).

5 Two of them, Benin and Chad, joined the cotton dispute alongside Brazil as third parties. The following countries also joined the DS267 case as third parties: Argentina, Australia, Canada, China, European Union, India, New Zealand, Pakistan, Paraguay, Venezuela, Japan, Taipei, and Thailand.

6 "We recall the mandate given by the Members in the Decision adopted by the General Council on 1 August 2004 to address cotton ambitiously, expeditiously and specifically, within the agriculture negotiations in relation to all trade-distorting policies affecting the sector in all three pillars of market access, domestic support and export competition, as specified in the Doha text and the July 2004 Framework text." (WT/MIN(05)/DEC, 2005, p. 3).

7 The first Farm Bill (Agricultural Adjustment Act - AAA) dates from 1933 and was approved under the New Deal to provide financial assistance to farmers in the immediate post-Crisis. The Agricultural Law is valid for periods of approximately five years and is currently in its 12th edition (2018-2023), according to Public Law No: 115-334.

8 The preparation of the Cotton-4 project took place during the final stage of the Brazil's cotton dispute against the United States. The effective implementation of the project began during the compliance phase of the DS267 case and the high visibility and international sympathy received by Brazil around the project in various international forums has been an important element of pressure in negotiations between Brazil and the US.

[9] Ten per cent of this amount, or US$ 50.5 million, were allocated to the Brazilian South-South cooperation. Brazil's government negotiated that 10% of all the resources received by the IBA's managed Fund would go to its technical cooperation activities. To this end, the following documents were signed: "Protocolo de Intenções entre o Ministério das Relações Exteriores da República Federativa do Brasil e o Instituto Brasileiro do Algodão para Cooperação Técnica no Setor do Algodão" and "Memorando de Entendimento entre o Ministério das Relações Exteriores e o Instituto Brasileiro do Algodão para Cooperação Técnica no Setor do Algodão". Both documents are available at: <http://www.iba-br.com/web/guest/documentos-institucionais>. Accessed April 12, 2020.

[10] This meant an additional input of US$ 30 million for Brazilian South-South cooperation activities. Until 2018, the funds from the cotton dispute have financed – partially or entirely – the following Brazilian SSC projects (10): Cotton-4 (2009-2013); Cotton-4+Togo (2014-2018); Cotton Shire-Zambeze (with Malawi and Mozambique); Cotton Victoria (with Burundi, Kenya and Tanzania); Argentina; Bolivia; Colombia; Ecuador; Paraguay and Peru. Besides these, Brazil signed an umbrella trilateral project with the International Labour Organization (ILO) entitled "South-South cooperation for the promotion of decent work in cotton producing countries in Africa and Latin America" (Bueno, 2018).

[11] Funding research activities are allowed, provided that they are conducted in partnership with research agencies of the USDA or with universities or research foundations based in the USA. Depending on the agreement between the Brazilian and US institutions involved, research activities may contemplate partnerships with third countries.

[12] The origin of theories of international regimes lies in the 1970s, with the publication of the article "International responses to technology: concepts and trends", by John Ruggie (1975). According to the rationalist Stephen Krasner, regimes can be defined as "*sets of implict or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations*" (Krasner, 1982, p. 186). Other exponents are Susan Strange, Robert Keohane, and Robert Axelrod.

[13] Additionally, it must be borne in mind that international development cooperation was widely used by the United States in combating communism during the Cold War.

[14] In general, cooperation can be understood as a phenomenon that occurs when actors adjust their behavior to the real or predicted preferences of other actors through a process of political coordination (Keohane,1984; Milner, 1992).

[15] It is a series of neoliberal solutions proposed by economist John Williamson in the late 1980s with the aim of providing a return to growth. Several of these solutions - fiscal discipline, reduced public spending, deregulation and opening up the economy - were endorsed and disseminated by the Bretton Woods institutions (World Bank and IMF) to promote macroeconomic adjustment in developing countries, especially in Latin America.

[16] According to the Paris Declaration (p. 3-8), these principles are defined as: "(i) Ownership: partner countries exercise effective leadership over their development policies, and strategies and co-ordinate development actions ; (ii) Alignment: donors base their overall support on partner countries' national development strategies, institutions and procedures; (iii) Harmonisation: Donors' actions are more harmonised, transparent and collectively effective; (iv) Managing for results: managing resources and improving decision-making for results; (v) Mutual accountability: donors and partners are accountable for development results".

[17] Up until the end of 2018, Brazil was not a signatory to the Paris Declaration (OECD), it was not a member of DAC / OECD and did not accept the "emerging donor" label. However, one of the foreign policy's goals of current Brazilian President Jair Bolsonaro (2019-2022) is to accede to the OECD and its instruments. As of April 2020, Brazil is listed as "confirmation pending" in the list of Endorsements to the Paris Declaration and the Accra Agenda for Action (AAA).

[18] These principles are based on the official rhetoric of the Brazilian government. In the academic field, there are works that critically analyze the application of these principles in Brazilian international technical cooperation projects, see "Le changement international par les relations Sud-Sud", Doctoral Dissertation by Elodie Brun (Sciences Po, 2012) and the lecture "Cooperation International and South-South Cooperation" by researcher Iara Costa Leite in the 2013 Update Course on Public Policies for International Cooperation in Health from a Bioethical Perspective, Brasília-DF, March / 2013 (available at: <https://youtu.be/O6RI7yZYwlY>. Accessed April 13, 2020.

[19] This categorization is present in the first Brazilian Cooperation for International Development Report (known as COBRADI), published in 2010, referring to the years 2005 to 2009. The second edition of the report, published in 2013, referring to the year 2010, brings changes in the categories exposed in the previous report, presenting the following divisions: technical cooperation; educational cooperation; scientific and technological cooperation; humanitarian cooperation; support and protection for refugees; peacekeeping operations and spending on international organizations. This change in categorization, among other factors, makes it difficult to assess and monitor Brazilian development cooperation activities. It is necessary, together with the domestic actors that carry out cooperation projects and programs, to develop permanent criteria that allow a comparative assessment of the temporal evolution of Brazilian cooperation. In addition, it is important to establish fixed periods for publication of the COBRADI report (for example, every 3 years).

[20] The disaggregated data per year point to R$ 76.4 million in 2011, R$ 66.4 million in 2012 and R$ 68.8 million in 2013.

[21] R$172 million was spent on technical cooperation with other developing countries and R$156 million was spent on scientific and technological cooperation.

[22] The revitalization of the biotechnology laboratory, although it was not in the original project document, was the most expensive of all, having cost around US$ 1 million. The intervention was made due to repeated requests from the Malian side.

[23] Field Day is a method of disseminating sustainable agricultural technologies and practices aimed at rural areas. It has been used in Brazil since the rural extension service was implemented in 1948. It is a method of collective communication and uses a methodology that allows practical demonstration of the visited experience.

[24] The three volumes are available at (only in French):

Entomology: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/142479/1/Entomologie.pdf>.

No-Tillage System: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/99864/1/COTON-4-MANUAL-Plantio-direto.pdf>.

Breeding: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/142513/1/Amelioration-genetique.pdf>.

[25] These documents are available at (only in French):

Entomology 1: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/99857/1/COTON-4-ECHANGE-EXPERIENCE-Reconnaissance-ravageurs-por-C4.pdf>.

