

Chapter 2

Challenges for establishing global partnerships: from biomes to people

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Introduction

Global development is at a critical moment. Despite progress made, the multiple dimensions of poverty and inequalities still remain a major challenge in several regions. Slow and unequal economic growth, inadequate supply of food, water and energy, low educational levels, lack of adequate working conditions for all, and situations of conflict, fragility and vulnerability due to economic factors, natural disasters and pandemics are also reasons of concern worldwide. Associated with climate change and the increasing demand for shared use of natural resources, these issues become even more complex. In this context of uncertainty and diversity, partnerships promote converging efforts to create, among other objectives, more concrete, lasting and effective opportunities and results to foster socioeconomic transformations and an equal sustainable future for all (Global Partnership for Effective Development Co-operation, 2014).

Specifically in Brazil, a continental-sized country, landscapes in various biomes are enormously diverse. Its South American border countries share ecosystems with Brazil. Much is said, for example, of the similarities between the Brazilian Cerrado and the African Savannas, between the Brazilian Rainforests and the African and Asian ones. Intersections, however, go beyond biomes, and also involve people. Brazilians on the border are closely connected with their foreign neighbors, with whom they share ecosystems, problems, challenges and opportunities. Brazil also has a highly diverse population in terms of origins; a significant share descends from various peoples, who have cultural and affective bonds with their regions of origin.

In this chapter we discuss the organization of global partnerships and behavioral changes in international cooperation, moving from a cooperative environment based on camaraderie to a more formal and professional one.

Challenges

The creation of global partnerships for sustainable development has been discussed in different international fora promoted by the Organisation for Economic Co-operation and Development (2017), by the United Nations Economic and Social Council (2017) and the Global Partnership for Effective Development Co-operation (2017), among others. Implementing decisions made in these fora requires dealing with several particular issues and, in many cases, negotiations can last years before actions are taken and expected impacts are felt. It involves, for example, issues of intellectual property and benefit sharing, particularly if developing new products with business appeal is a possibility. In this case, more national regulatory mechanisms are frequently introduced. Such mechanisms, while useful in their country of origin, are not necessarily equivalent to or compatible with those in other countries. Suggestions to minimize these discrepancies include, for example, establishing an international minimum standard for using genetic resources and related traditional knowledge or performing third party audits to ensure compliance with national legislation: it would be a slow process, because each country has its jurisdiction and, consequently, its sovereignty (Souza, 2014). In this case, political will must be combined with sustainable development actions that depend on recognizing international rights (The global..., 2013; Crigger, 2017; Global Partnership for Effective Development Co-operation, 2017), especially in studies focused on the various biomes and their potentialities, as a starting point for understanding the global importance of ecosystems.

International partnerships do not ensure that negotiations are conducted on equal conditions, and may even lead to dependency between countries and opportunistic exploitation of resources by these partners. It can be more critical when negotiation involves countries in different development degrees. Thus, it is not enough to simply transfer knowledge and technology from the one who knows more, who does more, who has greater purchasing power. From the onset, negotiation should be participatory and involve all parties. This type of negotiation usually requires more time and financial support, and specific methodologies, so that cultural, social, environmental, economic and institutional differences can be adequately and democratically addressed (The global..., 2013; Souza, 2014; Global Partnership for Effective Development Co-operation, 2017). Additionally, the work of collegiate authorities in charge of social, economic and environmental public policies, particularly those involved in international agreements, must be adequate, effective and transparent (Relatório..., 2017). Many of them are under public administration and subject to political appointments of people that are

not always committed to improving society's quality of life and the common good (Souza, 2014).

In terms of knowledge and technology sharing, little progress has been made to integrate various existing bases. Results tend to be concentrated in scattered bases because there are no privacy and data usage policies to provide, maintain, develop, and protect information and its users. Furthermore, each country's economic and political situation can make data collection and integration difficult. In Brazil, for example, recent budget cuts and reduced operational capacity at the Brazilian Institute of Geography and Statistics (IBGE), in charge of censuses and economic indexes, certainly will jeopardize the main source of official data to evaluate progress on the goals outlined by the 2030 Agenda (Relatório..., 2017).

Differences between the partners regarding contributions and technical-scientific skills are also challenges in establishing global partnerships. Facing them requires enhancing professional skills and improving local institutions that will, at some point, be involved in designing, planning, enforcing and monitoring public policies aimed at the sustainable development of the planet (Souza, 2014; Global Partnership for Effective Development Co-operation, 2017; Relatório..., 2017).

Embrapa and its international partnerships

All these facts affect the Brazilian Agricultural Research Corporation (Embrapa) in establishing global partnerships. The simple, almost informal relationships in which groups of researchers with similar interests exchanged knowledge and genetic material not based on any legal framework have faded in this complex environment of benefit-sharing and intellectual property mechanisms.

Substantial investment in training researchers from Embrapa and the Sistema Nacional de Pesquisa Agropecuária (National Agricultural Research System) at universities around the world has been one of the driving forces of Brazil's agricultural development. Such investment returns were greatly enhanced as Embrapa researchers established formal and informal partnerships with the technical research staff of universities and research companies where they had been trained and as their former classmates and partners in laboratories and field experiments moved to prominent positions within the scientific community.

One can no longer bring foreign genetic material simply by collecting it with the support of the local scientific community and packing it in travelers' luggage or shipping it through international courier systems, without following legal

procedures. Sending abroad genetic material from Brazil has also become a complex process. The growing academic competitiveness and intellectual property mechanisms have also reduced the exchange of scientific knowledge and research data.

