Austral: Brazilian Journal of Strategy & International Relations |
e-ISSN 2238-6912 | ISSN 2238-6262| v.2, n.4, Jul-Dec. 2013 | p.117-139

TRIANGULAR TECHNICAL COOPERATION AND THE ROLE OF INMETRO

Leonardo Pace Alves[1]

Introduction

Nowadays, the Triangular Technical Cooperation appears as a promising subfield of the Cooperation for Development area, uniting efforts of a developing country and developed country (or of a multilateral organization) in favor of a third nation destitute of resources. The Triangular Technical Cooperation meets the eighth goal of the United Nations 2000 Millennium Declaration, establishing partnerships for development in order to reduce global inequities.

After remaining for two decades a recipient of technical knowledge from more industrialized nations, Brazil gradually assumed the dual identity of recipient and provider thereof, accumulating forty years of experience in international technical cooperation with countries of less relative development. This cooperation was built in both bilateral and trilateral scope.

Initially, Brazil made use of triangular technical cooperation as an expedient to meet budgetary constraints at a time of severe economic hardship. Currently, this triangular partnership earns more complex features, since developing countries are likely to play an increasingly active role in technical

[1] Inmetro Researcher. Master in International Relations, PUC-RJ. Master in International Studies, University of Uppsala. I thank Vitor Galiza Xavier for helping to produce this paper. This paper was written in personal character and does not necessarily reflect the official positions of Inmetro. E-mail: lpalves@inmetro.gov.br.

cooperation as they expand their own profile on the international scene. In this context, the transmission of technical knowledge can be conceived not only as a means of fulfilling an UN goal, but also as a resource of soft power, capable of increasing the prestige of these countries in world politics.

This article aims to analyze the Brazilian technical cooperation, with special focus on the case of the triangular partnership between Mozambique, Brazil and Germany, in which the Institute of Metrology, Quality and Technology (Inmetro) is heavily involved. Thus, an example of triangular cooperation not covered by the contemporary literature is presented. For this purpose, the text below is divided in six items. In the first, the evolution of North-South International Technical Cooperation is described; in the second, the evolution of South-South International Technical Cooperation is examined; in the third, the Triangular Technical Cooperation is discussed; in the forth, the history of Brazilian Technical Cooperation is evaluated; in the fifth, the Project of Triangular Technical Cooperation Mozambique-Brazil-Germany is analyzed; and finally, final considerations are exposed.

Evolution of the North-South International Technical Cooperation

Along with the financial cooperation, humanitarian aid, the scientific-technological cooperation and food aid, the International Technical Cooperation (ITC) is part of the comprehensive category of Cooperation for Development. This cooperation has as main objective to overcome, or at least mitigate, the economic and social disparities that lead the division between developed countries, developing countries and least developed countries.

According to Puente (2010), the ITC can be defined as:

> "A multidisciplinary and multisectoral a process that usually involves a developing country and other International Actor(s) (country or multilateral organization), working together to promote, through programs, projects or activities, dissemination and transference of knowledge, techniques, successful experiences and technologies aiming to build and develop human and institutional capacities of the developing country, arousing thereby the necessary confidence that contributes to the achievement of sustainable development with social inclusion through the effective management and operation of the State, the production system, the economy and the society in general."

The expression ITC was, however, preceded by the term "Technical Assistance" (TA). In 1948, according to the Resolution 200, the General Assembly of the United Nations created this concept, based on which, the developed countries would assist poorer nations. From the 1970s, in the context in which the third world countries began to demand the construction of a more equitable international economic order, TA was replaced by ITC or North-South cooperation. This change was not merely semantic, once the expression TA could contain the idea of inactivity of the receiver before the charity donor. In contrast, the term "technical cooperation" opened up the possibility of greater constructive exchange between the provider and receiver (Puente 2010). This characteristic of ITC is also discussed in more detail in the next section of this article.

While the discourse of ITC contains some altruistic purposes linked to the idea of promoting development, there are other elements of political, strategic and economic order that should not be disregarded. Thus, when analyzing the ITC provided by a given country, it is necessary to evaluate not only the explicit principles and values, but also the underlying national interests. This explains why the ITC initially was not conducted based on the needs and preferences of the recipient countries, but, anchored in perceptions and interests of donor nations. In other words, not uncommonly, have occurred "manufacturing demand" based on priorities established by ITC donors.

In the 1980s, amid the severe economic crisis that affected the peripheral nations, especially in Latin America, some Northern donor countries undertook a review of the mechanisms of ITC and its decreased volume. Thus, during the so-called “lost decade”, there was appreciable reflux of the ITC, making it difficult to advance towards development. At the end of that decade and the early nineties, this setback was accentuated by the neoliberal "Washington Consensus." Therefore, the ITC was used by some developed nations as a tool to stimulate the implementation of structural reforms in peripheral countries, which aimed to diminish and to weaken the State. According to the neoliberal creed, with the end of the Cold War, progress and growth would result in the free expression of market forces, rather than the implementation of public policies targeting development.

