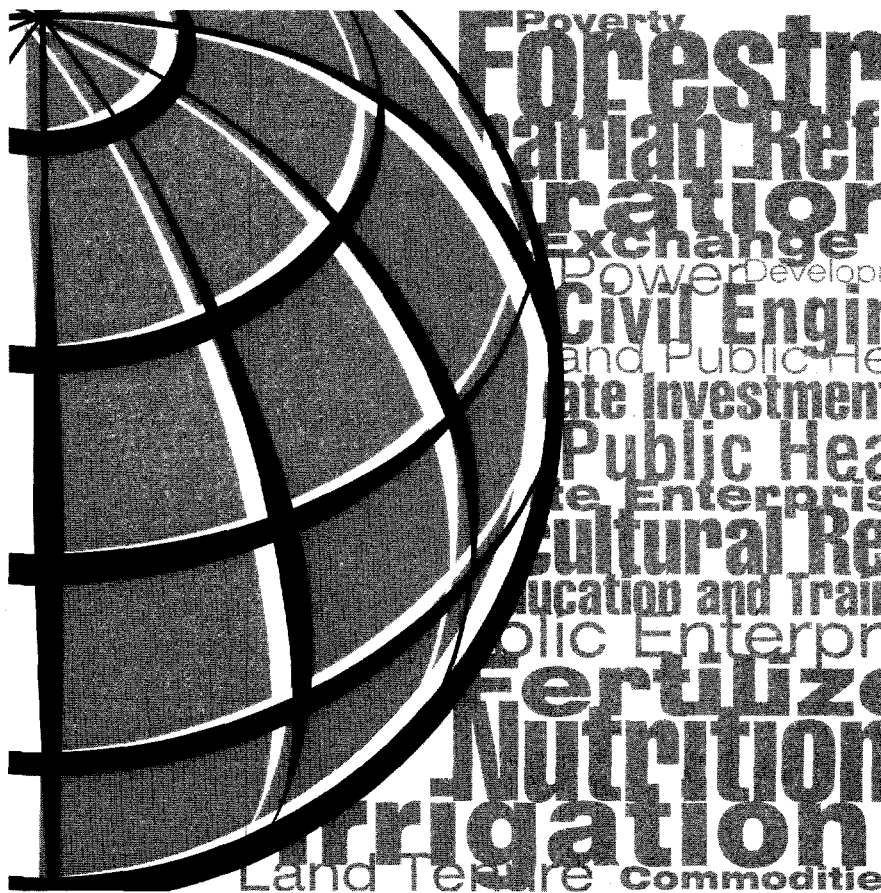




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# Institutional Environment and Public Officials' Performance in Guyana



*Omer Gokcekus  
Nick Manning  
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# Institutional Environment and Public Officials' Performance in Guyana

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*The World Bank  
Washington, D.C.*

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## Foreword

Recognizing that strong institutions are an integral part of a well-performing public sector, this paper is part of a larger effort in the Poverty Reduction and Economic Management Network to develop practical strategies for reform. The objective is to present results to policymakers in a format that leads to more informed choices about the public sector.

This study is based on the findings of surveys of public officials in Guyana. Funding for this and fifteen other country-studies came from the Bank-Netherlands Partnership Program. The report emphasizes that public officials respond to their environment. They are neither intrinsically selfless nor intrinsically rapacious, and their behavior must be understood in the context of the incentive structure that they face. The approach has been to start with the existing knowledge about the country's public sector and then use officials' responses to deepen understanding of strengths and weaknesses of the public sector institutional environment. The report sets out the key lessons from the survey that will encourage debate on priorities for reform, and which institutions might be further strengthened and how.

Cheryl W. Gray  
Director, Public Sector Group  
Poverty Reduction and Economic Management Network



## **Abstract**

This report presents the findings of a survey of 454 public officials in Guyana, whose views were sought on a wide range of civil service issues—from personnel management practices to rewards and disciplinary actions, and from budget environment to corruption. Respondents' answers were used to test some prior assertions about the public sector in Guyana. Respondents believe that public sector jobs are attractive, but public employees are not fully prepared for their jobs through education and training and that recruitment is not always based on merit. Officials find policies consistent, and implement policies even when they disagree with the policy direction. Decision-making is, however, characterized by poor communication and low employee participation. Surveyed officials show keen insight about which reforms might enhance the performance of the organizations in which they work. Utilizing the analytical framework developed for the series of WBNPP-financed public officials surveys, data analysis enables quantification of how public officials assess the institutional environment and performance of their organizations. Survey data was analyzed to demonstrate how widely varied the institutional environments of different public sector organizations can be. Across the sampled public sector organizations, survey data provides evidence that performance does depend upon institutional environment. The report explores how interventions can be prioritized according to their potential payoffs in different performance areas. Setting goals and monitoring performance is likely to be associated with the most significant positive change in performance.

## **Acknowledgments**

This report is a product of the Public Sector Group in the PREM network. It analyzes the findings from a survey of public officials in Guyana undertaken between November 1999 and January 2000. The survey is one of a major program of surveys of public officials funded by the Bank Netherlands Partnership Program (BNPP).

The survey was designed by Omer Gokcekus (PRMPS) and Ranjana Mukherjee (PRMPS), administered by the Management Services Division of the Public Service Management Ministry, and coordinated by Leila Parris, Deputy Permanent Secretary, Public Service Management Ministry, Government of Guyana.

The report was prepared in the Public Sector Group of the PREM network with input from Leila Parris and Grace MacCalman of Public Service Management Ministry, Government of Guyana. Adeel Malik (PRMPS) provided research assistance. The authors thank Ethan Weisman (IMF) and Dr. Roger Luncheon, Head of President's Secretariat, Government of Guyana for their comments on earlier drafts of the report. The document was peer reviewed by Monica Das Gupta (DECRG) and Jit Gill (LCSPPS), and their comments are gratefully acknowledged. The authors also thank those who participated in an Internet discussion of the report in January and February 2001. The views expressed in this report are not necessarily those of the World Bank.

## Abbreviations

BNPP	Bank Netherlands Partnership Program
CA	Constitutional Agencies
CIDA	Canadian International Development Agency
CXC	Caribbean Examinations Council
DFID	Department for International Development
ERP	Economic Recovery Program
GCE	General Certificate of Education
GDP	Gross Domestic Product
GUYSUCO	Guyana Sugar Company
HIPC	Heavily Indebted Poor Country
IDA	International Development Administration
IDB	Inter-American Development Bank
IMF	International Monetary Fund
LDO	Local Democratic Organs
PC	Policy Credibility
PPO	Performance Pay-Offs
PS	Permanent Secretary
PSC	Public Service Commission
PSM	Public Service Management
RA	Regional Administration
RC	Rule Credibility
RP	Resource Adequacy and Predictability
SAA	Semi-Autonomous Agencies
TC	Technical Cooperation
UNDP	United Nations Development Programme
USAID	United States Agency for International Development



## **Introduction**

This report analyzes the findings from a survey of public officials in Guyana undertaken in 1999. The immediate objective was to use detailed survey data to map the points of strength and weakness in the Guyanese public sector. The aim of the study was to draw conclusions about those institutional weaknesses that should be the immediate target for reform.

The premise for the survey design and data analysis is that public officials' performance depends on their institutional environment, and that understanding the formal rules is necessary but insufficient to understand the reality that officials face. Formal rules do matter, but public officials' actions are also shaped by the degree to which they believe that rules will be enforced in practice, that resources will be provided as promised, and that policies are stable and implementable. This survey set out to obtain a better understanding of where and why formal rules are not applied, and what informal incentives constitute working reality for officials.

The survey begins with questions about the background, current position, and future plans of respondents. This first section includes questions regarding the age, gender, marital status, education, salary, training, number of subordinates, and work experience of officials. A second set of questions deals with officials' reasons for working in the government, factors contributing to poor performance, general hiring trends, existence and efficacy of formal training, frequency of performance appraisal, existence of performance standards in the organization, records management systems, evaluation of disciplinary actions, and evaluation of employee rewards. The next set of survey questions explores budget management, covering the extent of officials' involvement in budget preparation, estimate of budgetary shortfall, areas of budgetary cuts, expenditures in excess of budgetary authorization, and the penalties associated with those expenditures. A subsequent set of questions focuses on organizational mission—consistency of policies, views on improvement of organizational performance, and the frequency of political interference in the organization. The final set of questions examines the significance of corruption as a problem, the location and forms of corruption, the regularity with which instances of corruption are reported, and measures to help reduce corruption.

The survey provides the opportunity to test empirically a series of commonly-held assertions about the civil service in Guyana. This "common knowledge" includes assertions about decision-making in the public sector, incentives for good performance by public officials, the popularity of public sector jobs and public employees' preparation and training for the jobs they do. The survey finds that most respondents maintain the view that public sector jobs are attractive. It shows that public employees are not fully prepared for their jobs through education and training and that recruitment is not always based on merit. The survey does offer the reassuring finding that officials find policies consistent, and implement policies even when they disagree with the policy direction. Decision-making in the public sector is, however, characterized by poor communication and low employee participation. Surveyed officials show keen insight about which

reforms might enhance the performance of the organizations in which they work. They reported that increased funds would not necessarily make their organizations perform more effectively; performance evaluation and monitoring, officials stated, are more essential.

The survey also allows some associations to be identified between specific elements of institutional environment and officials' performance. The survey employs a particular empirical approach which moves beyond theory into a practical investigation of which institutions matter particularly and where the largest "performance pay-offs" might be found. The intention of this approach is to move beyond the general finding that institutions matter for performance, and to open up consideration of which institutions matter particularly.

This report is divided into five sections: Section 1 draws an outline of the public sector in Guyana, highlighting pay and employment in the civil service. This section sets the background against which the survey was conducted. Section 2 summarizes the survey instrument, sample details and the survey implementation methodology. Section 3 presents the findings from the surveys. Prior assertions about Guyana's public sector performance are tested from survey results. Section 4 analyzes survey data to establish the connection between officials' performance and their institutional environment. In that section, the components of institutional environment and performance are enumerated, institutional environment and performance are measured in terms of indicators, and then connections between the institutional environment and performance and pay-offs on potential reform interventions are explored. Section 5 summarizes the reform implications of the main findings of the survey. Unless otherwise stated, figures and charts are based on author calculations of survey data.