Entomology 2: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/99859/1/COTON-4-ECHANGE-EXPERIENCE-Technol-production-trichogramma-2013.pdf>.

No-Tillage System 1: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/99846/1/COTON-4-ECHANGE-EXPERIENCE-Diagnostique-visuel.pdf>.

No-Tillage System 2: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/142514/1/Les-especes-vegetables-de-couverture-du-sol....pdf>.

Breeding: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/99844/1/COTON-4-ECHANGE-EXPERIENCE-Utilisation-Sisvar.pdf>.

[26] For more details on this process, please check this author's chapter, "The evaluation process of international technical cooperation: EMBRAPA's experience in the Cotton-4 project". In: COSTA, M. A. (Org.). (2018). *Práticas de avaliação da cooperação internacional no Brasil*. Brasília: Nikê Consultoria. Available at (in Portuguese only): <https://st3.

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27 As previously seen, they are: solidarity diplomacy, absence of conditionalities, acting in response to demands, untying commercial interests and recognition of local experience and adaptation of the Brazilian experience.

28 One cannot generalize the application of the five principles to the Brazilian SSC as a whole. Some countries, of particular commercial and investment interests of Brazilian government and companies, carried out technical cooperation projects in partnership with Brazil in which the separation between cooperation, financing and investment was not clear. For a critical view of Brazilian cooperation, especially in Angola and Mozambique, see Almeida and Kraychete (2013) and Garcia et al. (2013).

29 They are: (a) Regional Project for the Improvement of African Cotton Technicians; (b) Regional Project for Strengthening the Cotton Sector in the Lower Shire and Zambezi Basins; (c) Regional Project for Strengthening the Cotton Sector in the Lake Victoria Basin; (d) Technological Strengthening and Dissemination of Agricultural Best Practices for Cotton in the Cotton-4 Countries and Togo (which represented the continuity of the original Cotton-4 Project, with the inclusion of Togo). Apart from these larger initiatives, in 2016, Angola, Benin, Mali, Mozambique, and Zimbabwe presented demand to Brazil for cooperation in cotton. Projects would have a smaller scope than regional initiatives in Africa.

30 Bolivia, Colombia, Ecuador, Paraguay and Peru.

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UK PARTNERS WITH INDIA TO DEVELOP GIFT CITY, FUNDS INFRASTRUCTURE PIPELINE

At the tenth Economic and Financial Dialogue (EFD) between India and UK, UK entered into a partnership with India to develop a financial services centre GIFT city in the country, and also signed off on a new infrastructure finance and policy partnership to assist India execute its National Infrastructure Pipeline that includes investments of around USD 1.4 trillion.

In 2019, the bilateral trade between India and U.K. stood at £24 billion. India is now the second-largest project investment source for the U.K. The new U.K.-India strategic collaboration will promote greater links between GIFT City and the U.K. financial services ecosystem by bringing together both governments, regulators and business to share experiences and expertise.

Under the infrastructure partnership, the UK will share experience, assist in knowledge exchange and technical assistance to support India's National Infrastructure Pipeline, and will also help set up a Project Preparation Support Facility-cum-Centre of Excellence for PPP Projects. A new U.K.-India Sustainable Finance Forum is also being created in order to mobilise private capital for green investment.

Source: The Hindu. (2020, October 28). U.K. to partner for developing GIFT City, funding infra pipeline. Retrieved from: https://www.thehindu.com/business/uk-to-partner-for-developing-gift-city-funding-infra-pipeline/article32966539.ece

Potential Impacts of COVID-19 on the Cotton Sector

Published by International Cotton Advisory Committee (2020)

Aditi Gupta[*]

Since the beginning of the COVID-19 pandemic, governments globally have been trying to create a balance between economic growth and public health. Several measures have been undertaken by national governments to protect their citizens from COVID-19 including social distancing, lockdowns, curfews, etc. Major global economies like China, Europe and United States have been put under severe pressure and strain due to the pandemic.

The ICAC Recorder on "Potential Impacts of COVID-19 on the Cotton sector" by International Cotton Advisory Committee (ICAC) has 23 articles which document the impact of COVID-19 on the global cotton sector. Even before the COVID-19 pandemic the global cotton sector was under stress due to low international prices. Under the pandemic, the textile industry is amongst the worst hit industries. Prices of raw cotton and yarn have crashed, upstream supply chains and value chains have been badly hit and stocks have piled up.

The following paragraphs discuss the various articles of the ICAC Recorder, bringing out the analytical issues covered. Articles 1 to 4 discuss the impact of the pandemic on commodity prices, textile and apparel trade, retails sales, global textile industry and the supply chain. Financial markets and commodity prices have become highly volatile. The crude oil market price faced a sharp contraction in the first five months of 2020. Most metal prices have also declined. Retailers have postponed or cancelled purchase orders, adversely affecting factory employment and liquidity. As a result, there have been rising layoffs and unemployment rates in the cotton industry.

* Research Assistant, RIS.

Article 5 highlights the impact of the pandemic on the cotton sector of major cotton producing countries like China, India, Brazil, Turkey, Egypt, etc. This is further discussed in many subsequent articles. According to *Article 6*, textile manufacturing activity has decreased considerably in Latin America and the Caribbean (LAC), due to COVID-19 outbreak in the United States and China, which are the main partners and export destinations of the LAC region.

Articles 7 and 9 discuss the potential impacts of COVID-19 on African cotton sectors. For various African economies, cotton serves as an important source of foreign currency. Therefore, the reduced cotton demand and prices would adversely impact the national reserves of African countries in the coming years. Mainly the smallholder farmers produce cotton in Africa and due to the disruptions in market access caused by the pandemic, there will be negative impacts on both farmer incomes and food security within communities and also at a national scale. In countries like Benin, Mali, Burkina Faso, etc., in the northern hemisphere, the purchase price of seed cotton negotiated for 2020-21 season will be revised downwards. For example, in Mali it will fall by 30 per cent, while in Cameroon it will fall by 12 per cent.

Article 8 discusses the global impact of the pandemic on the cotton sector. Cotton would be more affected than competing crops, like food crops, as cotton and textiles are more sensitive to economic fluctuations. According to ITMF survey (April, 2020), mill orders have been cut down by more than 40 per cent in April due to the reduction in textile demand and annual decrease in the turnover of mills is expected to be more than 30 per cent for 2020. ICAC has projected a 12 per cent decrease in cotton consumption for 2020-21. The article highlights the need for subsidy support to be provided by government to compensate for lost income.

Articles 10, 11 and 12 do an impact analysis and discuss revival strategies for the Indian cotton industry. Indian textile sector has a market size of USD 150 billion and contributes 7 per cent to the industrial output. Cotton is a highly traded commodity in India and has a stake of 59 per cent in the total textile segment. Cotton prices began to decline in the Indian market after the outbreak of the pandemic in China. The seed cotton prices fell to Rs. 4966 per quintal by February 20 and further fell to Rs. 4779 per quintal towards the end of March 2020. Like in all other countries, the domestic consumption has declined with stocks piling up. Some of the interim relief measures announced by the Indian government to safeguard the industry include cash transfers and additional supply of food grains free of cost for three months, providing Rs. 2000 as advance instalment per account holder under PM Kisan Yojna, provision of relief camps for migrant workers, exempting the production, transport and marketing of seeds, fertilisers and pesticides from lockdown, etc.