Therefore, the context changed from a simple and informal environment to a new one, under international agreement regulations in several areas and affected by knowledge economy competitiveness. This required Embrapa to take a corporative approach to cooperation: it hired professional experts on legal and international cooperation areas to join its research teams. Departments have been created to manage international cooperation, genetic heritage and intellectual property. The Agricultural Innovation Marketplace (MKTPlace) and Building on the Successes of the Marketplace (M-BoSs) cooperation platforms, presented in more detail in [Chapter 5](#), emerged from this effort as mechanisms for promoting and organizing partnerships and for offering the support needed to overcome barriers of the new era. Embrapa has also launched a program to open offices and laboratories abroad as research interfaces with developed and developing countries.

Embrapa embraced the benefits of training its researchers abroad, but also realized that researchers from other countries could benefit from exchanging with Embrapa and its technical team. It paved the way for initiatives such as Embrapa Estudos e Capacitação (Cecat), a unit aimed at improving the skills of technical staff from developing countries. In that same vein, projects were organized by the Brazilian Cooperation Agency to send Embrapa researchers and technicians to partner countries to establish technical cooperation in varied areas.

Final considerations

This chapter covered different (such as regulatory, cultural, social, environmental, economic and institutional) aspects involved in establishing partnerships. As we move forward in the 21st century – a time when human activities are the primary causes of the planet's environmental and climatic changes (Waters et al., 2016) – all aspects (with no exception) become a part of the global sustainable development. Thus, partnerships must be able to reconcile individual and collective interests, even in highly competitive environments (Sullivan et al., 2018). From an institutional point of view, encouraging a greater connection between people, either by sending professionals abroad or by welcoming foreigners in Brazil or both, is highly recommended, despite the fact that international cooperation is currently much more regulated than in the 1980s and 1990s.

References

CRIGGER, B. J. Toward an ethics of community-academic partnership. **Narrative Inquiry in Bioethics**, v. 7, n. 1, p. 51-54, 2017. DOI: [10.1353/nib.2017.0016](https://doi.org/10.1353/nib.2017.0016).

GLOBAL PARTNERSHIP FOR EFFECTIVE DEVELOPMENT CO-OPERATION. **About for global partnership**. 2017. Available at: <http://effectivecooperation.org/>. Accessed on: Dec. 17, 2017.

GLOBAL PARTNERSHIP FOR EFFECTIVE DEVELOPMENT CO-OPERATION. **First high-level meeting of the global partnership for effective development co-operation: building towards an inclusive post-2015 development agenda**. 2014. Available at: http://effectivecooperation.org/wp-content/uploads/2014/07/ENG_Final-ConsensusMexicoHLMCommunique.pdf. Accessed on: Dec. 17, 2017.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. **The high level fora on aid effectiveness: a history**. 2017. Available at: <http://www.oecd.org/dac/effectiveness/thehighlevelforaonaideffectivenessahistory.htm>. Accessed on: Dec. 17, 2017.

RELATÓRIO luz da agenda 2030 de desenvolvimento sustentável: síntese. 2017. Grupo de Trabalho da Sociedade Civil para Agenda 2030. Available at: http://actionaid.org.br/wp-content/files/mf/1499785232Relatorio_sintese_v2_23jun.pdf. Accessed on: Dec. 15, 2017.

SOUZA, A. de M. e. (org.). **Repensando a cooperação internacional para o desenvolvimento**. Brasília, DF: Ipea, 2014. 277 p. Available at: http://www.ipea.gov.br/portal/index.php?option=com_content&view=article&id=24257. Accessed on: Dec. 15, 2017.

SULLIVAN, K.; THOMAS, S.; ROSANO, M. Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals. **Journal of Cleaner Production**, v. 174, p. 237-246, Feb. 2018. DOI: [10.1016/j.jclepro.2017.10.201](https://doi.org/10.1016/j.jclepro.2017.10.201).

THE GLOBAL partnership for development: the challenge we face: Millennium development goal 8. New York: United Nations, 2013. (MDG gap task force report). Available at: http://www.un.org/millenniumgoals/2013_Gap_Report/MDG%20GAP%20Task%20Force%20Report%202013_English.pdf. Accessed on: Dec. 17, 2017.

UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL. **Development Cooperation Forum**. ECOSOC 70. Available at: <https://www.un.org/ecosoc/en/development-cooperation-forum>. Accessed on: Dec. 17, 2017.

WATERS, C. N.; ZALASIEWICZ, J.; SUMMERHAYES, C.; BARNOSKY, A. D.; POIRIER, C.; GAŁUSZKA, A.; CEARRETA, A.; EDGEWORTH, M.; ELLIS, E. C.; ELLIS, M.; JEANDEL, C.; LEINFELDER, C.; MCNEILL, J. R.; RICHTER, D. de B.; STEFFEN, W.; SYVITSKI, J.; VIDAS, D.; WAGREICH, M.; WILLIAMS, M.; ZHISHENG, A.; GRINEVALD, J.; ODADA, E.; ORESKES, N.; WOLFE, A. P. The Anthropocene is functionally and stratigraphically distinct from the Holocene. **Science**, v. 351, n. 6269, 2016. DOI: [10.1126/science.aad2622](https://doi.org/10.1126/science.aad2622).