# 1. Profile of public employment

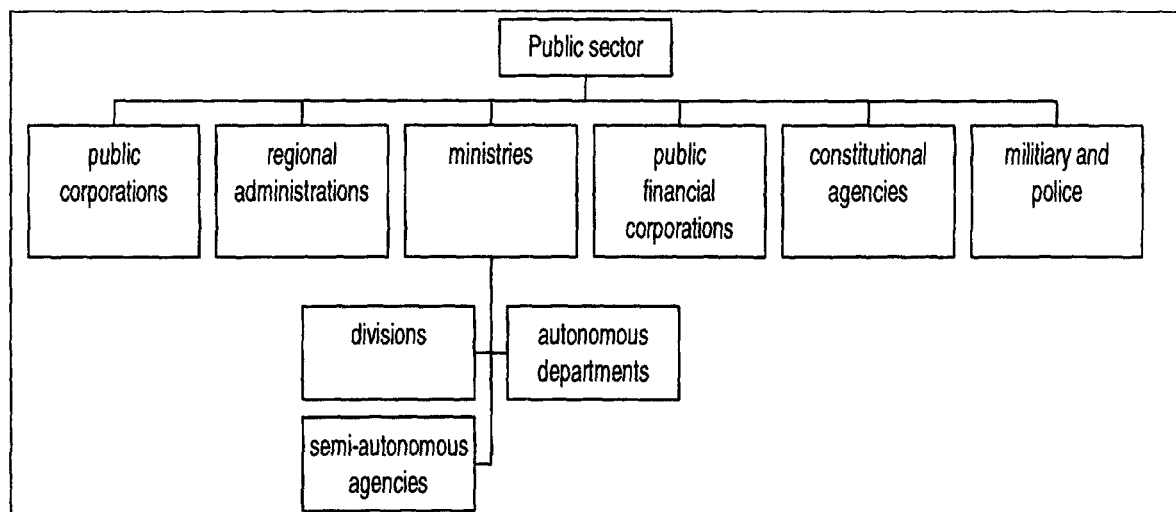
## *Background*

Guyana is a heavily indebted poor country (HIPC) with a population of 750,000 people. A former British Colony, Guyana achieved independence in 1966. Four years later, it became a Cooperative Republic within the British Commonwealth following centralized socialist policies. In 1980 a new constitution was enacted, declaring Guyana an indivisible, secular, democratic, sovereign state. The policies pursued by the government of Guyana in the 1970s and 80s were characterized as “cooperative socialism.” The productive sectors were predominantly controlled by the state. Since 1988, however, the Economic Recovery Program (ERP) has reversed most of those financial and industrial policies begun in the 1970s.

## *Composition of the public sector*

The public sector in Guyana is composed of ministries (and divisions and departments under them), regional administrations, public corporations, financial entities, constitutional agencies, and military and police services.

**Figure 1 Composition of Guyanese public sector by type of organization**



The ministries are listed in Appendix 1. Although most divisions and departments report to the minister through their respective hierarchies, some ministries contain autonomous departments whose heads report to the minister directly. For example, the Ministry of Finance contains the Inland Revenue and Customs and Excise departments which have this particular status.

Semi-Autonomous Agencies (SAAs) are intermediate in character between government departments and public corporations. These are controlled by a supervisory board, and report directly to the sector minister. Within the public sector, the Constitution establishes a number of Constitutional Agencies (CAs), which have specific functions to ensure

probity in the conduct of public affairs. A significant component of the public sector in Guyana consists of public corporations, governed under the Public Corporations Act of 1988. Appendix 1 lists all Guyanese public sector organizations.

The Local Democratic Organs (LDOs) Act, passed in 1980, added another administrative layer. The effort was intended to decentralize government powers with the creation of 10 regions, with their respective Regional Administrations (RAs) and Regional Democratic Councils (RDCs), including 6 town municipalities, 19 district councils, 32 village councils, and 75 Amerindian councils. RAs were established to incorporate popular participation while managing within the general policies of the central government. The current debate on constitutional reforms may lead to future changes in these arrangements.

### ***Personnel management responsibilities in the public sector***

The Constitution of Guyana sets out the legal framework for the functioning of the state. Under the Constitution, the president has complete authority over the structure of the government and its ministries. The ministries are structured into a number of divisions, which are the direct responsibility of the Permanent Secretary (PS).

The composition and functions of the Public Service Commission (PSC) are set out in articles 200 to 205 of the Constitution. The Public Service Commission rules (1998) specify the regulations for appointments, promotions, transfers, retirement, discipline, conduct, and related personnel management issues. The Commission delegates, with due approval of the prime minister, the administrative powers to a permanent secretary, head of department or the clerk of the National Assembly.<sup>1</sup>

The head of the Public Service serves as the head of the Presidential Secretariat, as the cabinet secretary, and as the senior public servant in the Office of the President, which now contains the Department of Public Service Management (PSM), the former Public Service Ministry, which has its own permanent secretary.

The responsibility for personnel policy and administration is divided between the Public Service Commission and the Public Service Management (PSM) Ministry, individual ministries, Regional Administrations (RAs), and, for payroll purposes, the Ministry of Finance. The PSM is responsible for all personnel policies in the public service. Its responsibilities include determining the number of posts in the ministries, establishing salary and grading levels, and developing training programs. The individual ministries and RAs are responsible for day-to-day management of staff, their training and appraisal, and for maintaining employment and salaries within limits approved by the PSM. Overall, human resource management remains highly centralized and RAs and individual ministries have little delegated authority.<sup>2</sup>

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<sup>1</sup> Government of Guyana (1999).

<sup>2</sup> This section draws on the World Bank (1993 and 1999b).



## ***Public sector reform during the nineties***

During the 1990s, the government of Guyana undertook a major public sector reform initiative with the active support of IDA, IDB, British DFID, CIDA, UNDP, and USAID. Public sector reforms have been politically difficult and slow in implementation. With IDA support, private management (Booker Tate, Ltd. of the UK) was introduced in the Guyana Sugar Company (GUYSUCO) in the early 1990s. Since then, with support from IDA's ongoing public administration project (1993-1999) and IDB projects, the government since the late-nineties has:

- (1) Streamlined the grade structure and carried out a private sector survey to fine-tune a new remuneration structure that is conducive to retaining and attracting managerial, professional and technical personnel. But the large wage awards by the tribunal for 1999-2000 precluded a separate wage structure as originally intended; and
- (2) Revised public service rules relating to employee discipline, severance, and annual performance appraisals; and
- (3) Completed the restructuring of the finance ministry and started the restructuring of the Ministry of Education and the Ministry of Health.

Because of continued opposition from the unions, the government has been slow in reducing the size of the civil service. The government, with support from IDA, has improved the payroll and pensions database.

Ongoing IDB technical cooperation is supporting the government in staff audits, job descriptions, and performance appraisal, which will serve as key inputs for the public sector modernization program to be implemented over the medium term.

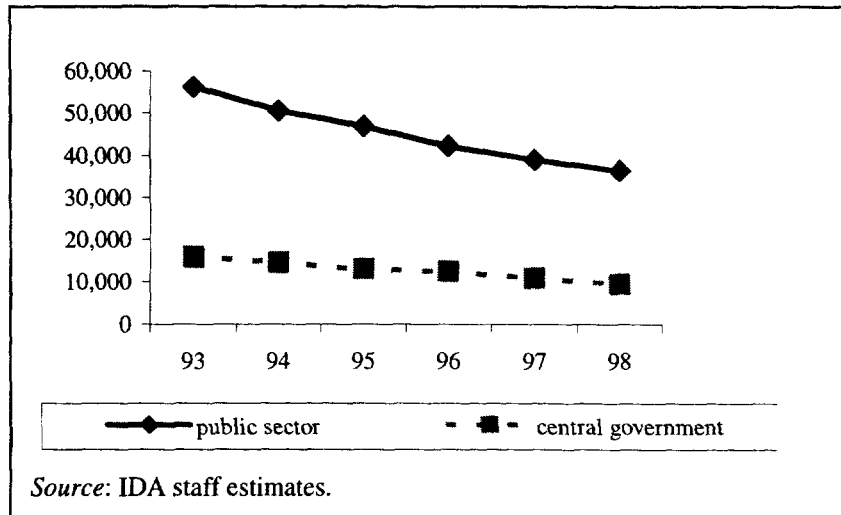
## ***Shape and size of public employment***

During the 1990s, public employment in civilian government (excluding police) has fallen significantly. Since 1993, the number of employees has dropped from 56,000 to about 31,000, and total public employment in Guyana today accounts for 13 percent of the labor force.<sup>3</sup> Government is also continuing a hiring freeze, begun in October 1999. In late October 2000, the government eliminated over 1,200 security guard positions and contracted out security services to a private firm. With the support of IDB and IDA, the government plans to modernize the public sector over the medium term.

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<sup>3</sup> World Bank (2000a).

**Figure 2 Employment in Guyanese civilian government excluding police**



The public service in Guyana includes public servants working for ministries and their affiliated departments, the regional associations and constitutional agencies. Available government estimates indicate that there are 21,206 public service posts, of which 12,024 (57%) are filled and 9,182 (43%) are vacant. Of the recorded 21,206 positions, 63% are in ministries, 31% are in RAs and 6% are in CAs.<sup>4</sup> Three-fourths of the filled positions in the public service are in the lowest 5 grade levels, and vacancies at the lower levels are due partly to a conscious effort to streamline the civil service. However, vacancies at the middle and higher levels are due mainly to the unattractiveness of civil service salaries.

In 1993, a 14-band salary structure was introduced and, on the basis of job evaluations, all existing posts were incorporated into the new structure. The current level of salaries corresponding to these bands is presented in Appendix 1, and the number of employees belonging to the central public service in each band are given in the box alongside.

The government of Guyana has undertaken significant efforts to improve the remuneration structures. To correct for the real wage declines in the public sector in the 1980s and early 1990s, the government first revised the salary structure in 1993 and later approved a series of wage increases beginning in 1994. Wage supplements were additionally granted over base pay to critical positions. The intention behind the government's wage reform was to achieve the medium-term goal of gradually bringing public sector wages to within 10 percent of the median for comparable jobs in the private sector.<sup>5</sup>

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IDA staff estimates, 1999.

<sup>4</sup> IDA staff estimates, 1999.

<sup>5</sup> World Bank (1995).

**Table 1 Salary bands and employees**

Band	Number of Employees
0	52
1	1686
2	2841
3	879
4	1095
5	545
6	288
7	374
8	344
9	278
10	230
11	162
12	61
13	45
14	18

*Note:* Does not reflect Guyana police force.  
*Source:* PSM Ministry (2000).