Article 13 discusses the impact of the pandemic on the cotton sector of Pakistan. Agriculture including the cotton sowing operations in Pakistan have been severely affected. Closure of businesses and lockdowns have

reduced the food demand and led to a fall in the prices of perishable produce. *Article 14* points out that Bangladesh cotton sector has been affected in 3 different areas that include raw materials procurement, buyer late payment and buyer cancellation of in-process orders. Closing of stores in Europe, United States and other main importing countries has had adverse consequences for the Bangladesh garment sector.

Article 15 discusses the effect of COVID-19 on Brazilian cotton sector. Brazil is the 4th largest cotton producer in the world and also the 2nd largest exporter. Since the consumption from main importing countries of Brazilian cotton will reduce, the exports of Brazil are expected to drop leading to an increase in local stocks. Brazil has deployed advanced technological interventions in cotton cultivation, due to which it now produces high quality cotton with environmental sustainability. The greatest worry for Brazilian farmers comes from the crash in market prices, as that will negatively affect the future contracts, thus reducing the profitability of farmers. The demand for clothing has reduced by 90 per cent while several local industries have stopped production during COVID-19. For 2020-21 season, the seed and input supply chains would also be affected due to the disruptions in trade and transport in various countries.

As *Article 16* highlights, for the Argentina cotton sector, the price fluctuations due to market uncertainty is the biggest challenge. The demand for clothing in the local market is non-existent. Due to the lockdown, ginning factories, spinning mills and textile industrial processing have been severely affected. Some of the steps put forward by cotton organisations to overcome the current crisis include standardisation of quality parameters as per international norms, assessing and addressing export logistics, providing source of financing for producers in the short term, solving input problems for ginning factories, etc.

The area of cotton production is likely to fall by 30 per cent to 1,20,000 hectares in Egypt in 2020. The *Article 17* discusses how a huge majority of the population globally have lost their income, livelihood and also their purchasing power. The textiles demand in Egypt has reduced due to the pandemic. The lockdown has led to the closing of the textile related factories and shipment of raw materials. The business community is facing cash crunch, supply chain disturbance and manpower related difficulties.

In Sudan, as *Article 18* points out all ginning factories and spinning mills are closed although cotton has been harvested, thus negatively affecting the prices of seed cotton. The cotton which trading companies have exported is stuck in target countries, but the payments haven't been made yet. Delays in seed availability, input supply, preparation arrangements and input distribution are likely to affect the cotton sowing in the coming season. Sudanese farmers will be focusing on food crops instead of cotton farming as the situation of cotton markets remain uncertain.

Article 19 discusses COVID-19 impact on Kenya's cotton sector. In Kenya, input transportation costs are expected to increase and interrupted operations may lead to inefficiencies.

In Kenya, cotton is grown in arid and semi-arid lands for food security and the article suggests that it is important to recognize that the pandemic can lead to a food crisis in these areas. There is a need for the government to initiate measures to ensure continuous cotton production, its marketing and trade. Input and information should be made accessible to farmers in a timely manner. Vulnerable groups need to be provided stimulus support in the short term.

South Africa is a net exporter of agricultural products, including cotton. *Article 20* suggests that due to the price pressure of critical inputs, cotton farmers in South Africa may opt for alternative summer crops like Maize, which is the main competitor of cotton. Also, from the perspective of food security, there may be greater demand for maize leading to higher relative prices, which can result in lower cotton hectares.

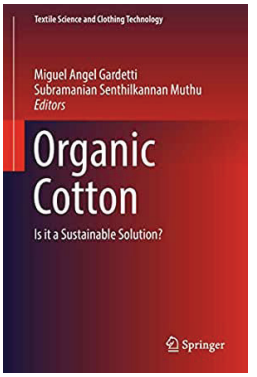
Cotton is a significant source of livelihood in Mozambique for almost 2,00,000 smallholder farmers. *Article 21* highlights that due to the pandemic, at the level of the farm, there has been a reduction in the minimum price of cotton in Mozambique. As a result, cotton fields have been abandoned by certain farmers. This will lead to a decline in the area of production in the next season.

Article 22 gives a general perspective of the impact of the pandemic on the cotton sector while highlighting the fact that environment is the natural capital that should be cared for. Lastly, *Article 23* gives a rationale behind using cotton for face masks. While doing so, it discusses the science behind cotton face masks and why cotton is better than synthetics.

In conclusion, the ICAC Recorder serves as a significant and comprehensive compilation of analytical reports and articles highlighting the devastating impacts of the current pandemic on the global cotton industry. It covers the challenges being faced by the domestic cotton sectors of several countries in the continents of Africa, Asia and Latin America. It also provides a useful coverage of the various measures undertaken by national governments to safeguard their vulnerable population against the impact of COVID-19 and suggests the next steps that governments globally should take to help their cotton industry recover from the current crisis.

Organic Cotton: Is it a Sustainable Solution?

Editors: Miguel Angel Gardetti, Subramanian Senthilkannan Muthu; Singapore: Springer Nature, 2019; ISBN 9789811087813; x+176 pp.; €103.99



*Akshay Singh**

"The researchers argue that through genetic engineering, hybrids should be created which leverage the positive qualities of cotton fibres while at the same time improve upon the deficient parameters."

Historically cotton has been an important plant. Its historical imprint can be traced back to as early as 3000 B.C. with its early usage documented in India. As the world was being explored through conquests and colonisation, the usage of cotton spread to countries like Greece, Spain, Italy, China, Japan, England and even the Americas. At present, the cultivation of cotton is extensively practised in Brazil, China, Egypt, India, Iran, Mexico, Pakistan, Sudan and the United States of America. The utility of the cotton plant is not only limited to the textile industry as it is utilised for animal feed, production of vegetable oils and fertilizers. The cotton plant can be grown with or without the use of artificial chemicals such as pesticides, plant development controllers and defoliants. The latter is referred to as organic cotton while the former is referred to as white cotton. White cotton is notorious for being one of the most chemically intensive plants. It is grown on 3-5 per cent of the world's cultivated lands yet it accounts for 16-25 per cent of the total pesticide usage. With the realisation of the dangers of climate change, increased emphasis is being laid on adopting sustainable agricultural practices. Hence, organic cotton has been explored as a viable alternative for white cotton. Currently, the cultivation of organic cotton is led by India, China, Turkey, and the United States of America. This book is a collection of papers which investigate the various aspects of organic cotton relative to white cotton. It does not attempt to provide definitive conclusions about the sustainability

* Teaching & Research Fellow at O.P Jindal Global University.

of cotton but rather attempts to explore the multiple perspectives around organic and conventional cotton farming through empirical as well as qualitative analysis.

The book critically delves into the environmental impacts associated with the conventional farming of white cotton and the issues with organic cultivation of cotton. White cotton cultivation is chemical as well as water-intensive. The chemicals used are detrimental to the producers, consumers and to the environment. They leech into the soil and increase its toxicity while the residuals of pesticides and heavy metal ions (Arsenic, Chromium, Lead etc.) find their way into the finished products. Moreover, the cultivators of white cotton bear the brunt of continuous exposure to such chemicals and many of them require hospitalisation. Whereas white cotton farming demands on an average 2210 litres of water per kilogram of cotton, organic cultivation is possible with only 182 litres per kilogram. This becomes pertinent in the light of depleting water tables in various parts of the world due to anthropogenic factors. Having highlighted the negative environmental impacts of conventional cotton farming, the researchers further explore the issues which may have limited the adoption of organic cotton on a global scale.