In late 2008, with the outbreak of the economic crisis in the United States, which spilled over to other regions, currently affecting mainly the countries of the Euro zone, the creed of the "Washington Consensus" was badly shaken. State intervention in the economy, in order to overcome the crisis, was seen as necessary not only in the peripheral countries, but also at the epicenter of global capitalism: the USA. In this turbulent environment, ITC gained renewed impetus, especially because of the innovations that were already being implemented by some emerging countries of the South under the scope of horizontal cooperation.

Evolution of South-South Technical Cooperation

Cooperation in South-South axis, also called horizontal cooperation, arises as an alternative to the traditional North-South Cooperation or vertical cooperation. It is observed that this partnership between the peripheral countries should not necessarily be thought of as a contraposition, since it can complement the efforts made in the North-South axis. The trilateral cooperation (discussed in the next section) illustrates the possibility of synergy between the two axes.

Moreover, horizontal cooperation results of a historical process in which some developing countries have gradually evolved from the simple condition of receptors of technical expertise from developed nations to the dual situation of providers of South-South Cooperation, but without abdicating entirely the benefits from the North-South Cooperation. Thus, emerging countries like Brazil, China and India started to offer technical cooperation on the horizontal axis, while still receiving dividends from technical cooperation with the core nations. However, it has been noted a gradual decline in the volume of technical knowledge transferred to these countries by industrialized nations as these emerging achieve a higher degree of socioeconomic development.

It is worth clarifying that South-South Cooperation can be understood through two interpretive lines, which have frequently tangled. According to the conception so far described, the horizontal cooperation refers to the definition of the United Nations Program for Development (UNDP), according to which technical partnership between the peripheral countries is developed. A second understanding refers to the diplomatic coordination among countries of the South through the formation of political coalitions of variable geometry

(coalition building) seeking, among other things, to increase the joint bargaining power in a multilateral forum (Lechini 2010). The IBSA (India, Brazil and South Africa), BRICS (Brazil, Russia, India, China and South Africa) and the G-20 in WTO loom large as examples of political coalitions, in which Brazil is inserted.

Two international statements are identified as foundations of South-South cooperation oriented to development: the Declaration on the Promotion of World Peace and Cooperation, agreed during the Bandung Conference in Indonesia in 1955, as well as the Plan of Action of Buenos Aires, formulated during the United Nations Conference on Technical Cooperation among Developing Countries, held in Buenos Aires in 1978 (Zimmermann and Smith 2011).

The Bandung Conference was an initiative of the Asian-African nations that had recently achieved political emancipation. These countries organized themselves in order to oppose Neocolonialism and Imperialism of the great powers in the context of the Cold War. The declaration that resulted from the conference stressed the need for Third World countries to reduce economic dependence of core countries through mutual technical cooperation. Furthermore, the Conference represented a first step for the future launch of the Movement of Non-Aligned Countries, which occurred in the Belgrade Conference in 1961.

In its turn, the Buenos Aires Plan of Action, arising from the United Nations Conference on Technical Cooperation among Developing Countries, was adopted by the General Assembly of the United Nations in 1978. This Plan competed effectively for the establishment of horizontal technical cooperation for development, which would be improved in the following decades. In this sense, the UNDP was designated as the body responsible for coordinating the activities of Technical Cooperation for Development (Puente 2010).

It is worth highlighting that the greatest activism of peripheral countries, in the 1970s, occurred in a context of Détente in the Cold War. The decrease of the tension between the United States and the Soviet Union facilitated the articulation between the countries of the South in favor of a New International Economic Order (NIEO). Sombra Saraiva names this period "Equitable Illusions". According to the author, the peripheral countries

considered themselves able to change the parameters of the international order in their favor without, however, holding the power resources necessary to achieve that purpose. The severe economic crisis that occurred in the following decade corroborated this weakness (Saraiva 2001).

Still according to the vision of the peripheral countries, the traditional model of vertical cooperation is characterized by welfarism permeated by political, strategic and commercial interests. Furthermore, riddled with conditionalities, this welfarism stops contemplating the real priorities of the receptors states, which leads to the perpetuation of dependency before the central countries (Puente 2010).

Conversely, in order to provide technical cooperation, countries like Brazil, China and India do not establish conditionalities in what concerns economic, environmental, governance and human rights aspects, in addition to reducing the procedural requirements. Mindful of their sovereignty, due of having already been subject of foreign interference in the relatively recent past, these countries respect the principle of non-interference in the internal affairs of other nations.

Besides preserving sovereignty, the absence of conditionality has two other advantages. First, it provides recipient countries faster access to financing of the emerging countries. Second, it increases the bargaining power of the recipient countries facing cooperation offered by developed countries of the North, whose conditions are usually much more severe and inflexible (Souza 2012).