Following a two-month strike in May-June 1999, the arbitration tribunal awarded a larger-than-expected increase in public salaries. Civil service salaries were raised by 31 percent. A further 27 percent increase was granted in 2000.

Though the impact of the more recent wage raise is not documented, the earlier reforms were described as only partially successful. The two government surveys commissioned in 1998 deduced that private salaries exceeded those of the public service for comparable positions.<sup>6</sup> The wage compression in 1999 was 8:1, down from 6:1 in the early 1990s<sup>7</sup>. However, salaries are more compressed for technical and professional staff, 3.5:1 and 6.6:1, respectively.<sup>8</sup>

The figure below shows the structure of public employment in Guyana, with available employment figures corresponding to each category.

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<sup>6</sup> Concern has been expressed that the private sector surveys were based on non-comparable groups (see Rama 1999).

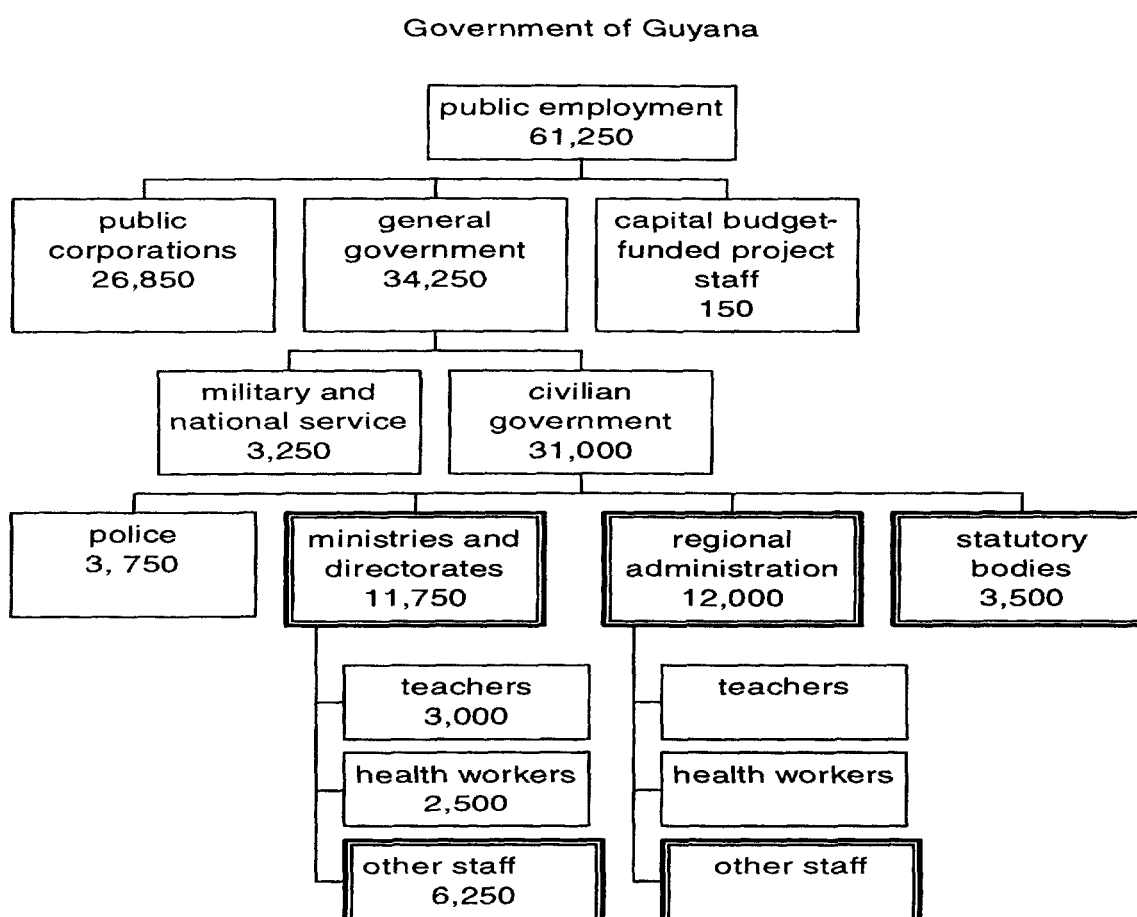
<sup>7</sup> Wage compression is the ratio of midpoint of highest and lowest salary scales.

<sup>8</sup> World Bank (1999b).

## *Fiscal weight*

Total public expenditures in Guyana amount to about 40 percent of GDP and the central government's budget deficit (after grants) stood at over 6 percent of GDP in 1999.<sup>9</sup> The recent generalized pay rise has exerted greater fiscal pressure. In 1998 total expenditure on personnel wages of central government employees was two and a half times as much as in 1993. In the period of 1993-1998, the annual percentage increase in personnel expenditures averaged 19.5 percent. The ratio of wages and salaries to GDP has risen by more than 38 percent since 1993, compared with a 29 percent increase in the ratio of allowances and contributions to GDP in the same period. The expenditure on wages and salaries of public officials has consumed a greater proportion of tax revenues over time, from 12.6 percent in 1993 to 22.8 percent in 1998.

**Figure 3 Structure of executive government in Guyana**



*Source:* Staff minutes from World Bank files, November 1999. Boxes with heavier borders indicate parts of the public sector from which the survey sample was drawn.

<sup>9</sup> World Bank (2000a).

**Table 2 Trends in personnel expenditure**

	1993	1994	1995	1996	1997	1998 <sup>a</sup>	1999 <sup>b</sup>
Personnel expenditure <sup>c</sup> (% of GDP)	6.2	6.0	6.3	6.6	7.8	8.4	8.4
Wages and salaries (% of GDP)	4.5	4.5	4.8	5.1	5.9	6.5	6.2
Allowances and contributions (% of GDP)	1.7	1.5	1.5	1.5	1.9	1.9	2.2
Wages and salaries (% of total tax revenues)	12.6	15.2	15.2	15.7	19.9	22.8	NA
Wages and salaries (% of non-interest expenditure)	12.8	17.7	16.4	15.8	17.8	21.4	NA
Consumption expenditure in the public sector (% of GDP)	15.6	14.9	14.9	16.0	17.1	17.6	NA
Gross domestic investment in the public sector (% of GDP)	19.4	11.6	16.3	19.1	18.1	14.4	NA
Wages and salaries in public Enterprises (% of GDP)	14.6	13.3	12.1	11.5	13.5	12.0	NA

a. Preliminary estimates.

b. Budget estimates.

c. Includes 'wages and salaries' and 'allowances and contributions' of central government employees only.

## 2. The survey of public officials in Guyana

### *Why were public officials surveyed?*

The survey of public officials in Guyana was one of a series funded by the World Bank Netherlands Partnership Program (WBNPP).<sup>10</sup>

The need for an analytical framework emerged from the lessons of past experience in the World Bank. The Operations Evaluation Department reported that during 1980-97, only one-third of the Bank's closed civil service reform interventions had successful outcomes.<sup>11</sup> Other reviews of the Bank's public sector reform efforts have identified shortcomings of the Bank's approach in this area, pointing out the risks of a narrow and "technocratic" view of what is needed for public sector reform, and of a reliance on "best practice" models that have not been feasible in the particular country setting.<sup>12</sup> The Bank's most recent strategy for reforming public institutions has identified that for the approach to be effective, "[W]e need to work with our partners to understand and address the broad range of incentives and pressures—both inside and outside of government—that affect public sector performance."<sup>13</sup>

The strategy paper also points out that for the analytic work to be useful, "We need to start with a thorough understanding of what exists on the ground and emphasize 'good fit' rather than any 'one-size-fits-all' notion of best practice. And we need to work with our clients and other partners to develop and apply analytic tools effectively."

Public officials, like other economic agents, generally respond to the incentive structure they face. There is ample evidence, both theoretical and empirical, to suggest that the performance of public officials is greatly determined by the institutional environment in which they find themselves. The survey approach used in Guyana recognizes that incentive systems vary across types of organizations and types of officials. The survey uncovers the sanctions and rewards that drive behavior, as seen by those who may be subjected to them—the public officials themselves.

The survey covers several important areas. It provides a contextual description of the public sector, including characteristics of respondents, their reasons for joining the public sector and the duration of respondents' employment in the public sector. It offers the possibility of presenting policy-makers with robust confirmation of the theory-based assertion that it is the institutional environment—defined in a policy-relevant manner—that drives performance. The survey also allows hypotheses about the Guyanese civil

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<sup>10</sup> WBNPP surveys of public officials have been completed in Albania, Argentina, Bolivia, five countries in the Organization of East Caribbean States, Guyana, Indonesia, Kenya and Moldova. Survey results are displayed on the World Bank's web site at <http://www1.worldbank.org/publicsector/civilservice/surveys.htm> for the use of independent researchers, policy makers, practitioners, and other interested parties.

<sup>11</sup> World Bank (1999).

<sup>12</sup> World Bank (2000).

<sup>13</sup> Ibid, p.4-5.

service to be tested. Many widely held views on public officials are bandied about without substantive evidence—more akin to “urban myths” than to empirical observations. The survey allows such assertions to be tested and supported or refuted.

Finally, with important cautions, the survey allows some assessment of *which* aspects of institutional environment exert a particularly strong impact on performance.

### ***Survey design***

The survey questionnaire was adapted from a tested template, based on focus-group interviews held with public officials in November 1999. The questions were tailored to the specific administrative environment of Guyana. The questionnaire contained 74 questions, and was divided into five main sections, and conducted in English. Some questions on sensitive issues such as corruption were contained in a separate booklet. The structure and the main focus of the questions asked are presented in Table 3 below.

**Table 3 Key dimensions probed in the survey**

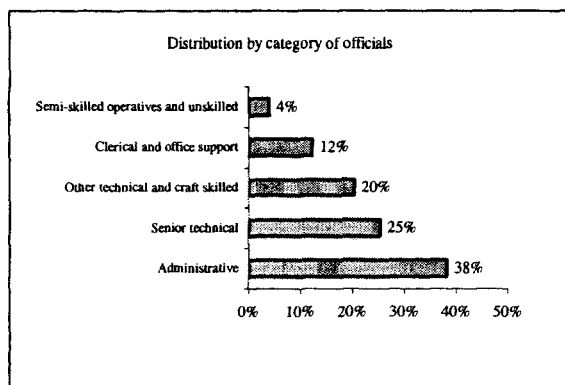
Profile of the respondent	General questions about the background, current position, and future plans of the respondent. Respondents were queried about their age, gender, marital status, education, salary, training, number of subordinates, length of experience etc.
Personnel management practices	Reasons for working in the government; factors contributing to poor performance; general hiring trends; existence and efficacy of formal training; frequency of performance appraisal; existence of performance standards in the organization; records management system; evaluation of disciplinary actions; evaluation of employee rewards, etc.
Budget management	Extent of involvement in budget preparation; estimate of budgetary shortfall; areas of budgetary cuts; expenditures in excess of budgetary authorization and the penalties associated with excesses.
Organizational management	The mission of organization; consistency of policies; views on improvement of organizational performance; and the frequency of political interference in the organization.
Corruption	Significance of corruption as a problem; the location and form of corruption; the regularity in corruption reporting; and measures to help reduce corruption.