The transition from conventional methods to organic methods is riddled with negative economic implications for the cultivator. For a conventional cotton farmer, one of the major barriers which hamstring the popularity of organic cotton production is the lengthy transformational period of two to three years which is required to wash away the chemicals from the soil. The production cost of organic cotton is further compounded due to the costs associated with a lower yield, organic certification, increased labour, and organic fertilisers and manure. The researchers estimate that organic cotton production is 50 per cent more costly than conventional cotton; the cost is passed on to the consumer. Despite there not being any apparent difference in the finished quality of products made from organic cotton, the cost of pure organic cotton products is 20-50 per cent greater than conventional cotton products.

The fibre properties of a cotton plant are an important determinant of its selling price as well as the likelihood of its usage in the production of high-quality yarns. Cotton fibre can be assessed on the parameters of its length, strength and thickness. The researchers in the book, through empirical analysis of select organic and white cotton fibres, establish that the latter have more desirable parameters. However, the naturally coloured fibres of organic cotton are resistant to fading and also offer protection from the UV rays. Further, the organic cotton fibres can seamlessly blend with the white cotton fibres and therefore be useful in the textile industry. The researchers argue that through genetic engineering, hybrids should be created which leverage the positive qualities of cotton fibres while at the same time improve upon the deficient parameters. If this is achieved, it would reduce the price of organic cotton products, and would attractively position the products of organic cotton to a regular consumer and not just the environmentally aware.

Organic farming of crops including cotton should be promoted with the aspect of intra-generational equity. However, the transition to a completely different framework is not solely determined by environmental sustainability. Organic farming has to be economically sustainable to producers as well as consumers. In the case of organic cotton, the high cost of production dissuades the farmers. The causality of the high costs is shared between specific organic farming practices and the presence of information asymmetry both of which impact the yield. Despite the obvious environmental benefits of transitioning to organic cultivation of cotton, the shift has been at a sluggish pace. Apart from highlighting the benefits of organic cotton production, the various papers at their core, argue for a robust incentive system for the farmers in the form of exposure to better information, cost-sharing of certification and tax credits while at the same time leveraging technology to improve the fibres of organic cotton.

USAID AND ASEAN SIGN INAUGURAL REGIONAL DEVELOPMENT COOPERATION AGREEMENT

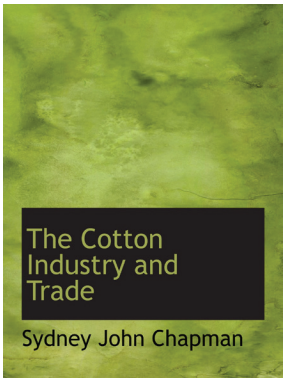
The first Regional Development Cooperation Agreement was signed between USAID and ASEAN by USAID Principal Officer to ASEAN, Mr. Ryan Washburn and Secretary General of ASEAN, H.E. Dato Lim Jock Hoi on the sidelines of the ASEAN – US Ministerial Meeting. This agreement is an important milestone for US-ASEAN cooperation and is also a reflection of long-term strategic partnership for promotion of peace, democracy, and prosperity in the Southeast Asia Region.

The agreement has a value of up to USD 50 million and is a five-year agreement that will advance the ASEAN Community Vision 2025 and the ASEAN-U.S. Plan of Action (2021-2025). USAID continues to support ASEAN in meeting regional and global challenges that include COVID-19 pandemic, human trafficking, access to digital economy, and managing responses to natural disasters.

USAID and ASEAN will also launch a new joint initiative to counter the impacts of the COVID-19 pandemic and increase future preparedness through the ASEAN Public Health Emergency Coordination System (APHECS). APHECS will provide ASEAN Member States and other stakeholders a regional framework to guide coordination and communication in public health emergencies.

Source: US Embassy in Cambodia. (2020, September 10). USAID and ASEAN Sign Inaugural Regional Development Cooperation Agreement. Retrieved from: https://kh.usembassy.gov/usaid-and-asean-sign-inaugural-regional-development-cooperation-agreement/

The Cotton Industry and Trade



Editors: S. J. Chapman, M.A., M. Com., Stanley Jevons Professor of Political Economy and Dean of the Faculty of Commerce at the University of Manchester. With Eight Illustrations. (London: Methuen and. Co., 1905. Pp. vii L + 175. Crown 8vo. 2s. 6d. net.)

*Shriya Singh**

"A great deal of focus was attached to the mechanisation of the cotton industry because it is seen as the starting point of the modern technique of production that we call the factory system."

This is more than a century-old volume under the "Books on Business" series issued by Messrs, Methuen, and is intended to be an elementary introduction to the economics of the cotton industry and trade. It is primarily focused on a descriptive analysis of the evolution of the Cotton Industry situated in Europe especially Spain, Egypt, Britain, Germany, France, and Russia. The book may be recommended as an easily readable and fairly comprehensive book, likely to be very useful to students and others desirous of obtaining a historical perspective of the industry and trade to which it relates, and with their existing development through-out the world. Professor Chapman has culled some interesting information concerning the spread of the cotton industry, with specific accounts on cotton mills on the other side of the Atlantic and in Eastern Asia, with the included statistics, also giving the work something of a value of a convenient reference book.

The systematic chapterisation of the book takes us on a journey from the initial process of raw material procurement coupled with early industrial and technical advancements to the impact of cotton trade on the world market and society. The development of overland trade routes in the classical age from India to the Mediterranean and then by sea to distribution emporiums at Venice eventually ushered the age of commercialisation for the textile industry. These routes were further expanded, as a consequence of the high demand for Asian

* Graduate Research and Teaching Assistant at O.P Jindal Global University.

goods, in the European World markets. Moreover, between the eighteenth and nineteenth centuries, the phase of scientific and mechanical advancements had thrown Europe into the "Industrial Revolution", unleashed by stalwarts like Kays, Hargreaves, Paul Arkwright, Crompton, Cartwright, especially the power loom. This revolutionized the handloom industry and increased the overall share of the manufacturing sector to the European economy. A great deal of focus was attached to the mechanisation of the cotton industry because it is seen as the starting point of the modern technique of production that we call the factory system. Spinning, a traditional industry, of stretching and twisting the clean combed cotton fibers was revolutionized for industrial production. The Hargreaves and Arkwright techniques of spinning superseded the old and hand spinning wheels with a speed that in retrospect, appeared almost dramatic. Between 1768-9 there were protests fearing unemployment, on the one hand, and an increase in the wages of certain specialists by three-four times their previous earnings. In all practicality, the increase in demand for cotton, in the late nineteenth century also brought in the context of 'working capital' and factory system, there was a steady rise in small firms and local businesses.