Moreover, based on the sharp criticism concerning the asymmetry of the North-South axis, technical cooperation in South-South axis emphasizes the concepts of partnership, reciprocity and equality, which bring greater legitimacy to cooperation. According to the logic of horizontal cooperation, development is conceived as a collective enterprise of dialectical character. Thus, it is not just a state granting assistance to another less developed, once the donor country acquires new experiences that can be applied to deepen its own development (Burges 2012).

Another benefit that comes from the dynamics of horizontal cooperation is the reduction of existing costs. In general, countries like Brazil and China do not hire external consultants for their technical cooperation projects in other countries. Instead, these countries send technical staff of the

federal government itself, with the goal of executing the project. This also simplifies accountability and monitoring of undertaken activities. Since the procedures of the technicians are paid by various public entities, actual expenditures on technical cooperation often do not enter the calculations of the agency responsible for coordinating the project.

The dynamics of South-South Cooperation is not, however, exempt from some limitations. Often, technicians of various public entities of the federal government do not have specific training to apply their knowledge to the foreign reality in a multicultural environment truly distinct. Also, these technicians do not have the same length and flexibility of time enjoyed by foreign independent consultants to implement cooperation activities, because the stay abroad implies the suspension of everyday tasks in their home institutions.

Another quite sensitive point is the constant need to respond to internal criticism regarding the expenditure of public funds to the horizontal technical cooperation. In light of the serious socio-economic problems still facing the donor country, it is mister justifying why public money is invested in improving social indicators of other disadvantaged countries.

Furthermore, another aspect vulnerable to criticism is that the supply of technical cooperation without conditionalities can prolong the stay of corrupt and authoritarian leaders who violate human rights and the environment. This concern is particularly acute with respect to the policies adopted by China in Africa.

The logic of horizontal technical cooperation may also be relativized, because, even if the partnership occurs between the southern states, there is a clear asymmetry between the donor and the recipient country. Thus, there is also a hierarchy of power blending the idea of horizontality. Nonetheless, it is undeniable that South-South cooperation is closer to the ideal of equality between the two poles of the equation than the North-South cooperation.

In short, despite some vicissitudes, horizontal cooperation is establishing itself as a catalyst for major changes in the international order after the Cold War. On August 3, 2011, the Secretary-General of the United Nations confirmed that idea in the report on South-South Cooperation for Development:

> "South-South interactions are leading to deep changes in the fabric of international relations and have begun to yield a proven development impact, with countries of the South now constituting a powerful force in the global economy." (UN 2011)

The Triangular Technical Cooperation

As discussed earlier, the vertical cooperation and horizontal cooperation are not a recent phenomenon. The horizontal cooperation has its roots in the 1970s, while the other dates back to the late 1940s. In contrast, the triangular technical cooperation presents itself as a new arrangement, which begins to gain importance in the 1990s.

In general, the triangular technical cooperation can be thought of as an amalgam between the vertical cooperation and horizontal cooperation, involving therefore a developed country and a developing nation, which act together in order to qualify technically a third country of the South which is poorest in resources.

Although prevalent, this is not the only type of trilateral dynamic possible, since there exists also cooperation between two countries of the South, with the aim of transferring technical resources to other peripheral nation (horizontal cooperation only). There is also a joint effort between a country and an international organization in another nation. Nevertheless, this section will address only the first type of triangular cooperation.

This type of partnership for development follows logical cascade cooperation (Lechini 2010). Peripheral countries have received and are still receiving, although to a lesser extent, the technical expertise of the core countries. Having achieved a reasonable level of development by adapting the technology of the industrialized countries to their needs, these peripheral countries start to transfer tropicalized technical expertise to other nations of the South.

Accordingly, the peripheral countries have adequate experience and are better positioned than the central states to meet the demands of their counterparts in the South, once they have faced in the recent past the same challenges to development, formulating creative solutions to improve their socioeconomic conditions (ECOSOC 2008). Moreover, technical cooperation of the southern countries tends to be best received by other peripheral countries, because it is devoid of remnants of the former metropolitan domination.

Often, this South-South partnership is marked, however, by financial difficulties of the developing country which supplies the cooperation. Thus, the financing of the project by a central country becomes truly relevant in order for the project to be put in practice (Burges 2012). This is one of the advantages of trilateral cooperation, because the technical knowledge and experience in the South adds to greater financing capacity of the central countries.

Triangular cooperation can therefore be seen as an intermediate arrangement between cooperation in the bilateral scope and multilateral cooperation, bringing together, at the same time, the efforts of developed and development countries for the improvement of the technical capabilities of a third Southern country (Abneur 2007). An example of trilateral cooperation in which Brazil participates will be provided later.

The History of Brazilian Technical Cooperation

Brazilian technical cooperation follows the historical pattern, mentioned above, based on which the country moves slowly from receiver to the condition of receptor-provider of technical knowledge. This evolution has unfolded between the 1950s and 1970s.