### ***Sampling features***

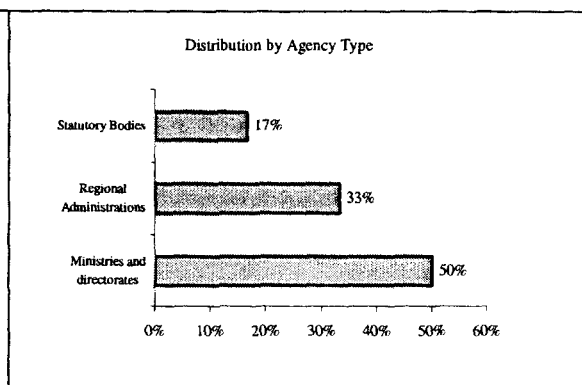
The sample was designed to ensure adequate representation of the various types of government agencies, different categories of public officials, and diverse geographical locations. The sample was defined in a detailed fashion, with a clear identification of the types of state organizations as well as the number of interviewees for each type. Country specialists on Guyana were consulted to arrive at this sample distribution.

The survey was conducted in the branches of the civilian government identified in Figure 1. The sample was drawn from ministries and directorates (50%), regional administrations (33%), and statutory bodies (17%). Nine ministries, six statutory bodies, and five kinds of regional administrations were selected for the sample.

**Figure 4 Distribution of the sample among kinds of tasks performed by the officials**



**Figure 5 Distribution of the sample among kinds of organizations.**



38% percent of the sample consisted of officials performing administrative tasks. Other groups of staff in the sample included senior technical staff (25.3%), other technical and craft-skilled staff (20.3%), clerical and office support staff (12.2%) and semi-skilled operatives and unskilled (4%).

About two-thirds of the sample was drawn from the Demerara-Mahaica region, an urban district.<sup>14</sup> The remaining third of the sample was drawn from regions 2, 3, 6, 7 and 10.<sup>15</sup>

The typical respondent of the public officials' survey was a female employee between 45 and 55 years of age, with a school-leaving certificate (CXE/GCE) and with 5 to 10 years experience. She was substantively appointed to her post, serving in a ministry at the time of the survey, and in 5 years' time expected to be working in a different position in the same organization. She had dependent children, had not received any training outside of her country, seemed sincere in her responses and had cooperated with the surveyor.

### ***Survey administration***

The Guyana survey was administered by six officers of the Public Service Management Ministry/Office of the President, in the period of November 1999-March 2000. The overall supervision and coordination of the project was provided by Leila Parris, the Deputy Permanent Secretary of the ministry. A total of 454 civil servants were interviewed for the purpose of this survey.

<sup>14</sup> Demerara - Mahaica is the largest region and includes Georgetown.

<sup>15</sup> These and other regions are listed in Appendix 1.



The survey questionnaire was pre-tested among a group of fifty public officials. The lessons learned from the preliminary testing were incorporated in the final questionnaire. The survey was administered with the support and co-operation of various agencies and their senior managers. This support was particularly useful in ensuring timely selection and availability of respondents.

The questionnaire was then administered through face-to-face interviews. In the case of sensitive questions, respondents were given booklets to indicate their choices, which were later sealed in the envelopes to ensure anonymity. Surveyors were trained through mock interviews. Surveyors submitted the completed questionnaires to the survey coordinator in a timely fashion. The survey coordinator in turn submitted these completed questionnaires for data entry. Incomplete or inconsistent questionnaires were rejected and agencies were asked to identify alternate respondents.

The survey coordinator reported some difficulties during the course of survey implementation. Many public officials expressed their unwillingness to participate in the survey, either because they had insufficient time to be interviewed or were unavailable for the scheduled interviews. The timing of this survey coincided with the government's exploring possibilities for rightsizing the civil service. Some officials were skeptical that the survey responses would be factored into the rightsizing project and refused to be associated with the survey. Of those who agreed to be interviewed, some were reluctant to answer the more "sensitive" questions; some employees had difficulty in responding to the more technical questions and issues.

Many of these difficulties were resolved through regular meetings of the entire project team. More information on the survey purpose and its possible benefits was shared with skeptical respondents. Some interviews had to be re-scheduled for those who were not available at the time of the interview. For others who declined to be interviewed, replacements were made with other public officials of comparable positions. Respondents were assured of strict anonymity and confidentiality during the whole survey exercise.

### 3. Survey findings

Survey data was used to test ten “commonly held views” about the Guyanese public sector. This common knowledge or set of prior assertions emerged from reports on the Guyanese public sector and contributed to questionnaire design.<sup>16</sup> The results are summarized below.

**Table 4 Common assertions tested<sup>17</sup>**

Prior Hypotheses/Assertions	Whether supported by survey findings
1. Public sector jobs are attractive	Supported
2. Public employees are poorly prepared for their jobs	Partially Supported
3. Officials find the policies that they are asked to implement are inconsistent	Not Supported
4. Recruitment is not merit-based	Partially Supported
5. Politicians meddle in day to day operational decisions of the public sector	Partially Supported
6. No incentives for good performance and few disincentives for bad performance	Supported
7. If only more money were available, organizations would perform better	Partially Supported, but public officials think performance evaluation systems will improve organizations' performance more than higher salaries.
8. Decision-making in the public sector is characterized by poor communication and low employee participation	Supported
9. Corruption is a serious concern	Supported
10. Budget management remains weak	Supported

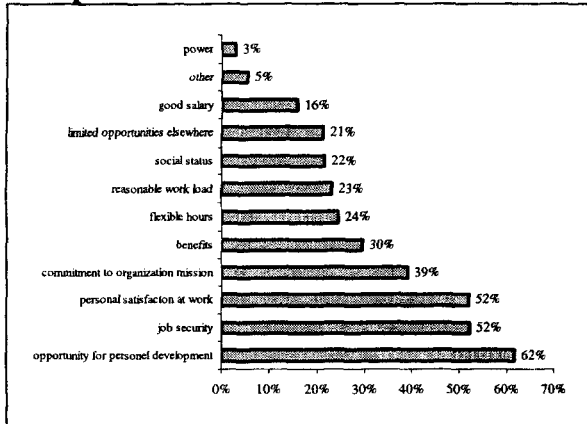
- *Public sector jobs are attractive.*

Respondents were asked to state what influenced their decision to join the public sector and whether any expected features were absent. Two-third of all respondents noted that a “good salary” was absent. 82% of officials said that their government salaries were not sufficient to pay their living expenses, and more than two-thirds of surveyed employees stated that they supplement their salaries with support from other members of their families or relatives overseas.

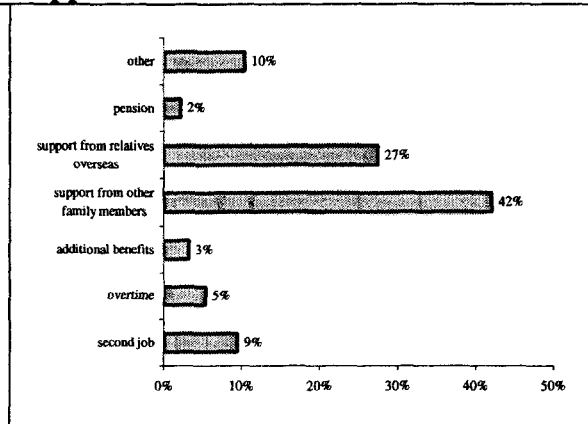
<sup>16</sup> For instance, World Bank (1993; 1999b; and 2000a).

<sup>17</sup> Questions that were used to test these prior assertions are listed in Appendix 2.

**Figure 6 Reasons why officials joined the public sector**



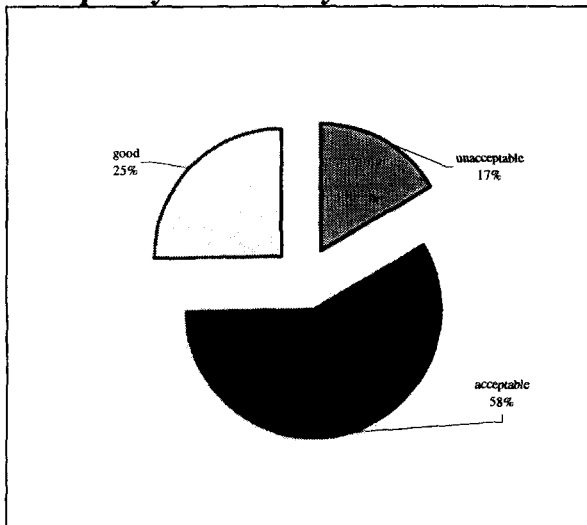
**Figure 7 Ways in which officials supplement salaries**



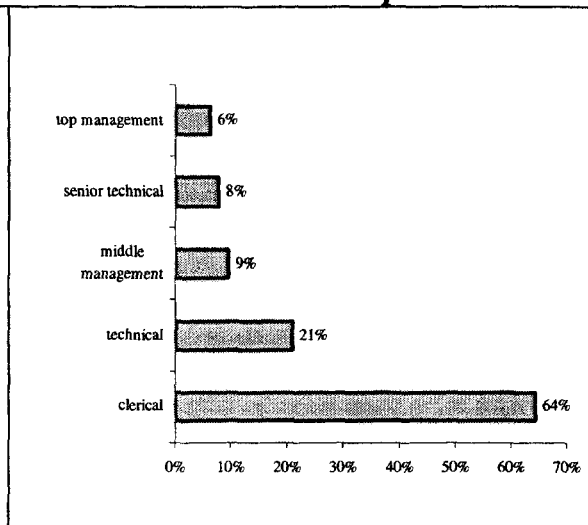
Despite some dissatisfaction with wages, public sector jobs *are* attractive, and five out of six respondents said that the lives they had led during the past year were either good or acceptable. “Opportunity for personal development” was cited most often as the main reason for joining the public sector, followed by “job security.” One-third of all respondents said they were “not at all worried about losing their jobs” in the near future, and another one-third said they were “somewhat worried.”<sup>18</sup>

Some policy makers in Guyana consider that on-the-job training gained by public officials furnishes them with skills that are valued in middle-level jobs in the private sector. This explains the high turnover of staff at government’s clerical levels, as 64% of all respondents perceive that people who left public service jobs were at the clerical level when they left.

