INTERAMERICAN DEVELOPMENT BANK

TECHNOLOGICAL EXTENSION SERVICES (TES) IN THE CARIBBEAN

DIÁLOGO
REGIONAL DE POLÍTICA

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I. Objectives

The objectives set at the beginning of this work were:

1. Inquire about public policies of Technological Extension Services (TES) in the Caribbean countries.
2. Suggest how to advance in the implementation of TES, since they can contribute to improve the productivity and competitiveness in Caribbean countries.

- Information was obtained through various documents and publications, but especially through face-to-face interviews with representatives of the public, private and academia sectors in four countries: Barbados, Belize, Jamaica and Saint Lucia.

- Analysis was performed around 4 aspects:
  - Institutions (governance)
  - Instruments (services)
  - Human capital
  - Technological services

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II. Public policies of technological extension

It basically consists of the implementation of programs that make available to companies, especially SMEs, mechanisms or instruments to provide direct external assistance that facilitate technological and management improvements, in order to increase their competitiveness.

Among the instruments to support technological extension, we can mention services such as:

- Information provision
- Technical assistance
- Accompaniment and training
- Development of value chains
- Associative projects
- Facilitating access to financing

A TES policy does not consist to support the generation of new knowledge to be applied in companies.

A TES public policy consist in support the adaptation of available technological know-how to companies, especially SMEs.

To this end, it is necessary to have instruments that promote and facilitate the adaptation and use of technologies already developed.

III. Competitiveness and innovation background in the Caribbean

The main antecedents are the following:

Country	Population 2016	GDP at current prices 2016	Per Capita Income 2016	Average Growth Rate 2006-2015	Ranking Human Development Index 2015	Global Competitiveness Index 2017	Ranking Innovation Index 2017
Antigua and Barbuda	92	1,259	23,062	1.1%	62	n/i	n/i
The Bahamas	388	8,854	23,001	1.1%	58	n/i	n/i
Barbados	284	4,385	16,406	0.2%	54	72	53
Belize	359	1,753	8,484	4.4%	103	123	135
Dominica	73	517	10,865	3.3%	96	n/i	n/i
Dominican Republic	10,528	68,103	14,237	8.9%	99	92	114
Grenada	107	984	13,559	4.1%	79	n/i	n/i
Guyana	767	3,166	7,528	11.7%	127	n/i	n/i
Haiti	10,711	8,765	1,757	8.4%	163	134	71
Jamaica	2,726	14,262	8,873	2.0%	94	75	138
Saint Kitts and Nevis	56	876	25,088	3.8%	74	n/i	n/i
Saint Lucia	185	1.431	10,944	3.3%	92	n/i	n/i
Saint Vincent and the Grenadines	110	738	11,14	2.1%	99	n/i	n/i
Suriname	543	5,15	16,703	9.6%	97	112	70
Trinidad and Tobago	1,36	23,855	33,309	2.8%	65	94	105

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- Indicators show that in recent years Caribbean countries, in general, have achieved an increase in GDP and per capita income.

- However, despite this, several countries in the region continue to have relatively low levels of per capita income and human development and, in general, there are significant delays in competitiveness and innovation, reaching a relatively low international level.

- The implementation of public policies of TES could be an alternative to help companies in the region, especially SMEs, to achieve technological and management improvements and thus increase their competitiveness.

IV. Main findings (Conclusions)

1. Caribbean countries indicators of human development, competitiveness and innovation, show significant levels of delay at the international level, with important differences between them.

   Introduction of new technologies and management capabilities in enterprises through business development programs could become an important tool to improve productivity and reduce competitiveness gaps with more developed countries.

2. In the countries visited, no public policies focused exclusively on technological extension were identified as a mechanism to support enterprises.

   In several of the existing business development support programs it is possible to incorporate technology transfer activities and management methods.

3. The countries are implementing programs to support development of business competitiveness through different instruments aimed at providing solutions to specific problems of companies such as financing support, certification, investment attraction and export promotion, which make up what could be called “a national system” of support for business development. The system could be reinforced through a holistic vision, shared by different sectors, incorporating new challenges and establishing a national strategy to support the improvement of competitiveness.

4. The representatives of interviewed institutions (public, private and academia sectors) expressed great interest in the implementation of public policies to support business development. In many cases they require more information to measure their possible benefits, and the concrete way of addressing them.

5. In the public sector there is widespread concern about improving business competitiveness, which has led to the creation and strengthening of institutions to support that.

   It is necessary to reinforce this process through the elaboration of a national strategy to support the development of competitiveness, led by the public sector and with the explicit consensus of the main public, private and academic actors related to the issue. There is an ample space to optimize the development of institutional governance and the concrete way of providing support instruments for the productive development of companies.

6. Caribbean countries face relatively high costs for the delivery of services to companies, mainly due to the fact that they require a high degree of specialization, and due to their relatively small size, they have a relatively low demand for such instruments.

   That constitutes an important obstacle for the competitiveness' improvement of the Caribbean companies.

7. The organized private sector is quite clear about the macroeconomic improvement needs and the environment in which its business operates, but it makes fewer contributions related to public policies to support business development through instruments that co-finance specific business projects.

   This may be due not only to their lack of experience in the field, but also to the fact that the private sector, as in many other parts, not always knows clearly what are their needs to be more competitive, and therefore does not demand such services or instruments.