In the 1950s, with the advent of the National Commission for Technical Assistance (NCTA), linked to Itamaraty, Brazil starts to plan up in order to receive technical cooperation from developed countries. It was necessary to coordinate the demands of Brazilian institutions for technical knowledge, setting priorities in order to establish partnerships with the core countries and UN agencies (Puente 2010). Thus, in the following two decades, Brazil has received technical cooperation mainly from Germany, Canada, France, Britain, Italy and Japan as well as the UNDP (Cervo 2008).

In 1968, the Brazilian government created a system of technical cooperation involving the Ministry of Planning and the Ministry of Foreign Affairs. This interministerial arrangement laid the foundations for Brazil to start, in 1973, at the end of the Medici government, as a provider of technical cooperation to the countries of Latin America and Lusophone Africa (Puente 2010).

This guidance deepened with Geisel's Responsible and Ecumenical Pragmatism (1974-1979), according to which foreign policy was conceived as a

tool to leverage the country's development. In the context of a serious crisis of the Brazilian economic miracle, parallel to the relative decline of U.S. power in the international arena, the presidency of Ernesto Geisel consolidated the Brazilian diplomacy global-multilateral tradition (Leite 2011; Pecequilo 2012). Brazil would have to transpose the ideological boundaries of the Cold War, expanding its international insertion through the approximation with various countries, especially those of the so-called third world. In this regard, technical cooperation has played a relevant role in the consolidation of Brazil's relations with developing countries. The impulse in South-South Cooperation was aligned with the Action Plan of Buenos Aires of 1978.

Despite the serious economic crisis that marked the 1980s, Sarney's government was able to continue horizontal technical cooperation efforts in the country through the reform of its institutional structure, based on the creation of the Brazilian Cooperation Agency (ABC) in 1987, linked to the MFA. This reform lent greater dynamism and flexibility to technical cooperation, which favored triangular arrangements with the World Bank, the IDB and UNDP, among other multilateral agencies, as a way to circumvent budgetary constraints (Puente 2010). In the following year, "cooperation among peoples for the progress of humanity" was inscribed in the fourth article of the Brazilian Constitution as one of the principles governing the international relations of the country. Technical cooperation has started, therefore, to espouse, in a conspicuous way, a goal of teleological nature.

The Brazilian process of expansion and institutionalization of international technical cooperation remained during the 1990s. Despite the adoption of neoliberal policies by Collor and Cardoso governments, which entailed reducing the role of the state and less emphasis on the development, horizontal cooperation is thought, increasingly, as an instrument of foreign policy. In this sense, the choice of countries with which Brazil has cultivated partnerships, aiming to transfer technical knowledge, has been aligned with the diplomatic guidelines.

Thus, during the two governments of President Cardoso (1995-2002), technical cooperation with the countries of South America was prioritized, in the context of increasing regional integration. Conversely, cooperation with African countries has been relegated to the background, although some projects have been performed with the Portuguese-speaking nations of the continent as

part of the Community of Portuguese Language Countries. Sombra Saraiva even qualifies the nineties as a period of "long sleep" in Brazil's relations with Africa (Saraiva 2012).

During the two governments of President Lula (2003-2010), foreign policy went back to being intensely used as an instrument for development (not only economically, but also socially). The dogged pursuit for autonomy through diversification of the country's partnerships in the international arena, entails an "unsubmissive and active diplomacy" (Amorim 2010). In this context, South-South Cooperation (in its two conceptions) gains greater prominence. The increased relations with the countries of the South do not occur, however, at the expense of traditional partnerships with the nations of the North. Rather than that, these contacts tend to become stronger as a result of greater international prominence achieved by Brazil.

Moreover, the emphasis on policies to reduce poverty, via income transference and improving internal social indicators, conferred greater legitimacy on the international technical cooperation provided by the country. In fact, there is a clear congruence between the social inclusion policies adopted domestically and policies aimed at development in the international plan.

The increase in Brazilian technical cooperation was evident, especially with African countries due to the high priority given to the other side of the South Atlantic by the Lula government. Thus, 48% of technical cooperation projects coordinated by ABC were directed to Africa, covering 36 countries. Mozambique, Guinea-Bissau, Cape Verde, São Tomé and Principe and Angola were the African nations, in that order, which received more transmission of technical knowledge, which demonstrates the focus of Brazil in Portuguese-speaking countries (MFA, 2010). Also, According to Puente (2010):

> "the areas of greatest concentration of technical cooperation are agriculture, health, education and professional training, environment and natural resources, public administration, energy and biofuels, social development, business development, information technology and electronic government, transport, industry, standardization and metrology, urbanism, tourism, civil defense, among others."