**Figure 8 How do officials rate the quality of lives they lead?**



**Figure 9 Levels in the public sector from which most exits take place**

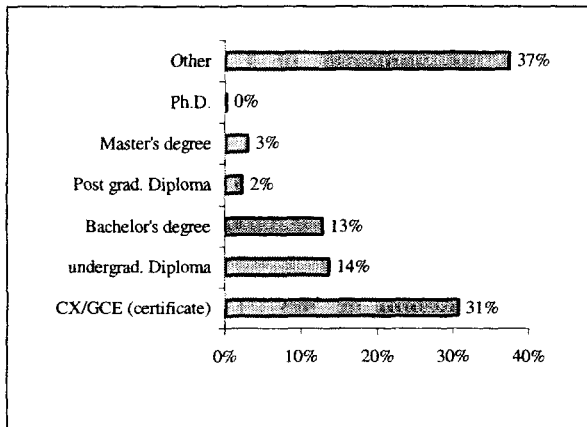


<sup>18</sup> The survey coincided with a government initiative at rightsizing the civil service.

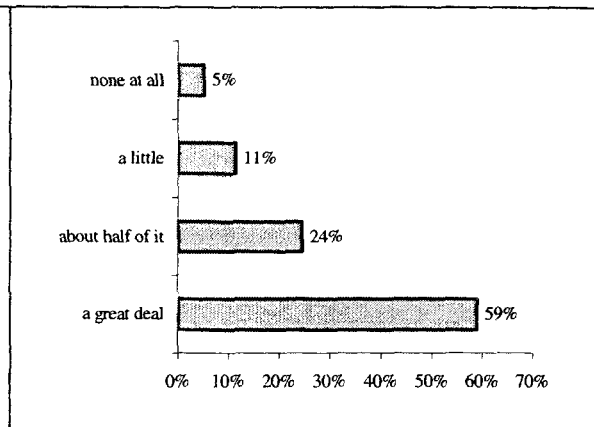
- *Public employees are poorly prepared for their jobs.*

The average education level of surveyed officials was not high: 18% of sampled officials had bachelor's or higher degrees. Given that officials who join the public sector do not have a high level of education before they come to their jobs, on-the-job training becomes all the more important. Yet, less than half the respondents (48%) said that new hires were provided with a basic orientation program. Neither are officials trained in the substantive content of their jobs: 58% respondents said they had taught themselves their jobs. Just over half the respondents (52%) received any formal training at all. Most of those who *did* receive this training found it useful and subsequently used at least half of the newly-learned skills in their current work.

**Figure 10 Education levels of surveyed officials**



**Figure 11 Part of the formal training that officials applied to their jobs**



- *Officials find policies consistent, and implement policies even when they disagree with the policy thrust.*

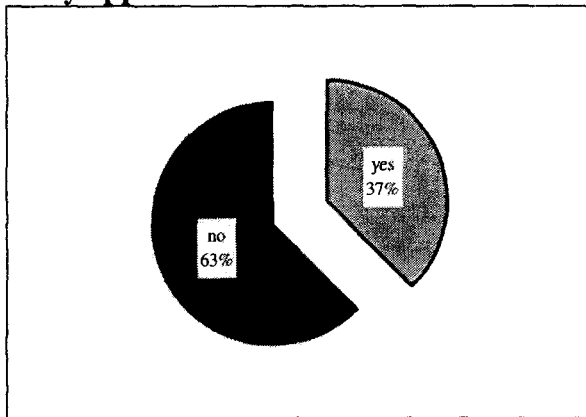
Three-quarters of all respondents found instructions and policies of their organizations to be consistent rather than conflicting. In general, the credibility of a government's announced policies can be undermined when frequent changes in leadership result in equally frequent policy reversals. Officials are less inclined to work to implement policies that they doubt will be sustained. Even without a change in leadership, policy-making can be captured or frequently reversed for immediate, temporary gain. In such circumstances, public officials are subjected to contradictory policy guidelines, and their organizations are given conflicting instructions. However, surveyed officials in Guyana report that this is not a perceptible problem in their own public sector.

While officials in Guyana believed policies to be consistent, they did not necessarily agree with or support the policies they are asked to implement; this was true of half the surveyed officials in Guyana.

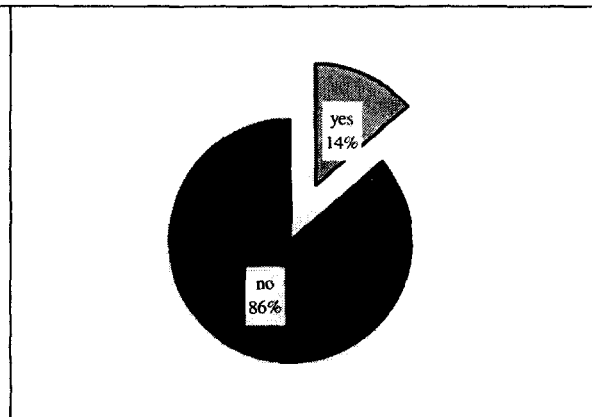
- *Recruitment is not always based on merit.*

Surveyed public officials reported that the recruitment system is based on merit. 61% of surveyed officials believe that persons recruited were the ones most qualified for their jobs. At the same time 37% said that they were assured of getting their jobs *before they applied*, and only 14% of the sample (of which one-third had not completed school) said written examinations were a regular practice in their organization's recruitment practice. This seems to contradict officials' possibly self-interested view that recruitment is merit-based. Although service commissions are entrusted to ensuring fair and merit-based recruitment, the widely held view is that there is extensive patronage in practice.<sup>19</sup>

**Figure 12 Officials who were assured of obtaining their jobs even before they applied**



**Figure 13 Officials who were recruited on the basis of written examination**



One factor could be the dearth of formal educational qualifications among the applicants. With such a poorly educated workforce to draw on, written examinations would do little to identify potential talent, and applicants who have the necessary qualifications would be assured of jobs even before they applied.

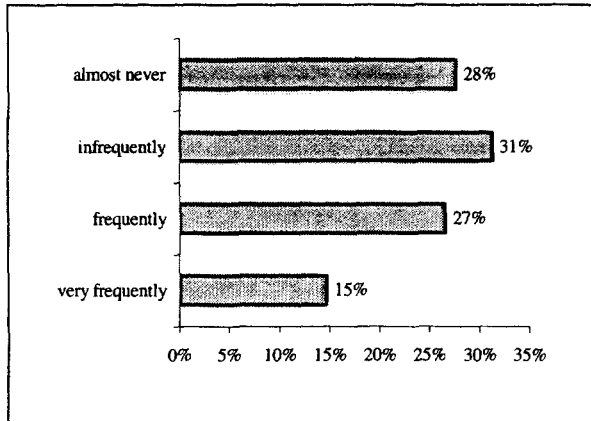
- *Politicians' interference in operational decisions of the public sector is at acceptable levels.*

59% of surveyed public officials reported that politicians rarely or seldom interfere in operational decisions, and two-thirds of respondents said that recruitment is not driven by political connections. A majority of officials believed that employees with political connections are treated the same as officials without connections.

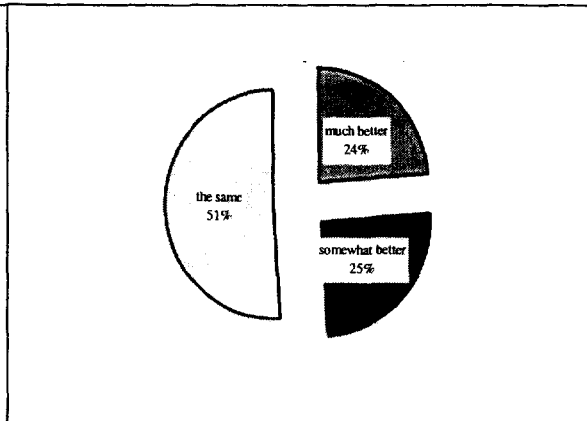
These responses need to be interpreted with caution. In assessing political micro-management in the civil service, World Bank (2000a) reports that the horizontal checks by the legislature on the executive are weak.

<sup>19</sup> World Bank (2000a)

**Figure 14 Officials' perceptions of whether politicians' interference is a significant problem**



**Figure 15 Officials' perceptions of whether politically well-connected colleagues are treated better**



- *Mixed results on incentives for good performance or few disincentives for bad performance*

On this point, the survey responses present a conflicted picture. On the one hand, more than half the surveyed officials (52%) said that there existed documented work/performance standards for each function in their organization; and 58% of respondents said that in their organizations, employees and supervisors discussed measurable annual objectives at the beginning of every year. of these, 82% said that the documented work standards of their organization are typically achieved. This paints a picture of public sector organizations with measurable targets, disaggregated into individual employees' objectives, that are made explicit to the employees each year.

On the other hand, more than half the respondents' (54%) performances had been appraised more than two or three years ago or never at all. It is not immediately clear how, if performance had not been evaluated, documented work standards could have been achieved. Performance appraisal is clearly not consistent. When asked to choose which interventions would improve the performance of their organizations, the highest number of responses recommended a performance appraisal scheme.

