



Canadian International  
Development Agency

Agence canadienne de  
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# **Cuba Informatics for Economic Management Project**

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## Executive Summary

### Introduction

The purpose of this report is to summarize the findings of the **Mid-term Evaluation** of the *Informatics for Economic Management Project*. Fieldwork for this evaluation was carried out in June and July 1999; data for the evaluation were collected through document review, key person interviews in Canada, and field mission interviews in Cuba.

### Development Context

Cuba ranks 58 on the Human Development Index (1999) among all countries in the world. Key indicators in the infrastructure services area include:

- Life expectancy at birth = 75.7 years
- Adult literacy rate = 96%
- Mortality rate under 5 years = 8%
- GDP per capita = US \$ 3,100
- Population growth (1990s) = >1%

CIDA does not have a country programming framework in Cuba. However, since 1994 CIDA has emphasized projects in the fields of human rights and democratic development, a Social Sector line of credit to support the maintenance of basic levels of service in basic education and health, and support for Cuba's economic reforms.

### Project Description

The *Informatics for Economic Management Project* is a three year bilateral project (1997-2000), with the long-term **goal** to facilitate Cuba's insertion into the global economy. In the long term this will entail transforming the Ministry of Economy and Planning (MEP) into a ministry and the Central Bank of Cuba (BCC) into a central bank that can meet the challenges posed by a reformed economic environment.

The **purpose** of the project is to enable MEP and BCC to better analyze and propose economic development options for Cuba.

The project will accomplish the goal and purpose through the provision of informatics hardware and software to MEP and BCC, accompanied by specialized training in Canada and Cuba in areas such as: computer applications, LAN system management, statistics gathering and database management.

### Project Performance

Up to the mid-point, the project has demonstrated notable results between 1997 and June 1999. Although results will be more evident at the project's conclusion in May 2000, results have already been achieved at the output and outcome levels. These are:

## ***Outputs***

- 128 workstations installed in MEP, including INIE and the provincial offices.
- 60 workstations installed in BCC.
- 3 servers installed in MEP with functioning LANs.
- 3 servers installed in BCC with operational LANs.
- 12 trainers trained in Canada in applications.
- 425 MEP & 120 BCC staff trained by trainers in applications.
- Training in Canada for 3 technical staff.

## ***Outcomes***

- Increased ability in MEP to produce more quickly annual economic plans and budgets (e.g., 1999 annual plan produced and presented 3 weeks earlier than the previous year.
- Increased capacity in MEP to quickly address emergency and unexpected economic developments and to formulate action plans. Emergency economic analysis was prepared in response to effects of Hurricane Georges (1998) using informatics equipment supplied by the Project.

The project has produced results that are most prominent at the meso (institutional) level with an overall upgrading of the informatics capacity and human skills at MEP (central and provincial offices) and BCC.

Training in statistics gathering and analysis, security, SQL Servers, networks and applications will take place during the second half of the Project, concluding in the first quarter of FY2000/01.

## **Key Factors Affecting Project Results**

The following have been key factors in facilitating or hindering the project's achievements up to the mid-point.

The project has benefited from enthusiastic support from MEP and BCC. This has been demonstrated by the care with which the installation of hardware and development of the networks were planned to meet the specifications of the manufacturers and the local climatic conditions. The training programs have also been enthusiastically received by the informatics specialists and general staff in MEP and BCC.

The project could be adversely affected in a limited way by Cuban informatics specialists leaving the project and disappearing while on training programs in Canada. The project has experienced two "unexpected departures" to date.

The lack of a reliable national telecommunications infrastructure is a major constraint for the project having a significant effect on Cuba at its conclusion. MEP will come under increasing pressure to produce more detailed national economic plans more quickly. Although progress in this area has been notable to date, it may not be sustainable in the longer term if the communications linkages between the MEP central office in Havana and the provincial offices are not improved to permit the rapid transfer of electronic data over the telephone lines, for example.

### **Policy Themes and Issues**

To date, the project has made a substantial contribution to the development of the institutional capacity of MEP and BCC, especially MEP, to respond to the Cuban Government's requirements for improved economic analysis and planning. With the arrival of up-to-date informatics hardware and software and the appropriate training, there has been a significant improvement in MEP staff's attitude towards their work and a renewed sense of confidence developed that the Ministry can perform the complicated tasks required of it.

### **Lessons**

To date, there is a limited number of lessons learned for future informatics projects. These are:

- The Canadian equipment supplier added specific tracing and usage information to track the use of the supplied spare parts in order to ensure that they were used for replacement purposes for project hardware.
- Greater attention should be paid to the UPS and surge protection systems to provide the required protection with respect to the local power distribution system.

### **Conclusion**

The project has been successful up to the mid-point (June 1999) in creating a positive environment within the stakeholder institutions in which a general improvement in the planning, analytical and policy development of MEP and BCC can take place. The specialized training in the second half of the project can be expected to build on the successes to date and further develop the capacity of the stakeholders to effectively contribute to the opening of the Cuban economy.