Moreover, in eight years, President Lula remained 55 days on African soil and promoted the opening of 17 Brazilian embassies. In commercial terms,

exports to Africa increased from US 2.9 billion to US$ 12.2 billion. The new partnership between Brazil and Africa reconciled, therefore, solidary commitment (based on altruistic values and perception of a common identity) with pragmatic economic interests. (Saraiva 2012; Valor 2013)

Since 2011, the current government of Dilma Rousseff has deepened ties with the African continent. In February 2013, the President participated in the III Summit of South America – Africa which took place in Malabo, Equatorial Guinea. The Declaration of Malabo reaffirmed the joint commitment to strengthen the mechanisms for South-South Cooperation. Recently, in May of the same year, Rousseff attended the Celebration of the Fiftieth Anniversary of the African Union in Addis Ababa, Ethiopia. On this occasion, she announced that her government plans to renegotiate the debt of 12 African countries with Brazil. Likewise, announced the intention to create a new international cooperation, trade and investment agency to Africa and Latin America (Valor, 2013).

This purpose of inaugurating a new agency reveals that Brazilian technical cooperation includes not only teleological goals consistent with the constitutional provision. There are also interests of economic and political order (Puente 2010). These different goals are not mutually exclusive and, in most cases, are intertwined.

In the economic sphere, Brazil has considerably raised trade with the other nations of the South, reducing dependence on the markets of developed countries. Due to this change, Brazil has been less affected by the impacts of the economic crisis that hit the U.S.A, and later, Europe. When promoting bilateral rapprochement with other Southern countries, technical cooperation is also indirectly contributing to the internationalization of Brazilian companies, particularly in the services area.

One adverse consequence pointed out by some critics is that technical cooperation would lead to the emergence of potential competitors of Brazil in some areas, for example, agriculture and biofuels (Puente 2010). This possibility seems, however, to be offset by the benefits arising in different areas of horizontal partnership.

In the political sphere, through the consolidation of the bonds with the South, Brazil managed to increase its global profile, becoming an indispensable actor in different international forums. This "capacity to political and

diplomatic consolidation" appears as one of the most important assets of the country in the coexistence with the major powers, since, based on the Constitution and the signing of the NPT, Brazil abdicated to resort to the nuclear alternative as a strategic deterrent (Lima 2010). It is worth stressing that the support coming from the woven partnerships with countries in the South was essential to José Graziano to be elected Director-General of FAO, in 2011, and Roberto Azevedo, of the WTO, in 2013. To ascend to these two organizations, it is certain that the two Brazilians will continue to promote the development as an essential objective to be achieved.

It is clear, therefore, that technical cooperation emerges as a relevant instrument of Brazilian foreign policy, and African countries are major beneficiaries. In general, the literature highlights the role of Embrapa, Fiocruz and Senai, respectively, in the areas of agriculture (with the opening of an office in Ghana), health (in the fight against the epidemic of AIDS and Malaria) and professional education (Hirst, Lima and Pinheiro 2010; Pino 2010; Saraiva 2012). There are, however, other governmental actors which also play an important role in Africa.

Triangular Technical Cooperation Mozambique-Brazil-Germany: Technical and Institutional Strengthening of the National Institute of Standards and Quality of Mozambique (INNOQ)

As mentioned before, the Brazilian triangular cooperation begins in the late 1980s, through a partnership with multilateral agencies in order to cope with domestic financial difficulties. From the 1990s, Brazil began to cooperate with developed nations, with the aim of transmitting technical knowledge to a third country less developed. Although the Brazilian government prioritizes South-South bilateral cooperation, triangular cooperation arrangement is designed as a supplement that adds value to the horizontal logic.

One of the peculiarities of Brazilian trilateral cooperation is that the country often partners with nations from which has already received technical knowledge in order to foster the development of a third country. Thus, in recent years, Brazil has embarked in triangular cooperation with Japan, the United States, Spain, Germany, France, Italy, Norway, Switzerland and Canada, with the scope to act jointly in Latin America and Africa. Beside the International

Labour Organization (ILO), Japan stands out as the main partner of Brazil in trilateral cooperation (Pino 2012; Souza 2012).

Notwithstanding the triangular arrangements involving a partnership with developed countries in favor of a third nation, Brazil seeks to maintain the characteristics of horizontality. In this sense, cooperation is driven by demand (demand-driven), conditionalities are not imposed and it is sought to transfer good practices, adapting them to the reality of the recipient country.

According to Saraiva, in present-day Africa, Mozambique distinguishes itself as "a case model of haughty international insertion" (Saraiva 2012). Located in the Indic portion of the African continent, the country achieved political emancipation in 1975, plunging in the following year in a civil war that lasted until 1992. With democratization, Mozambique began gradual stabilization process that engendered satisfactory policy performance and macroeconomic equilibrium. In 2011, the country achieved a GDP growth of 7%, showing one of the highest growth rates in the international scene, at a time of severe economic crisis.