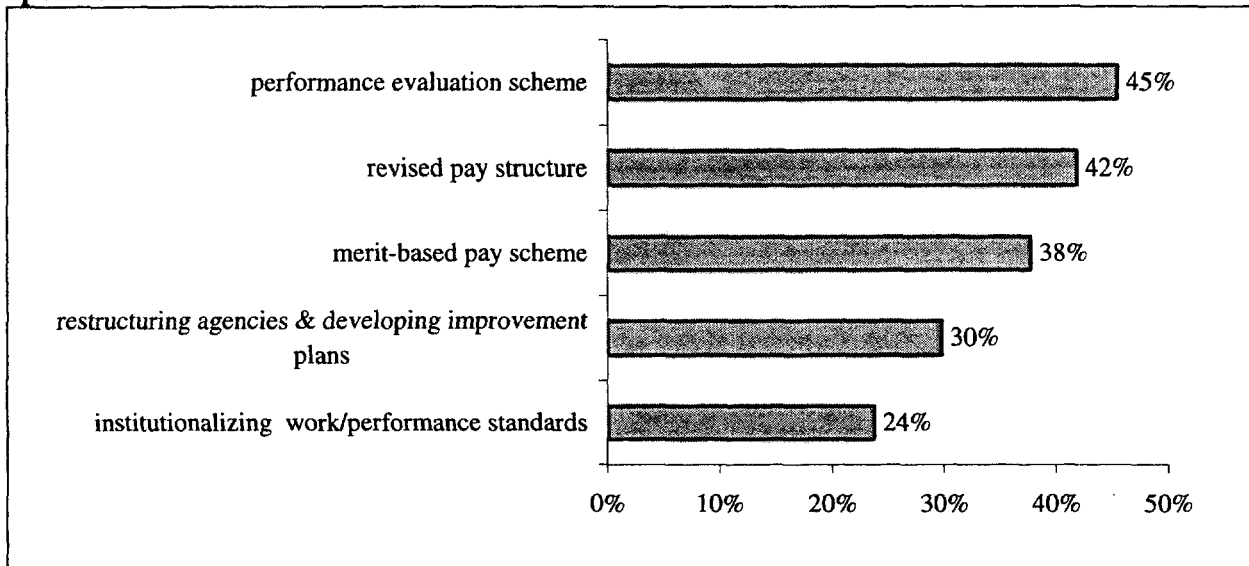
In light of the numerous complaints about poor service delivery, a possible explanation for these apparently contradictory reports is that the entire notion of work standards may have been misunderstood by many respondents. Very few work standards exist in the core public service. The few extant standards concern health professionals in the Ministry of Health, the Ministry of Education's examination standards and the Ministry of Public Works' engineering standards. A program is now being formulated in the PSM to introduce such standards to the public service in 2001.

In addition, 28% of respondents also said that no staff from their organization had been disciplined in the previous three years. Two-thirds of the respondents thought that some or many officials who showed outstanding performance had not been rewarded because no incentives exist, and because there is no functioning appraisal system in place.

- *Resources alone will not make organizations perform better.*

Officials cited inadequate resources, poor management style, weak communication and poor compensation as important factors in poor performance. Yet, officials did not see higher pay as the cure-all. It was cited as the second most important reform, behind performance evaluation.

**Figure 16 Intervention that can contribute most to improving organizations' performance**



- *Decision-making in the public sector is characterized by poor communication and low employee participation*

For public officials to implement policy effectively, policies must be communicated to them quickly and clearly. Surveyed officials in Guyana said that policy changes are communicated most frequently through written correspondence. This more formal approach may contribute to time-lags and confusion.

Employees do not participate in decisions about their organizations' budgets. More than two-thirds of employees were not at all connected, or connected very little with budget preparation. When the division's budget is cut, less than one-fourth of respondents (22%) are involved in the revision of planned programs.

- *Public sector officials are concerned about corruption.*

93% of all surveyed officials believe that corruption is significant in the public sector. Only 9% of officials reported having known of another official being disciplined for embezzlement. Officials in regulatory agencies (such as land registry, Supreme Court registry, customs and excise, births and deaths registry and licensing agencies) or in

positions involving purchases on behalf of government had the most ample opportunity for corruption—more than those in service delivery agencies (such as hospitals, educational institutions). Public officials believe that corruption occurred most frequently in (a) in evasion of taxes and customs duties, and (b) to avoid harassment by police or regulatory bodies.

Officials consider that reporting corruption can be best encouraged by ensuring that the identity of the person filing the report be kept secret. Officials believe that merit-based recruitment, better pay and stiffer punishments will reduce corruption in the public sector.

- *Budget management remains weak.*

The funds available in the budget are unpredictable. According to surveyed officials, the only certainty is that available funds will be less than stated in the estimate. More than three-quarters of respondents believed that available funds would be less than announced in the budget estimate, and 73% believed that the difference would be moderate or large. More than two-thirds stated that when cuts are imposed, “capital expenditure” and “other charges” are hit first.

However, there are few penalties for spending beyond the budget. 45% reported that in the previous year, their organizational budget or some budget sub-head had been exceeded, and 79% did not know whether organizations spending beyond the budget were in fact penalized.



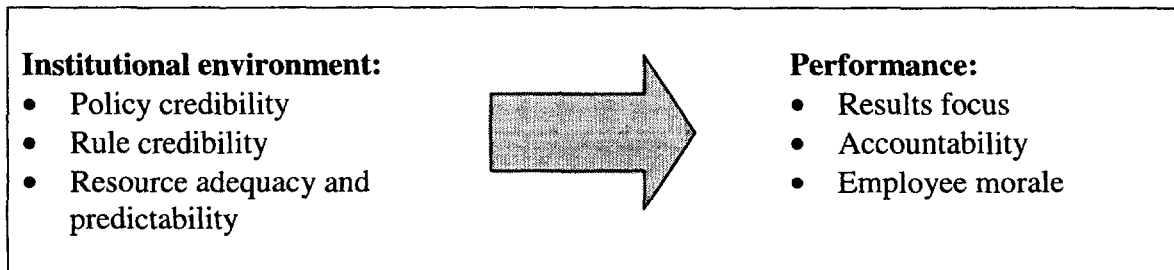
#### 4. Looking for points of entry: the impact of institutional environment on performance

##### *The model used for analyzing WBNPP surveys*

Public officials in developing countries are often viewed as unskilled, poorly equipped and poorly motivated to perform their official tasks. The assumption is frequently made that public officials are primarily motivated to exploit for their own benefit any official privileges that their positions allow. Given the poor performance of public bureaucracies in many developing countries, and the undeniable reality of low public sector salaries, such an assumption may not be wholly unrealistic. Yet, there are many public officials who, despite such poor incentives, may perform their tasks in spite of overwhelming incentives for opportunism. For every rent-seeking or poorly motivated public official, there may be another who is providing a valuable service. Therefore, it is worthwhile to examine in detail what motivates public officials to behave the way they do.

Accordingly, the analytical model for WBNPP-funded surveys starts from the premise that public officials' actions—and hence the performance of their organizations—depend upon the institutional environment in which they find themselves. In this way the analytical framework avoids the “blame-the-government” approach common in the literature on the public sector in developing countries, without attempting a defensive justification for poor performance.<sup>20</sup> The analytical model allows verification of the assumption that it is the institutional environment that drives performance of organizations in the public sector rather than the waywardness of officials. This model suggests that reform interventions that improve any or all aspects of the institutional environment will result in higher performance of some or all of the areas in which performance is measured.

**Figure 17 Analytical model for WBNPP-funded surveys**



<sup>20</sup> See Tendler (1997) for a summary of these perspectives.

## *Measuring the institutional environment*

### *Elements of institutional environment selected to measure it*

The institutional environment was measured along three dimensions: *rule credibility*, *policy credibility* and *resource adequacy and predictability*. This is consistent with the analytical framework described in Manning, Mukherjee, and Gokcekus (2000) and is used for analyzing all WBNPP-funded surveys. This study recognizes that institutional environment can be considered along other dimensions and that the framework used can only reflect best judgement.

*Rule Credibility*—The strength of institutions can be gauged by their impact on expectations.<sup>21</sup> If there is a rule about the management of records in the organization, or about methods of performance appraisal, then do officials expect that breaches of these rules will really be punished? The present survey probed rule credibility mainly in human resource management, an area that is of most interest to public officials.

*Policy Credibility*—The nature of officials' expectations is also important in relation to policy implementation. Willingness to gear actions to support ministerial policies is somewhat greater if officials believe that policies will remain in force for a period of time, and will not be undermined by other contradictory policies. Expectations that policies are likely to be soon reversed lead, at best, to second-guessing of what the next ones might look like. At worst, they lead to cynical disregard for any announced policy.

*Resource Adequacy and Predictability*—Expectations concerning the future flow of budgetary and other resources are also significant determinants of behavior. Officials who doubt that the budget will be implemented as planned may have few reasons to implement policies faithfully and every reason to over-staff, as salaries will ultimately be paid even if program funds are reduced.

Accordingly, an organization with a high institutional environment score is one in which the rules matter and discipline is good. Government policies are taken seriously so that the staff is oriented toward their successful implementation. In such an organization, resources might be tight, but resource flow is at least certain.

Conversely, organizations with low rule credibility are ones in which officials, generally speaking, do not expect the rules—about records management, training, and personnel

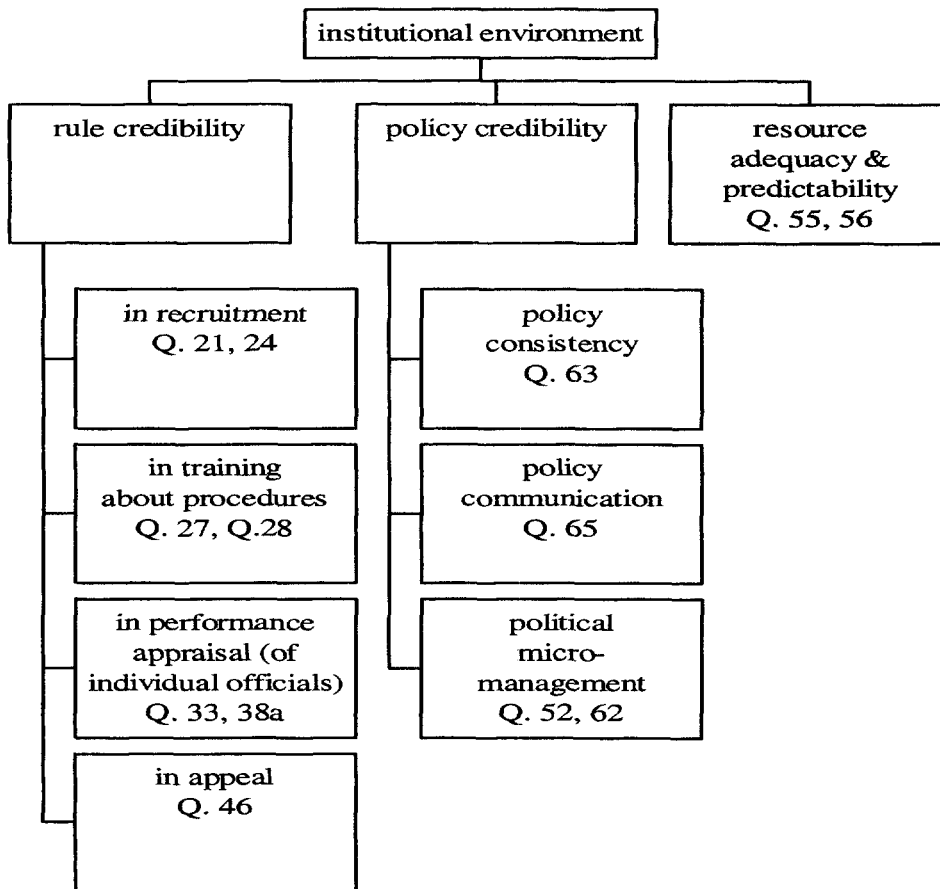
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<sup>21</sup> This point that institutional arrangements impact individuals' actions in the present by shaping their expectations about the future is made extensively in the institutional literature. See, for example, Bendor and Mookherjee (1987) and Mnookin and Kornhauser (1989). It is consistent with an assertion that the problem facing both public and private sector managers is one of maintaining their collective reputation as a relevant actor among their staff (See Seabright 1993). More generally, the literature on cooperation in the absence of third-party enforcement emphasizes that "the shadow of the future" (i.e., the degree to which actors expect to interact again under similar circumstances) significantly determines behavior in the present (See Axelrod and Keohane, 1985).

etc.—to be enforced. Staff discipline problems are to be expected in such organizations, but might not be reported, as action is less likely to be taken. In organizations with low policy credibility, officials do not believe that policies will remain in force for a period of time, and think that they may be undermined by other contradictory policies. Staff in such organizations might be expected to implement policies less than enthusiastically, considering that they might be soon reversed. Staff might even try to second-guess what the policy after this one might look like. Organizations with low resource adequacy and predictability are ones in which officials doubt that the budget will be implemented as planned. Such organizations may have reason to over-staff, as salaries will ultimately be paid even if program funds are curtailed.