The following recommendations have been made:

#### ***A. For the Informatics for Economic Management Project***

**Recommendation #1: Approval of MEP plan to extend hardware life.**

Under the circumstances and given the importance of maintaining all of the equipment in good working order, CIDA should approve a reasonable proposal of purchases of spare parts and upgrades by MEP to extend the life of the hardware beyond the current warranty period.

### **Recommendation #2: Consideration to Extend the Network to Municipalities**

We recommend that CIDA consider as part of a possible second phase of the project the provision of workstations, printers and training to the personnel in the municipalities who are responsible for the gathering and compilation of the economic data that is required by the provincial offices of MEP for inclusion in the annual economic plan. This would build on the success of the current project and ensure consistency and improved quality throughout the network. Prior to such a decision, a review of the Cuba's telecommunications infrastructure should take place.

### **Recommendation #3: Project Evaluation**

We recommend that a full evaluation take place approximately 18 months after the conclusion of the project. At this time, the personnel at MEP and BCC will have had a reasonable amount of time to employ the skills and knowledge in their planning that were acquired during the specialized training in statistics, data collection and analysis. The hardware will also be operational if the plan to extend equipment life is approved.

If possible, an evaluation of the project should be combined with an evaluation of the *Training in Economic Management Project*.

### **Recommendation #4: Results Framework**

If a second phase of the project is undertaken, we recommend that the expected results in the new phase reflect CIDA's guidelines for the preparation of LFAs with one long-term result flowing logically from the project's outcomes. We would also recommend that any second phase carry out a thorough situational analysis of gender equity issues and promote diverse results that go beyond numbers of trainees to actual methodologies, tools, economic indicators and budgeting.

### ***A. For Informatics Projects***

#### **Recommendation #1: Technical skills to be provided in support of CIDA Project Officer.**

The informatics industry is characterized by rapid technological change. On all future informatics projects, we recommend that CIDA consider, when necessary, enhancing the technical expertise in its informatics projects by contracting outside technical expertise to assist CIDA project staff, and that the same expert be maintained through the life of the project, as well as being available for short-term follow-up missions. Combining the thorough understanding by CIDA staff of the informatics environment within a government setting with the latest

informatics industry knowledge of outside experts should ensure a high quality of project preparation, execution and monitoring.

Suggested basic requirements for such expertise include:

- Non-contact with future suppliers;
- Up-to-date knowledge of the informatics industry and technology;
- Knowledge of the necessary support structures; and most importantly the
- Ability to interpret needs and wants into the necessary functional requirements.

### **Recommendation #2: Modifications to equipment supply process.**

We recommend that changes be made to the contracting process, particularly for hardware supply, since this equipment is vulnerable to short-term changes in the industry.

One possible change is:

- Specify a base price per unit with functional requirements. Suppliers produce bids based on available equipment. The contract is awarded based on the value per dollar of comparable base systems. Final specifications for equipment are not set until the order is to be placed, then the winning supplier constructs a new equipment list based on available technology, without exceeding the base price. A final review by CIDA project officer and technical expert, prior to purchase, is then conducted.

A second possible change is:

- Delay the order of equipment as long as possible. Potential suppliers can be advised that such an order is coming, and that they should be prepared to complete a proposal for equipment in under 1 week, or less. Review of bids can then be conducted within 24-48 hours and the purchase order submitted to the winning bidder.

### **Recommendation #3: Preparation of a systems sustainability report**

We recommend an additional report be produced, either stand-alone or as a section of a project inception report.

This report would be prepared by the technical expert and would provide background on all the sustainability aspects of the project including, but not limited to the following:

- Communications infrastructure;
- Power distribution infrastructure;
- Consumables;
- Intra- and inter-agency linkages and dependencies;

- Software capability of the average staff;
- Software capability of the informatics staff;
- Hardware support and repair capability of the informatics staff;
- Existence of any informatics “leaders” in any agency; and
- Future capability to stand-alone, technologically.

#### **Recommendation #4: Guidelines for Future Informatics Projects**

It is our recommendation that a checklist of items for informatics projects be created by the technical expert on the project as part of the project inception process and report. It would be convenient if a checklist of items could be developed that must be considered on all informatics projects. The informatics industry, as it continues to expand, would be constantly changing the contents of such a checklist.

#### **Recommendation #5: Hardware Delivery Timetable**

It is recommended that all planned hardware and software be purchased at the same time to produce a uniform platform across the project. The consequences and costs of buying all the equipment at the same time, versus the potential problems with different versions of hardware and software, must be considered.

#### **Recommendation #6: Hardware Upgrades**

As a general recommendation, requests for upgrades to delivered hardware should be denied. For hardware upgrades the question should be: Is there a good reason for this upgrade? In the case of the project the requests were reasonable in order to extend the life of the hardware beyond the warranty period.

#### **Recommendation #7: Software Upgrades**

A similar recommendation for software takes a different line, since the productivity and capability of the informatics design are embedded in the software, more than the hardware. Upgrades to software may be justifiable.

For software upgrades the question should be: Will the upgrade improve the short-term or long-term capabilities of the client country, and are these benefits sufficient to justify the capital cost of the upgrade?