For the benefit of Mozambique, trilateral cooperation aimed at strengthening the INNOQ (the National Institute of Standards and Quality of Mozambique) is within the context of the traditional partnership between Brazil and Germany in the field of metrology. Created in 1973, the then National Institute of Metrology, Standardization and Industrial Quality (Inmetro) – federal agency under the Ministry of Development, Industry and Foreign Trade – received transfer of technical knowledge of the National Metrology Institute of Germany (PTB). Throughout the 1970s and 1980s, fifteen Inmetro technicians were sent to Germany to learn the language and make training in the laboratories of PTB, staying in the country around a year. During this period, they had the opportunity to be instructed on what was most modern in metrology. Thus, following the dynamics described above, Inmetro was receiver of technical cooperation before moving to the condition of the provider. With this goal, in 2000 was created the Division of International Technical Cooperation (DICOI), which integrates the General Coordination of International Articulation (CAINT) of Inmetro.

The transmission of technical knowledge to Mozambique is situated in the context of the consolidation of Brazil's relations with Africa from the Lula government, particularly with the Portuguese-speaking countries. It is worth

noting that, even in 1975, Brazil was one of the first countries to recognize the independence of Mozambique, opening an embassy in Maputo, the following year. In 2003, early in his administration, President Lula visited the country, signing eleven instruments of technical cooperation.

The basis of the exchange between Inmetro and INNOQ are established with the signing of the Agreement of Cooperation and Technical Assistance, 2007. According to the agreement, the Parties agreed to cooperate in the fields of Industrial and Legal Metrology, Conformity Assessment and the implementation of the Agreement on Technical Barriers to Trade. This agreement between the two countries remained in force for three years.

In parallel, the trilateral cooperation starts being drafted in 2007, during the prospecting mission to Inmetro of two INNOQ leaders, accompanied by technicians of ABC and GTZ (German Agency for International Cooperation). This mission was intended to identify the Brazilian expertise of interest of INNOQ for the development of a pilot project for trilateral cooperation. In the same year, technicians from Inmetro, ABC, GTZ and PTB accomplished a mission to INNOQ in Maputo, to evaluate the needs of the Mozambican Institute.

Based on these two missions, a pilot project was designed in order to empower institutionally and technically the INNOQ, making it able to implement quality standards in the products manufactured and sold in Mozambique. This quality ensures the competitiveness of products in the domestic and foreign markets, besides providing security for consumers. The project was carried out in nine months with the participation of the five aforementioned actors. Among the activities developed are:

I. Review of the INNOQ Annual Operating Plan;
II. Support INNOQ in developing a career plan;
III. Review of the INNOQ Strategic Plan;
IV. Seminar held in order to publicize the INNOQ services;
V. Conducting courses on Mass Measurement; Pre-Measured Products; Drafting Regulations and Structuring Mechanisms for the Implementation of Legal Metrology, Volume Measurement; Measurement Uncertainty Applied to Legal Metrology, Operation of Conformity Assessment.

The pilot project had three truly relevant results:

I. INNOQ Institutional and Technical Strengthening. The organizational structure of the Institute was updated, increasing its capacity for political action and its recognition within Mozambican government and society. Moreover, the Legal Metrology started to be deployed in the areas of mass and volume (scales, weights and fuel metering pumps). A draft law to regulate the metrology activity in Mozambique was also prepared. The Metrology Act was finally passed by the National Assembly on May 21, 2010;

II. Mutual learning on the part of Brazil and Germany concerning the dynamics and potentialities of the partnership between the two countries, involving ABC, INMETRO, GTZ and PTB, aiming to provide technical knowledge to a third country. In August 2010, Germany and Brazil signed a Memorandum of Understanding on Triangular Cooperation. The following common principles were defined: ownership by the third country, based on which it leads the process of the implementation of the triangular project; common standards in the planning, implementation and evaluation of projects, as well as equitable sharing of costs;

III. Due to the positive evaluation of the three countries in relation to the advances made, it was agreed to further trilateral cooperation in Mozambique, by developing a new project more ambitious and comprehensive.

In 2010, Mozambique, Brazil and Germany prepared new triangular project, aimed at "INNOQ Technical and Institutional Strengthening ", with a duration of three years.

The three countries have set specific goals in six areas:

I. Metrology: a) legal metrology services in the areas of weight, mass and volume nationwide and next to the Municipal Councils; b) services of industrial metrology (temperature, mass, volume, length, power, flow, pressure or force);

II. Conformity Assessment: certification services of products and systems;

III. Standardization: Information on sectorial committees, so that minimum quality criteria are set to domestic products, particularly regarding products in the food, agribusiness, electronics and construction industries;

IV. Communication: communication plan internal and external (business, government, communities and the media), oriented to the goals of the business plan;

V. Overcoming Technical Barriers to Trade: facilitating access for Mozambican products to the international market.

VI. Internal management.

Regarding the actors involved, to the five participants of the pilot project (INNOQ, ABC, Inmetro, GTZ and PTB) two further Brazilian entities were added: ABNT (Brazilian Technical Standards Association) and INT (National Institute of Technology). Thus, the distribution of responsibilities was defined as follows:

• INNOQ – local counterpart, providing technical personnel and logistical support for the implementation of the project;

• ABC – coordinating physical and financial contribution to the Brazilian triangular project technical contributions.