Figure 18 shows how responses to questions were grouped under different elements of institutional environment before constructing the institutional environment indicators in Guyana.<sup>22</sup> The questions are provided in full in Appendix 3.

**Figure 18 Construction of indicators for institutional environment**



<sup>22</sup> For details, see Appendix 3.

### *Construction of indicators of institutional environment.*

Using this method, eight detailed indicators were constructed, with “0” being the worst and “10” being the best possible scores. Four of these were related to rule credibility: rule credibility in recruitment, rule credibility in training procedures, rule credibility in performance appraisal, and rule credibility of appeal mechanisms. Three indicators related to policy credibility: policy consistency, policies communicated effectively to establish credibility, and political interference that undermines policy credibility. The final indicator relates to resource adequacy and predictability. In total the institutional environment is gauged through eight indicators.

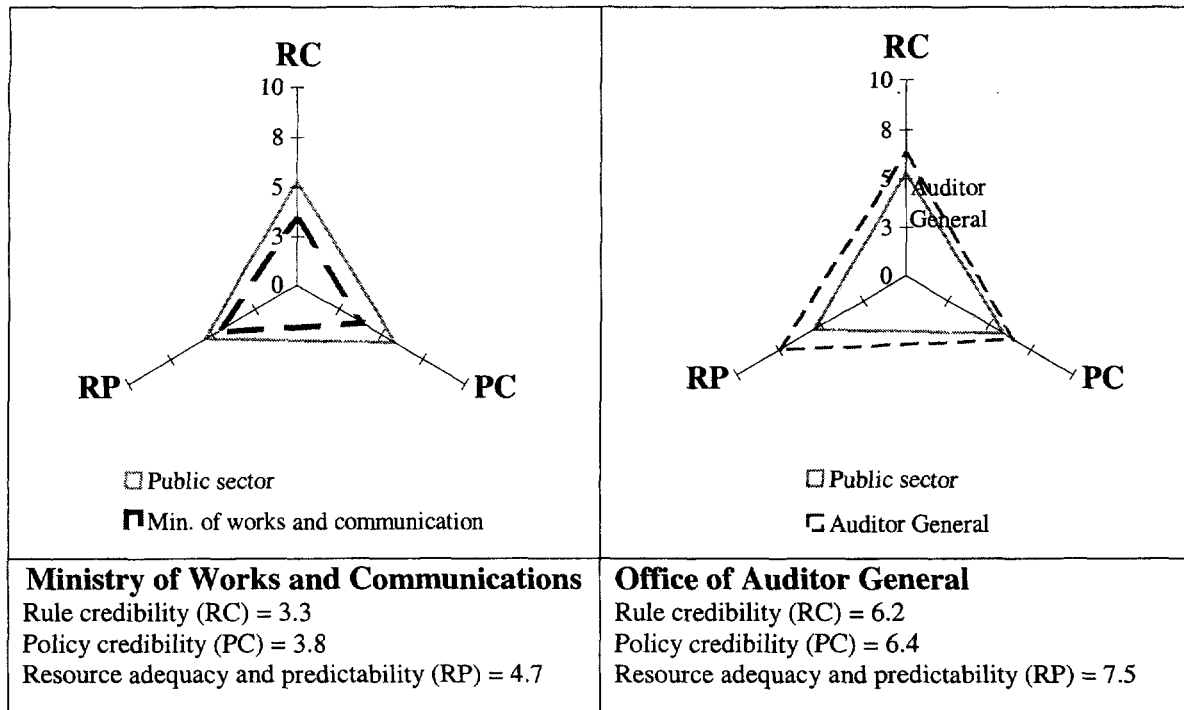
Indicators were constructed for rule credibility, policy credibility and for resource adequacy and predictability in each of the fifteen organizations sampled and the whole public sector. These calculations have been presented in Tables A7 through A12 in Appendix 3.

The strongest component of the overall public sector’s institutional environment is policy credibility (5.8/10) and the weakest one is rule credibility (5.3/10). Within policy credibility, officials rate policy consistency comparatively highly (6.6/10).

The average of the various indicators describe an overall institutional environment in Guyana’s public sector that is not particularly strong: officials rate their institutional environment score as 5.5 out of a possible maximum of 10. (For details, see Table A 12 and Figure A 1 in Appendix 3.)

Within the public sector, organizations offer very different institutional environments to their staff. Figure 19 shows how the institutional environments of two organizations—the Ministry of Works and Communication and the Office of the Auditor General—are quite different. Employees of the Ministry of Works and Housing give their organization an overall score of 4.0/10, while the Auditor General’s employees give their organization an overall score of 6.7/10. As this figure illustrates, the Office of Auditor General has higher scores in all the selected institutional environment areas—rule credibility, policy credibility and resource adequacy and predictability than the Ministry of Works and Communication.

**Figure 19 Institutional environment of the Office of Auditor General and the Ministry of Works and Communication**



### *Implications for organizations*

The details are instructive. The Office of the Auditor General interacts almost entirely with other public organizations, and is shielded from policy changes. Without interaction with the public at large, perhaps, political principals do not find it a fertile ground for micro-management. Not surprisingly, its scores are higher than the public sector's average in seven out of the eight elements—except policy communication. The other example, the Ministry of Works and Communication shows a different picture of the institutional environment. Its scores are below the public sector's average in seven out of the eight elements. (Figure A 2 and Figure A 3 in Appendix 3 provide further details.)

The Ministry of Works and Communication appears to be an organization with low rule credibility. This is an environment in which officials, generally speaking, do not expect the rules to be enforced. This is also an organization with low policy credibility. Officials do not believe that policies will remain in force for an extended period of time and also think that they may be undermined by other contradictory policies. As noted, staff in organizations with low policy and rule credibility might be likely to implement policies less than enthusiastically, considering that policies might be soon reversed.

Despite the continuing debate on the independence of the Auditor General and the need for a separate appropriation, the Office of the Auditor General is somewhat protected from the vagaries and uncertainties of funding that afflict the rest of the public sector. This appears in the survey results.

The fifteen sampled organizations' relative strengths and weaknesses (in terms of their rule credibility, policy credibility and resource predictability) have been summarized in the Table 5 below using the standardized indicators.<sup>23</sup> (Table A 13 in Appendix 3 provides the detailed standardized indicators for the three components of institutional environment.)

Table 5 suggests that general observations about institutional weaknesses in the Guyanese public sector could mask a variety of difficulties faced by each individual agency.<sup>24</sup> When looking for lessons, it is important to note that recent events can temporarily alter institutional environment. It is also important to bear in mind that a weak institutional environment is not the fault of managers within that organization. On the same note, local management cannot be held responsible for resource predictability issues that originate in weak overall budget management. That said, local management in those organizations with poor institutional environments should be aware of existing problems and should have considered the need for corrective action. The situation in the Ministry of Works and Communication might fall into this category.

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<sup>23</sup> In making that determination, +/- one standard deviation was used as the criteria for whether an organization is relatively weak or strong.

<sup>24</sup> The Anna Karenina principle applies: "all well-performing agencies are alike; there are so many preconditions for effective performance that every dysfunctional agency is dysfunctional in its own way". Tolstoy's original words were that "Happy families are all alike; every unhappy family is unhappy in its own way." Gary Reid pointed out the relevance of the observation for public sector performance.