The stability of the Cotton Textile industry rested on the organisation of production and distribution logistics and networks. Traders and Manufacturers had soon come up with a streamlined organisational framework for their ready business, as shown by the author in his elaboration of the varying spinning and manufacturing enterprises arising in England, like "Fine Cotton Spinners and Doublers' association" and other, with three specialized markets emerging for raw cotton at Liverpool, yarn market and fabric market at Manchester for the Lancashire Market. These trading and manufacturing organisations emerging in the western world, became harbingers of what Prof. Chapman calls "*Economies of Standardisation*", which is a process of establishing uniformity across manufacturing materials and processes, it is potentially beneficial in lowering productions and procurement costs through economies of scale, easier and less expensive repair and replacement. However, it is noteworthy, that constant weariness of the trade and watchfulness of the industrial players, made the industry competitive and change gradually. There is considerable evidence to showcase the fluctuations in trade and tariffs pertaining to the cotton textile industry, the author amply illustrated the gradual increase in the tariff and import duties for protecting the home industry from the influx of foreign/ cheaper products. The fiscal regulation implicated the rise of the discriminatory price mechanism and discouraged the exporters from other countries from sending their products to England. This is projected by the declining share of the British Cotton exports to countries like Germany, Holland, the Americas, and smaller Scandinavian countries between 1897-1909. Instead, there was a shift in the focus to the colonized or Southern world, which saw a steady rise in the import of British cotton cloth and yarn between the same period.

Mr. Chapman remarks on the British Cotton Growing Association's enterprise which implies the abandonment to some extent of the principle of *lassiez-faire* if he says "that phrase be taken to advise leaving ignorance and apathy to surmount the obstacles which prevent the foundations of industries." He suggested, however, what may be claimed to be a wiser interpretation of the principle - "the placing of no unnecessary obstacles in the way of industrial enterprise". Turning to Asia, Mr. Chapman draws from the cotton industry scattered sporadically through regions in India, China, and Japan. The Indian cotton textile manufacturing has been described as labor-intensive, inefficient, and technologically backward. The illustration points out that though the number of mills increased by a small margin (175 to 195) between 1898 to 1901, in the same period the number of power looms advanced from 24,700 to 40,500 (Chapman, 1905). For the same time period, imports of cotton manufacturers and twist/yarn from England increased, however, India became a major supplier of Indian twist and yarn as well as raw cotton to countries like Japan, Germany, Belgium, Italy, Austria-Hungary, France, China, and other countries. The trade in the East was encouraged by a reduction in the cost of carriage and the opening of the East to Western commerce. The length of the journeys to India (particularly to places in the north-west, such as Bombay) and China was diminished by the completion of the Suez Canal. Additionally, it hastened the changes from sailing vessels to steamers and inaugurated a period of great enterprise result that freight ell to a considerable extent in the few years following 1869. Further trade with China was rendered easier after the Second Chinese war in 1858, and particularly the convention of 1860. The establishment of a triangular trade between England, China, and India, sprang up with British merchants becoming intermediaries for the exchange of cotton and opium. The author goes on to explain the cotton trade in the larger context of global issues springing up like fiscal regulation, America civil war, Germany's industrialisation, and World Wars which followed.

All in all, the author is purposed to analyze the intrinsic relationship between the growth of the Cotton Industry in Britain to that of its colonies. It captures the world trade market shares being held captive by the competition between the European countries and their subsequent phases of the industrial revolution. It simply traces causes and effects, while introducing the readers briefly to some of the numerous problems that arise out of Industrialisation and commercialisation. It firmly sums up as an intent to be an elementary introduction to the economies of scale of cotton industry and trade.

India-Senegal: People-to-People Connections through the Ages

Renu Modi[*]

"The two countries have several common attributes and similar political values – both are pluralist societies, with a democratic political set up, are known for free and fair elections and peaceful transitions from one incumbent to the other."

Introduction

India and Senegal have a thriving tradition of people-to-people connections since Senegal's independence in August, 1960, under the leadership of the late President Léopold Sédar Senghor. India's first embassy in French West Africa opened in Dakar in 1961, with concurrent accreditations to Cote d'Ivoire, Niger, and Upper Volta. The first Ambassador was Dr. Nagoji Vasudev Rajkumar.

The two countries have several common attributes and similar political values – both are pluralist societies, with a democratic political set up, are known for free and fair elections and peaceful transitions from one incumbent to the other. They have been connected historically through the material medium of textiles and since the 1950s, through the love for Bollywood – commonalities that have formed the basis for their time-honored relations.

Shared political values: In 1980, President Senghor (in office from 1960-1980) gave up his presidency and retired voluntarily – an exception to the state of affairs on the continent at that time. African countries scored much better on the barometer of democracy after the 1990s, when the democratic 'new winds of change' or the 'second liberation' swept through the continent (Riley, 1992: p.116). But Senegal has had a long tradition of democratic institutions since the pre-colonial times. As a part of the Mali Empire of medieval West Africa, the

* Professor and Director, Centre for African Studies, University of Mumbai. Views expressed are personal.

Note: A longer version was presented at the webinar entitled '*India and Senegal: Commonalities, Complementarities and Untapped Potential*', on 26th November, 2020, The Embassy of India, Dakar, Senegal. Available at <https://asp.embassyofindiadakar.gov.in/eoiaspHtml/bilateralPol.htm>

West African nation drafted the Kurukan Fuga Charter (also known as the 'Charter of Mande') in 1235. It was a Bill of Rights, drawn about 450 years before the landmark "Bill of Rights" Act (1689, UK), and about 550 years before the French "Declaration of the Rights of Man and of the Citizen" (1789) (UNESCO, 2009). These long entrenched shared political values and President Senghor's keen interest in Indian literature, culture and peoples, further strengthened relations between the two partner countries.

Senghor and India-Senegal Relations: President Senghor was a prolific writer, poet, cultural theorist and linguist. His concept of 'Negritude' was a part of his cultural politics. He stated that Africans should 'go back to their roots', be proud of their culture, and celebrate their indigenous traditions, which were considered 'backward' by the colonisers (Senghor, 1974a).

President Senghor believed there were similarities between India and Senegal. He started the ambitious Afro-Dravidian project and wrote about it in the September 1974 issue of the Journal of Tamil Studies, published by the International Institute of Tamil Studies (for details see Senghor, 1974b). He propounded that they may be profound cultural and linguistic similarities between the Dravidians in southern India and Black Africa. Senghor opined that geographically, only the Indian Ocean separated India and East Africa, which was a contiguous landmass centuries ago. As a scholar of linguistics, he was particularly interested in the linguistic similarities between the Senegalese languages (Wolof, Serer and Fulani) and the Dravidian language – Tamil. Thus, he 'Africanised' the Dravidians of Southern India and extended the geographical arc to where he opined that peoples of African/Black ancestry were present. However, Senghor's thesis remains contested. As a part of his Afro-Dravidian project, he encouraged two-way exchanges between scholars from both sides (Senghor, 1974b).

Academic exchanges: Three academics from India – K.P. Aravanan, U.P. Upadhyaya, and his wife Sushila Upadhyay were invited to the l'Institut Fondamental d'Afrique Noire (IFAN), at the Université Cheikh Anta Diop de Dakar (UCAD) in 1973. Three Senegalese scholars, Dr. Cheikh Tidiane N'Diaye (1974), Professor Souleymane Faye and Mamadou N'diaye (1977) came on Government of India scholarships for their doctoral studies on the linguistic affinities between Senegalese languages and Tamil (Aravanan, 1997).

In 1974, the former Prime Minister of India, Mrs. Indira Gandhi and President Senghor collaborated with IFAN, the Indian Council for Cultural Relations (ICCR) and Annamalai University (Tamil Nadu) to set up the Indo-African Studies Department in Dakar, to the study commonalities of culture and languages between India and Africa and other areas of mutual interest. Unfortunately, this project was stalled after President Senghor left office. This is an unfinished agenda that I think could be taken forward through centers of critical learning at UCAD and in India.