• Inmetro – carrying out the Brazilian counterpart regarding legal and industrial metrology, conformity assessment, and certification of management systems, as well as overcoming technical barriers.

• ABNT – carrying out the Brazilian counterpart regarding standardization.

• INT – carrying out the Brazilian counterpart regarding product certification.

• GTZ and PTB – financing and carrying out the German technical contribution in the areas of Industrial Metrology, Conformity Assessment, Standards, Communication and Institutional Strengthening.

Synoptic Table Triangular Cooperation Areas		Responsible Counterpart
Metrology	Legal Metrology (weight, volume and length)	Inmetro
	Industrial Metrology (temperature, mass, volume, length, power, flow, pressure or force)	Inmetro PTB
Certification	Conformity assessment - Quality Management Systems	PTB + ABNT
	Products Certification	INT + ABNT
Normalization	Normalization	ABNT +PTB
Communication	Institucional Communication and Marketing	GTZ
	Internal Communication	GTZ
Overcoming Technical Barriers	Monitoring at the WTO	Inmetro
Institutional Strengthening - Internal Management	Support the adequacy of Physical Infrastructure	PTB
	Support to the accreditation process	ABNT
	Communication Network with Local Councils	GTZ + Inmetro
	Business Plan and Market Plan	PTB
	Planning, monitoring and evaluation	GTZ + PTB + Inmetro + ABC

Note that, at present, the project is still running. Some details about the implementation will be provided, as an example, regarding the area of Overcoming Technical Barriers, which is already concluded.

This area was already covered by the aforementioned Agreement for Cooperation and Technical Assistance between Inmetro and INNOQ. In the period 2007-2011, two Inmetro technical missions to Mozambique were made and one mission of INNOQ technicians came to Brazil. In these missions, the technicians of the two Institutes exchanged information on the operation and the main responsibilities of Enquiry Point of the Agreement on Technical

Barriers to Trade (WTO TBT Agreement). It is noteworthy that both institutions, the Inmetro and the INNOQ, are the focal points of this agreement in the Brazilian government and the Mozambican government, respectively. Thus, Inmetro transmitted its accumulated experience to INNOQ as a Focal Point since 1996.

It is worth mentioning that to each Focal Point of the TBT Agreement competes essentially to provide information on technical regulations and conformity assessment procedures in its country. In other words, the Focal Point acts as a center of reference on technical requirements of its country. Thus, information on changes in technical requirements for products are disseminated in order to avoid potential non-tariff barriers to international trade.

In May 2011, two technicians from the Division of Overcoming Technical Barriers of Inmetro (DISBT), which is part of CAINT, made a five-day mission to INNOQ in Maputo. During this period, they cooperated with the Institute for the effective establishment of the Mozambican Focal Point. Therefore, Inmetro technicians presented the most updated services offered by the Brazilian Focal Point (especially the "Export Alert!") and ensured a close partnership between the two Focal points.

Moreover, Inmetro worked with INNOQ so that key regulators of the Mozambican government and the main Mozambican companies, for which the services of the Focal Point would be available, were identified. These initiatives resulted in the holding of a meeting with regulators and another with the Association of Industries of Mozambique (AIMO). It must be emphasized that this collaboration with regulators and the private sector is critical so the INNOQ can notify technical regulations and conformity assessment procedures to the WTO and be able to respond to queries from nationals interested on technical requirements.

As an immediate result of the Mozambican mission, Inmetro helped INNOQ to clarify doubts regarding the process of notification to the WTO, based on the rules of the TBT Agreement. In this sense, the technicians of the two institutes jointly reviewed the first INNOQ notifications, which were sent to the WTO in 2012. Cooperation on Technical Barriers between Inmetro and INNOQ resulted, therefore, in the full participation of Mozambique in the

WTO's Committee on Technical Barriers being the Focal Point of the TBT Agreement.

As summarized in this part, the current dynamics of the triangular cooperation between Mozambique, Brazil and Germany is quite complex, comprising seven actors and six areas. The description of the partnership in overcoming technical barriers illustrated the important role played by Inmetro in only one of the five areas in which the Brazilian institution is involved.

Final Thoughts

The construction of triangular partnerships should be considered an important tool in order to foster cooperation for development in a period of global economic instability. By combining the efforts of three countries with different levels of development, triangular cooperation enhances the transfer of technical knowledge, reducing costs.

Brazil has been distinguished as one of the emerging powers in the field of international technical cooperation, with the increasing involvement of different government agencies, which reflects the level of excellence achieved by them in different domains. The active presence of the country in technical cooperation tends to increase its soft power in the international arena. As a result of the enhanced visibility enjoyed in world politics, Brazil is increasingly demanded to offer technical knowledge.