8. In the private sector, there is no clarity regarding their support needs, both at the technological and professional levels, and therefore they cannot clearly convey their needs to the public sector and the academic sector. This is a very common problem.

9. In all Caribbean countries, even those with the greatest advances in training of technicians and professionals, there is a need to strengthen human capital to facilitate the development of adaptation and transfer of technologies to the main productive sectors.

10. The academic sector has as a central axis of its business strategy the training of professionals and it is not prioritized the link with the private productive sector. It is important to note that, the quantity and quality of the professionals generated by the training centers do not necessarily coincide with the needs of the business sector, and that the academic entities do not have technological centers that link them with the productive sector (although in some cases there is an intention to move in that direction).

11. The private sector has relatively little knowledge about the type of instruments, services and mechanisms that could be used to support their business projects, and it doesn´t know or has little information, about the business development support services that already operate in its country. In addition, there is relatively little presence of individual consultants and consulting enterprises experts in preparation and evaluation of technological projects, an essential aspect for the good performance of projects and programs.

12. In general, universities do not incorporate research, innovation and technological extension issues as a possible business and, consequently, do not allocate human or financial resources to these functions, thus maintaining a significant lag in their technological infrastructure and human capital. There is an absence of public policies that encourage the development of a market of technological services to support business development.

13. In all the countries visited, the main economic activity is, by far, tourism. This sector offers a wide space to improve its competitiveness, access new markets, incorporate more added values to its local supply, which can be accelerated through the implementation of specific public policies in this area.

14. Other interesting sectors are: agriculture and agribusiness (market niches) global services and renewable energies. In some territories fishing, industry and mining are relevant, and all of them are directed to specific market niches.

15. In general, in the countries visited, there is not a willingness to conduct public policies jointly with the other Caribbean countries. Nevertheless, all recognize the need to advance in the design of instruments to support business development collectively, in conjunction with other Caribbean countries, but not in the implementation of the same ones that they estimate should be carried out individually by each country. The need for external support, especially from international organizations, is recognized.

16. In the visited countries there is a relatively high participation of women in economic activities, especially in the management positions of public and private companies, and in self-employment, which are more vulnerable and informal.

17. The sustainability of public policies to support business development, is not easy to achieve, for various reasons: a) high operating costs; b) political difficulties to justify high spending; c) high risk of projects, especially the most innovative; d) high private sector ownership of the most obvious benefits of public support policies to business development, e) visible positive effects on the economy are observed effects in the long term, among others.

V. Proposals to optimize the competitiveness support system

A. Internally

1. The generation of a National Competitiveness Council (NCC), a public sector-led entity, with the participation of representatives from the public, private and academic sectors, with the purpose of analyzing and proposing improvements to public policies to support the private sector development.

2. Establish the principles and criteria that are considered essential to support the improvement of competitiveness. This must be done by representatives of the public, private and academia sectors that participate in the NCC.

3. Describe the value chain of the national business support system and compare it with the value chain reasonably desired to have, which will allow to establish the gaps that will need to be addressed.

4. Establish the priorities of these functions and develop a sequential, long-term work plan to implement them.

5. Identify the productive sectors that are intended to benefit from public policies and instruments, incorporating an analysis of the value chains and their risks.

6. In the countries visited tourism is the main economic activity, so it is important to improve its competitiveness by extending and improving its value chain, which can radiate to an important part of other activities.

   However, it is recommended to support other productive sectors as well and not focus only on tourism and its value chains.

7. Adjust the design of the instruments according to the productive sectors and their value chains priority needs.

   It is necessary to take into consideration the need to promote the available instruments, the objectives to be achieved with them, the ways of access and the ways in which they can be financed.

8. Permanent generation of information about the company's needs.

9. Working group to support the formation of human and technological capital, made up of public, private and academic representatives.

10. Encourage the formalization of business activities in areas or areas with high female participation, through instruments that benefit their activity and which, by way of example, do not require payment of taxes for at least a significant period of time or when Have achieved certain minimum levels of income.

11. Incorporate additional benefits to projects of any productive sector, to the extent that there is minimum woman participation.

B. Associatively: Collectively between countries

1. Creation of a Project Committee (CP), among members from different countries of the region, with the capacity to evaluate and decide on the projects presented in different countries that have their own budget to finance their projects.

The main characteristics that are proposed for the operation of this CP are the following:

a) Each country sets its budgets and conditions for the projects that will be developed on it;

b) The system operates under the open window mode (first come, first served), having an annual calendar for the analysis and approval of projects, under previously designed methodologies;

c) Once the projects have been approved, the execution and monitoring of the projects is the responsibility of the country to which the companies belong;

d) The system requires a lot of knowledge in preparation and evaluation of projects, for which it is suggested to have expert advice, and to deepen the training in these subjects in the local universities.

2. Strengthening the market for business support services:

   a) Consultants' market: initially through a list of consultants in the different specialties to progress towards a Register of Consultants with extensive information of the same that includes their specialties, qualifications, work done and prices of their services.

   b) Market of technological services: initially through a list of consultants in the different specialties to progress towards a Registry of Technology Services with extensive information of the same that includes their specialties, qualifications, work done and prices of their services.

3. Support productive sectors and their value chains, identified in each of the countries.

¡Thank you!