Cognizant of the friendly relations between the peoples of India and Senegal, President Senghor was inducted as an honorary fellow into the Indian

National Academy of Letters – the *Sahitya Akademi* in 1974; and was awarded the prestigious Jawaharlal Nehru Award for International Understanding in 1982 (Chatterji, 1974).

Values of peace and accommodation: Further to the above referred commonalities and academic interest, there is an evident curiosity in Senegal about India's ideals of peace and non- violence, and regarding Indian philosophy, spiritualism, indigenous knowledge and traditional medicine systems. President Senghor had great respect for all that Mahatma Gandhi stood for – peace, *Satyagraha*, non-violence and dialogues for conflict resolution.

In Senegal, relations between the state and religious groups are underscored by deliberations and harmony. It is marked by the; 'rituals of respect', 'policy of cooperation', and the state's non-interference in religious affairs. The role of Muslim Sufi orders – the *Murid* (politically and economically influential); the *Tijaniyya* (largest in number); and the *Qadiriyya* (oldest) and their contributions to society are unique to the country (Stepan, 2012: pp.385-386). Brotherhoods- such as the *Murid* for example, and the support they have extended to the state in its efforts to contest socio-cultural practices such as Female Genital Mutilation (FGM), or more recently, to combat and spread awareness about the COVID-19 pandemic, is laudable. The best practices of the Sufi orders in peace building, reconciliation and accommodation, promoting harmony and supporting the state in its endeavors to deal with socio- cultural issues in particular–is an important learning that a multi-religious and pluralistic country like India can imbibe.

Love for Bollywood: Indian and Senegalese people have been connected through Indian culture; music, dance and Bollywood. I had the opportunity to attend the *Tiranga*[1] festival hosted by the then Ambassador, Shri Rajeev Kumar, in 2019 (India in Senegal, 2019). I met a Kathak dancer who was named Hema. She came to India under the ICCR fellowship for training. Her rendition of *Krishnalila* was commendable. I learnt that there were about two dozen or so associations of Indophiles, located mostly in the suburb of Pikine in Dakar, and across the country. Senegalese people love Bollywood songs and dance and organise what they call the *Soirees Indous* (Indian evenings/parties). Bollywood films were first screened in Senegalese cinemas around the 1950s and became much more popular than Arabic films, which were seen as 'too western'. The first Indian film screened in 1953 was called *Mangala*.

One of the most popular Bollywood films is *Mère Indienne* (Mother India, 1957) (See Steene, 2008, p. 7). The Shah Rukh Khan and Salman Khan blockbusters (such as *Kuch Kuch Hota Hai and Kabhi Khushi Kabhi Gham, Karan Arjun, Hum Dil De Chuke Sanam etc.*), too have been loved by audiences. The French speaking Senegalese, relate to the family dramas, the Indian culture of respect for elders, values of the joint family system and above all, the spectacle of Indian dance and the music. The Senegalese have also had a great allure for Indian textiles, over the past centuries.

Historical connections through cloth: The presence of an old Indian diaspora is considered to be a precondition or a basis for an engagement between countries in Africa and India. However, despite the absence of an established diaspora, Senegal and India have been connected since antiquity, through the material medium of textiles. In the pre-colonial period, cloth was transported through the overland trans-Saharan trading routes. Indian made cloth was a prized commodity and much in demand by local elites across West Africa. By the fifteenth and sixteenth centuries, Indian cloth was used as a currency by European traders to pay for slaves along the West African coast, who were then shipped, mainly to sugar plantations across the Atlantic Ocean**.** In the 19th century**,** *Guinée* cloth (from the Telugu word *giniyagudda)* – an indigo-dyed cloth produced in Pondicherry – was exported to Senegal, which was also under French colonial influence (Venkatachalam, M. et al., 2020: p.84). During my visit to the HLM market in Dakar in 2019, I saw made-in-India printed, embellished and designed textiles for sale by Gujaratis (mainly Kutchi traders) who also spoke the local Senegalese languages.

There are many such fascinating stories in Senegal, the Teranga land, which connects us with them. The Neem tree (the area around the Indian embassy in Dakar has many) was introduced in Senegal from India in the 1960s and is now known as the Independence Tree of Senegal! [2]

These remarkable narratives showcase an extraordinary account of people- to people connections between India and Senegal- from antiquity till date.

Endnotes

1 The Hindi word *'Tiranga'*, which refers to the Indian tricolor flag, sounds similar to the Senegalese term *'Teranga'*, which means 'hospitality' in the Wolof language. Both these sentiments are invoked to celebrate this Indian festival in Senegal (Embassy of India, Dakar, 2020).

2 Pers. comm. Ambassador Shri. Rajiv Kumar, High Commissioner of India to the Republic of Mozambique, 11/12/2020

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EGYPT'S INTERNATIONAL COOPERATION MINISTRY AND WORLD BANK RELEASE NEW ECONOMIC REPORT

Ministry of International Cooperation of Egypt and the World Bank Group release a new Economic report titled, 'Economic Monitor Report: From Crisis to Economic Transformation, Unleashing Egypt's Potential in Productivity and Job creation'. The report describes the economic transformation process in Egypt with a focus on job creation, and the emergency measures undertaken by authorities to meet the challenges of COVID-19 crisis.

According to the report, before the COVID-19 pandemic, the Egyptian economy had a stable macroeconomic environment, due to favourable fiscal, monetary and energy sector reforms. Some of the major reforms included energy sector reforms, easing of monetary policy and fiscal consolidation measures, containment of the wage bill, and the shift from a sales tax to a modern Value-Added Tax.

The report has proposed approaches to increase Egypt's productivity and job creation potential, through sustenance of macroeconomic stability and overall policy predictability, creation of a favourable environment for attracting domestic and foreign investments to improve within-sector productivity growth and to support the movement of workers into higher value activities and sectors, and upgradation of human capital and firm capabilities through investment in education and vocational training.

Source: Egypt Today. (2020, November 10). Egypt's International Cooperation Ministry, World Bank release new economic report: 'from crisis to economic transformation'. Retrieved from: https://www.egypttoday.com/Article/3/94100/Egypt-s-International-Cooperation-Ministry-World-Bank-release-new-economic

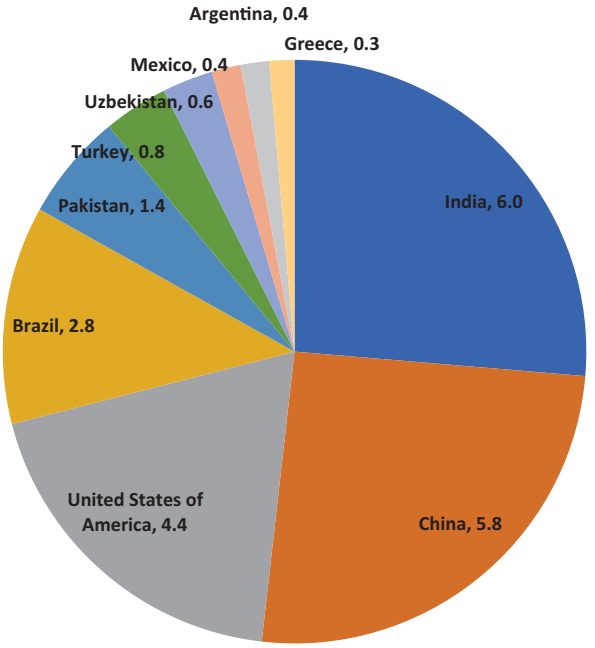
SSC in Statistics

An Analysis of Cotton Sector of C-4 Countries

*Sushil Kumar**

Approximately 26 million farmers grow cotton in 75 countries which provide livelihood to approximately 100 million families worldwide[1] and it is the source of livelihood to over four million farmers in Africa, of which around one million are located in the Cotton-4 countries[2]. In 2019-20, total worldwide cotton production was 25.92 million metric tons, it is dominated by few countries as Figure 1 shows that in 2019-20, India produced 6 million metric tons (23 per cent) followed by China 5.8 million metric tons (22 per cent), United States of America 4.4 million metric tons (17 per cent) and Brazil 2.8 million metric tons (11 per cent). Total production by these countries has accounted 87.88 per cent of the world total.