Inmetro is part of the list of public actors which have contributed to raise the reach and impact of Brazilian technical cooperation. Focusing both on the advancement of metrology as well as improving the quality of products and services, the Institute provides greater confidence to consumers, facilitating international trade.

The case of cooperation between Mozambique, Brazil and Germany demonstrates that in this triangular arrangement there is no simplistic division of labor in which a developing country supplies the technical knowledge while other developed country only funds the initiative. In contrast, Brazil and Germany divided on equal terms the technical, budget and management responsibilities, giving Mozambique leadership in implementing the project as its own needs. By doing so, it preserves the essence of horizontal technical cooperation, a valuable principle of Brazil's International Relations.

REFERENCES

Abdneur, Adriana. 2007. "The Strategic Triad: Form and Content in Brazil's Triangular Cooperation Practices". *International Affairs Working Paper*.

Amorim, Celso. 2010. "Brazilian Foreign Policy under President Lula (2003-2010): an overview". *Revista Brasileira de Política Internacional*.

Burges, Sean. 2012. "Desenvolvendo a partir do sul: Cooperação Sul-Sul no Jogo de Desenvolvimento Global". *AUSTRAL*: *Revista Brasileira de Estratégia e Relações Internacionais* 1(2): 237-263.

Cervo, Amado Luiz. 2008. *Inserção Internacional*: Formação dos Conceitos Brasileiros. São Paulo: Editora Saraiva.

Ecosoc. 2008. *Background study for the development cooperation forum*: trends in southsouthand triangular development cooperation. New York.

Hirst, Mônica; Lima, Maria Regina Soares; and Letícia Pinheiro. 2010. "A Política Externa Brasileira em tempos de novos horizontes e desafios". *Observatório Político Sul-Americano: Análise de Conjuntura*.

Lechini, Gladys. 2010. "La Cooperación Sur Sur. Teoría y Práctica. Los casos de Argentina y Brasil en África". *Revista Latinoamericana Surmanía*: 57-79.

Leite, Patrícia Soares. 2011. *O Brasil e a Cooperação Sul-Sul em três momentos: os governos Jânio Quadros/João Goulart, Ernesto Geisel e Luiz Inácio Lula da Silva*. Brasília: Fundação Alexandre de Gusmão.

Lima, Maria Regina Soares. 2010. "Brasil e polos emergentes do poder mundial: Rússia, Índia, China e África do Sul". In *Brasil e os demais Brics – Comércio e Política*, compiled by Renato Baumann. Brasília: Ipea.

Ministério das Relações Exteriores. 2010. *Balanço da Política Externa Brasileira (2003-2010)*. Brasília.

Pecequilo, Cristina Soreanu. 2012. *As Relações Brasil-Estados Unidos*. Belo Horizonte: Editora Fino Traço.

Pino Ayllón, Bruno. 2012. "Contribuciones de Brasil al desarrollo internacional: coaliciones emergentes y cooperación Sur-Sur". *Revista CIDOB d'Afers Internacionals*.

_____. 2010. *La Cooperación de Brasil:* un modelo en construcción para una potencia emergente. Madrid: Real Instituto Elcano.

Puente, C. A. I. 2010. *A cooperação técnica horizontal brasileira como instrumento da política externa: a evolução da cooperação técnica com países em desenvolvimento – CTPD – no período 1995-2005*. Brasília: Fundação Alexandre de Gusmão.

Saraiva, J. F. S. 2001. *Relações Internacionais: dois séculos de história*. Brasília: IBRI.

_____. 2012. *África Parceira do Brasil Atlântico:* Relações Internacionais do Brasil e da África no Início do Século XXI. Belo Horizonte: Editora Fino Traço.

Souza, André de Mello. 2012. "A cooperação para o desenvolvimento Sul-Sul: os casos do Brasil, da Índia e da China". *Cadernos Adenauer*.

United Nations General Assembly 66/229. 2011. *Report of the Secretary-General: The State of South-South Cooperation*. New York.

Valor Econômico. 2013. "Em visita, Dilma anuncia nova agência de cooperação para a África". May 25.

_____. 2013 "Sem companhia Sul-americana, Brasil dobra presença diplomática na África". May 27.

Zimmermann, F., e K. Smith. 2011. "More actors, more money, more ideas for international development co-operation". *Journal of International Development*.

Websites:

Triangular Cooperation:
<<http://www.abc.gov.br/Projetos/CooperacaoSulSul/CooperacaoTriangular>>
Accessed June 02, 2013.

ABSTRACT
Brazil outstands as one of the emerging powers in the technical cooperation field, with an increasing participation of different governmental agencies. This paper analyzes the Brazilian technical cooperation, with special focus on the triangular partnership between Mozambique, Brazil and Germany, with which Inmetro is deeply involved.

KEYWORDS
South-South Relations; Triangular Technical Cooperation; Inmetro.

Received on June 15, 2013.
Approved on July 26, 2013.

Translated by Ana Paula Calich