Figure 1: Cotton Production by top 10 Countries 2019-20 (million metric tonnes)

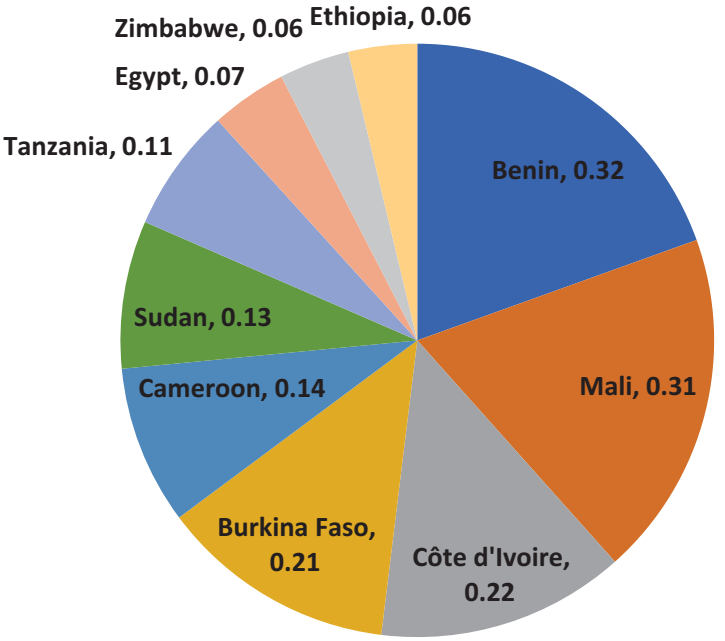


Source: Author's calculation based on ICAC data.

* Assistant Professor, RIS. Views expressed are personal.

Figure 2 shows that in 2019-20, the largest African producers were Benin, Mali, Côte d'Ivoire, Burkina Faso and Cameroon with total production of 1.61 million metric tons, accounting for 84 per cent of total African production. It is important to note that Africa contributed only 7.4 per cent to world production in 2019-20 with a total volume of 1.92 million metric tons. As ITC[3] pointed out that 37 of the 53 African countries produce cotton and 30 are exporters.

Figure 2: Cotton Production by top 10 Countries in Africa 2019-20 (million metric tonnes)

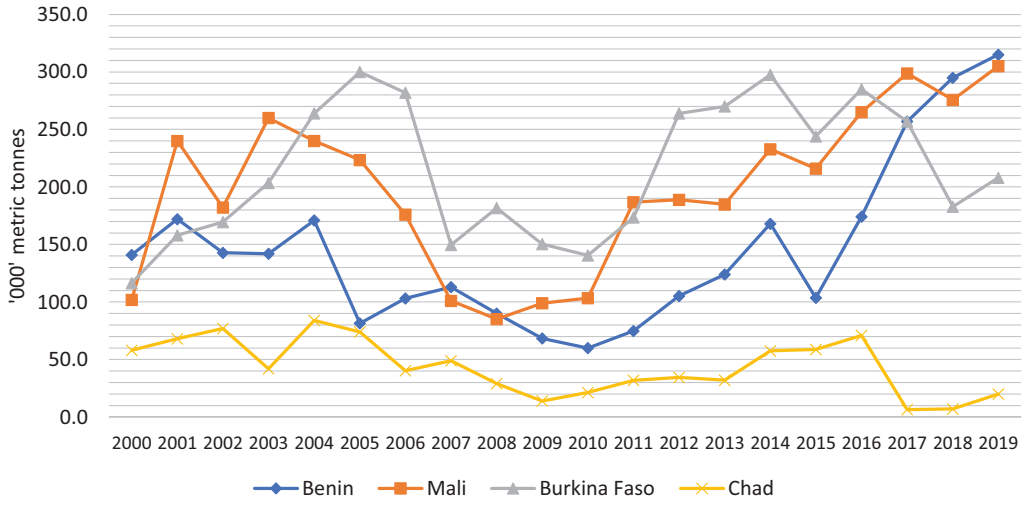


Source: Author's calculation based on ICAC data.

Cotton Production of C4 Countries

The importance of cotton for C4 countries as we can understand is that it represents between 8 to 12 per cent of the gross domestic product (GDP), 40 per cent of the total export revenue and 70 per cent of the agriculture export revenue[4]. It is important to note that 17 years ago C-4 (Benin, Burkina Faso, Chad and Mali) launched their sectoral initiative at WTO in 2003 and a sub-committee on cotton was created in 2004. C4 countries have also demanded reduction of cotton subsidy in developed countries especially in USA[5]. As Figure 3 shows that Benin, Mali and Burkina Faso's cotton production increased respectively from 141 (thousand metric tons), 101 (thousand metric tons), 116 (thousand metric tons) in 2000 to 315 (thousand metric tons), 305 (thousand metric tons) and 208 (thousand metric ton.

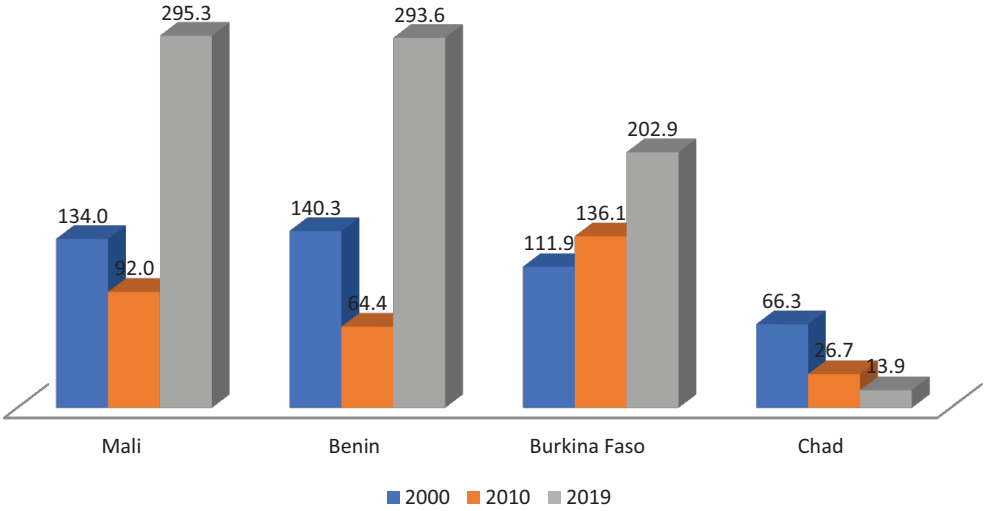
Figure 3: Cotton Production of C4 countries



Source: Author's calculation based on ICAC data.

Africa exported almost 87 per cent of its cotton and was the third largest exporter in the world in 2019-20. Africa exported 1.67 million metric tons (17.79 per cent of world exports) of cotton to the world in 2019-20, which is highest since 2000-01. It is important to note that C-4 countries accounted around half of Africa's export in 2019-20 which was around 40 per cent in 2000-01. The major African exporting countries in 2019-20 were Mali, Benin, Côte d'Ivoire, Burkina Faso and Cameroon. As Figure 4 shows that combined cotton export of C-4 countries increased from 452.5 thousand metric tons in 2000 to 805.7 thousand metric tons in 2019.

Figure 4: Export of cotton by C4 countries ('000 metric tonnes)



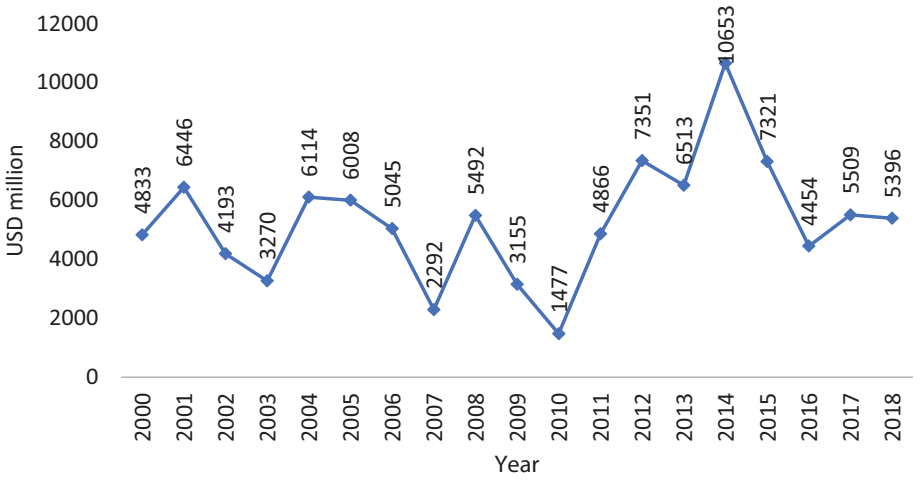
Source: Author's calculation based on ICAC data

Estimated Assistance Provided by Governments to the Cotton Sector

Subsidies to the cotton sector[6] have been estimated at USD 5.4 billion in 2018-19 which was USD 10.6 billion in 2014 (see Figure 5).

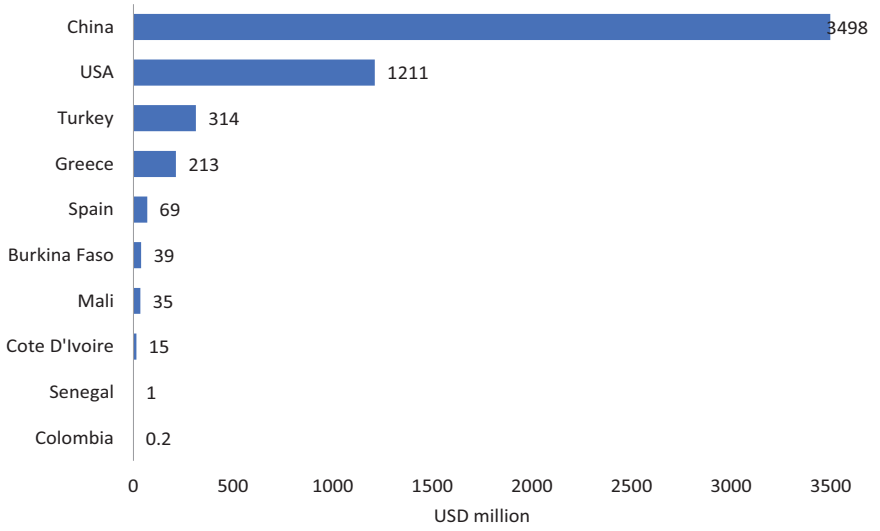
China and USA accounted 87 per cent of total world subsidies to cotton sector in 2018-19 (see Figure 6).

Figure 5: Estimated Assistance Provided by Governments to the Cotton Sector (USD million)



Source: International Cotton Advisory Committee[7]

Figure 6: Estimated Assistance Provided by Governments to the Cotton Sector in 2018-19 (USD million)



Source: International Cotton Advisory Committee

Endnotes

1 https://unctad.org/news/fibre-fabric-celebrating-value-cotton

2 https://www.wto.org/english/news_e/news20_e/cott_06oct20_e.htm

3 http://www.cottonguide.org/cotton-guide/the-world-cotton-market/the-importance-of-cotton-in-world-trade/

4 https://www.wto.org/english/tratop_e/agric_e/wcd2019testimonial_e.pdf

5 https://www.sciencedirect.com/science/article/pii/S1877042814031085/pdf?md5=82cc92d4792b4c2e8ddffc46a834df22&pid=1-s2.0-S1877042814031085-main.pdf

6 Including direct support to production, border protection, crop insurance subsidies, and minimum support price mechanisms

7 https://icac.org/Content Publication-sPdf%2 Files/0a348d9d_7eb4_44ff_b237f767b4c84c4e/Cotton_subsidies2019.pdf.pdf

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3. Use 's' in '-ise' '-isation' words; e.g., 'civilise', 'organisation'. Use British spellings rather than American spellings. Thus, 'labour' not 'labor'. (2 per cent, 3 km, 36 years old, etc.). In general descriptions, numbers below 10 should be spelt out in words. Use thousands, millions, billions, not lakh and crore. Use fuller forms for numbers and dates— for example 1980-88, pp. 200-202 and pp. 178-84, for example, 'the eighties', 'the twentieth century', etc.

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Introduction of a Section on Peer Reviewed Articles/Essays

In keeping with suggestions, feedbacks and accumulated experience, we have decided to introduce a section, containing peer reviewed full length articles/essays. Interested scholars willing to contribute are requested to send in their manuscripts (preferably in not more than 5000 words) to the editorial office.

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Development Cooperation Review (DCR) aspires to capture holistic narrative around global development cooperation and fill an important knowledge gap towards theorisation, empirical verification and documentation of Southern-led development cooperation processes. Despite growing volumes of development partnerships around the Southern world, there remains an absence of detailed information, analysis and its contribution to global development processes. Even though there have been sporadic efforts in documenting some of the activities, a continuous effort in chronicling the diverse experiences in South-South Cooperation (SSC) is still absent. RIS, in joint publication with GDI, FIDC and NeST has endeavoured to launch DCR, a quarterly periodical, to fill this gap.

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Knowledge generated endogenously among the Southern partners can help in consolidation of stronger common issues at different global policy fora. Consequent to the consensus reached on many of these issues at the High-Level Conference of Southern Providers in Delhi (March 2013) and establishment of the subsequent Core Group on the SSC within the UNDCF (June 2013), the Network of Southern Think-Tanks (NeST) was formally launched at the Conference on the South-South Cooperation, held at New Delhi during 10-11 March 2016. The purpose of the NeST is to provide a global platform for Southern Think-Tanks for collaboratively generating, systematising, consolidating and sharing knowledge on SSC approaches for international development. @NeST_SSC

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