**Table 5 Institutional environment in different organizations**

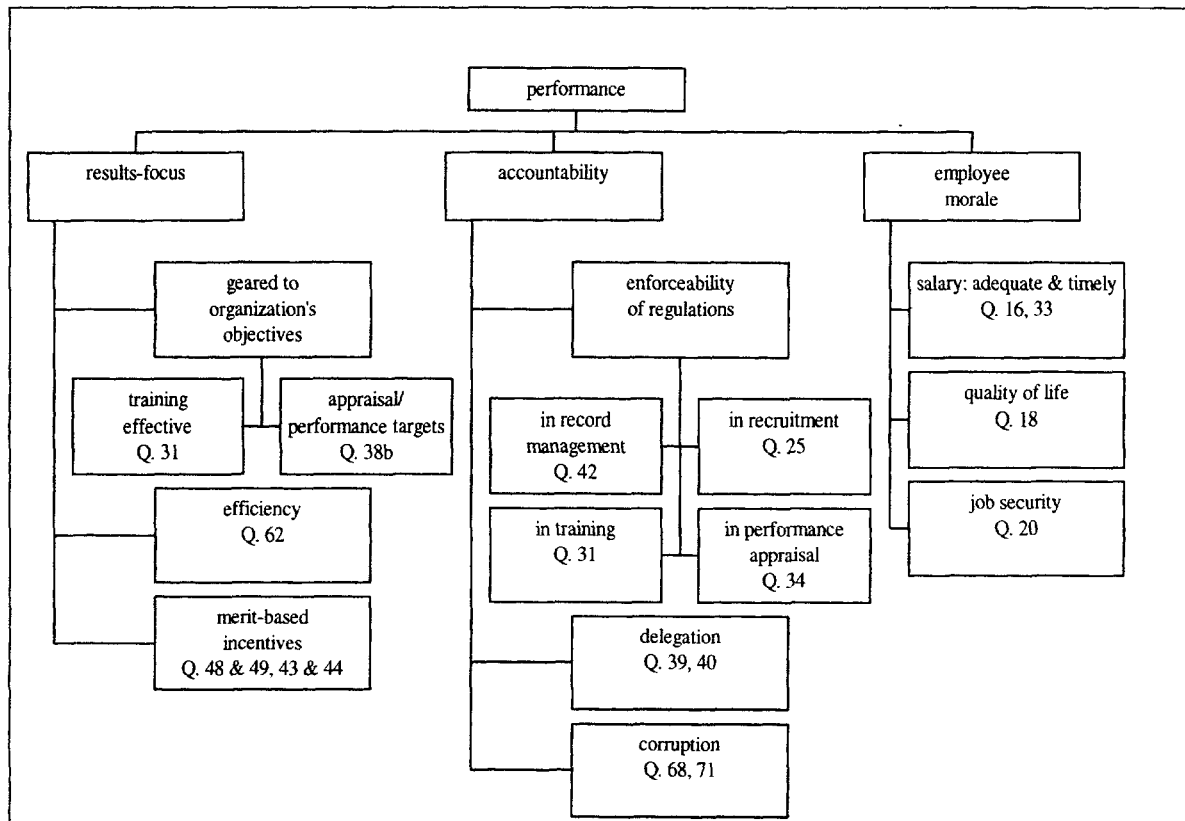
	Scores <sup>⊕</sup>	Summary	Overall Institutional Environment
<b>Ministries</b>			
Agriculture	Average		
Education	Average		
Finance	Average		
Housing and Water	Average		
Labor & health	Average		
Works & Communication	Low RC, PC	- -	Weak
<b>Regional Administrations</b>			
Region 2	Average		
Region 3	Average		
Region 6	Average		
Region 10	High PC	+	
<b>Control Bodies</b>			
Office of Auditor General	High RC, RP	++	Strong
Public service commission	Low RP	-	
Parliament office	High PC, Low RC, RP	+ - -	Weak
<b>Service Delivery Agencies</b>			
Water Authority	Low PC	-	
Georgetown Sewage Commission	Average		

⊕ Scores in three indicators of institutional environment: rule credibility (RC); policy consistency (PC); and resource predictability (RP).

### ***Measuring performance***

Performance was measured through survey questions on organizations' focus on results, accountability and employee morale. The degree to which these elements were or were not lacking was measured on a "0 to 10" scale, with "0" being the worst and "10" being the best. In the absence of organization-level performance targets, monitoring or evaluation these indicators were considered good proxies for conditions that induce good performance.

**Figure 20 Construction of indicators for performance in Guyana**



Results-focus was measured by creating an indicator covering the following: whether an organization's activities are geared to its objectives; whether the organization is efficient; and whether there is in place a merit-based incentive/reward and punishment system. Seven questions were used. The questions and details of the indicator are shown in Tables A14 and A15 in Appendix 4.

Accountability was measured by using eight questions to create an indicator covering the following: enforceability of regulations, delegation to other officials, and corruption. As noted above, *enforceability* of regulations as a component of performance is different from the *existence* of effective rules and regulations. In measuring performance, the enforcement of the rules was tested in four areas, namely record management, recruitment, training, and performance appraisal.

The list of questions for accountability and further details of the indicators are given in Table A 16 and Table A 17 in Appendix 4.

Employee morale was measured by creating an indicator covering adequacy and timely payments of the salaries, quality of life, and job security. Four questions were used to calculate the satisfaction indicator. The questions and calculations are presented in Appendix 4. In particular, the list of questions for employee morale and details of the indicator are given in Table A 18 and Table A 19 in Appendix 4.



The overall performance indicator was calculated by taking the simple arithmetic mean of the results-focus, accountability, and employee morale. Table A 20 in Appendix 4 presents performance indicators for fifteen public organizations and the public sector of Guyana.

### ***The connection between performance and institutional environment***

To describe and quantify the relationship between performance and institutional environment, a simple model was used. Aggregate performance and its three components, i.e., results-focus, accountability for formal rules, and employee morale were regressed on institutional environment. Accordingly, performance of organization-i was modeled as a function of its institutional environment, and an error term  $e_i$ <sup>25</sup>:

$$\text{Performance}_i = a + b \text{IE}_i + e_i$$

For the public sector of Guyana, there is a statistically significant positive relationship between institutional environment and performance indicators.

The estimation result for Guyana was the following:

<p>Aggregate Performance = 1.28 + 0.60 (Institutional Environment)</p> <p style="text-align: right;">t-value = 2.75</p> <p><math>R^2 = 0.37</math></p> <p>Obs. No = 15</p>
--

Figure 21 provides the result of cross-tabulation of institutional environment and aggregate performance indicators for 15 different public organizations in Guyana. Statistically significant relationships existed between the institutional environment and each area of performance

Thus there is empirical evidence that:

- Institutions do indeed matter; and
- Some performance areas might be more significantly affected by the institutional environment than others. . (Figure A 4 Figure A 5 and Figure A 6 in Appendix 5.)<sup>26</sup>

<sup>25</sup> An error term was attached to capture measurement errors, random variations, as well as other determinants that have been omitted from the equation.

<sup>26</sup> This assertion was based on differences in the estimated coefficients, i.e., slope, and in goodness-of-fit measures, i.e.,  $R^2$ , for the relationships between institutional environment and three different components of performance, which are presented in Appendix 5.

***Where are the opportunities for reforms?***

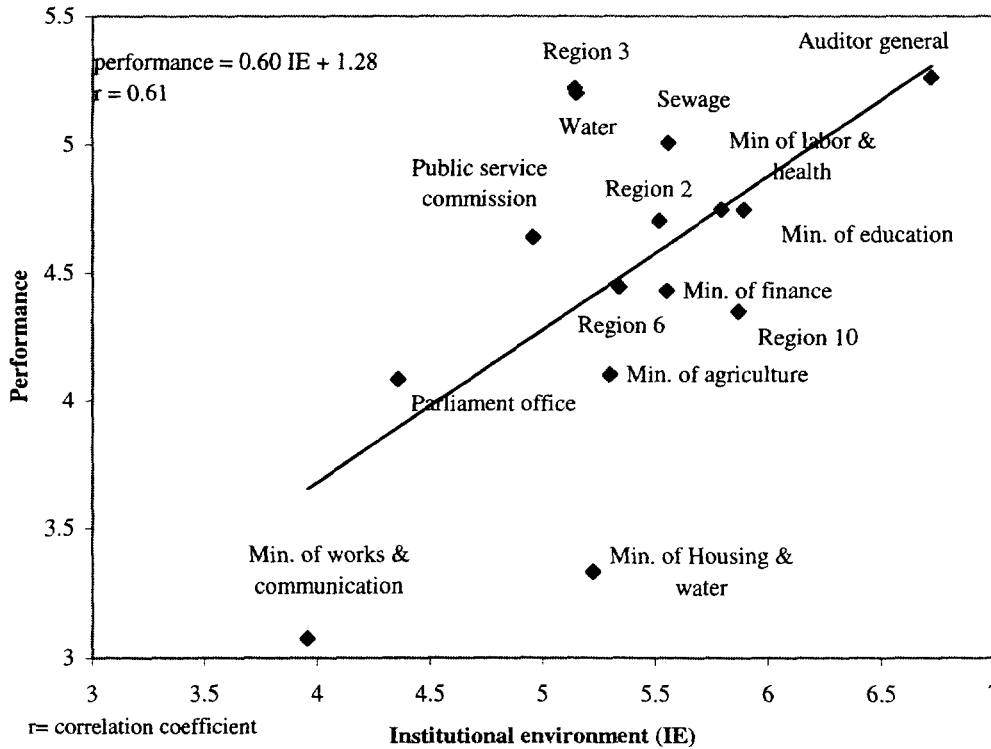
The basic premise for WBNPP-funded surveys is that performance is a function of the institutional environment:

$$\text{Performance} = f(\text{Institutional Environment}).$$

This performance function has already been estimated in the previous sub-section. It showed that in Guyana, the predicted correlations are high when simple averages of the elements of institutional environment are regressed against aggregate performance, as well as its three main components.

However, this information by itself is not enough for decision-makers. They already know that performance is sometimes low because of weaknesses in the institutional environment; and that if they could improve the whole institutional environment, the overall performance would improve. They need greater precision. Improving the institutional environment as a method for improving performance is a practical strategy only if we can assess which particular elements of the institutional environment really matter. In other words, decision-makers need to know which areas for reform efforts could have the greatest *pay-off*.

**Figure 21 The relationship between institutional environment and performance in fifteen public sector organizations of Guyana**



To answer this question for the public sector of Guyana, performance was modeled as a function of eight different components of the institutional environment (IE).

Performance = g(existence of rules in recruitment, existence of rules in training, existence of rules in performance appraisal, existence of rules for appeal, policy consistency, policy communication, political interference/micro-management, resource adequacy & predictability)

To unpack the relationship between institutional environment and performance, or in other words, to quantify the relationship between performance and different potential reform efforts, an econometric model was utilized to estimate this model.<sup>27</sup> Its estimated coefficients were used to derive appropriate indicators. In general, to find how much performance changes upon changing i-th component of the institutional environment, the following formula was utilized:

$$\text{Pay-off}_{i^{\text{th}} \text{ component of IE}} = \frac{\Delta \text{ performance} / \Delta i^{\text{th}} \text{ component of IE}}{\text{performance}_0},$$

where,  $\Delta \text{ performance} / \Delta i^{\text{th}} \text{ component of IE} = \frac{\partial \text{ performance}}{\partial i^{\text{th}} \text{ component of IE}}$ , and  
*performance*<sub>0</sub> = initial performance level.

### ***Performance pay-offs (PPOs)***

A comparatively high-value of performance pay-off for any reform effort means that the intervention is more likely to have a significant impact on performance than another with low-value. A comparatively low value would indicate that the effort is less likely to have an impact and will not bring about substantive results. Performance pay-offs can be calculated for each of the eight reform interventions listed above. (Refer to Appendix 6 for the following: a detailed econometric model specification, the estimation method, regression results, and how the estimated coefficients were used in deriving performance pay-offs based on the above-described formula.)

In moving from general observations toward identifying the specific impetuses of performance, two cautions should be borne in mind. First, like any other data collection exercise (despite quality control on survey administration and data collection and entry)

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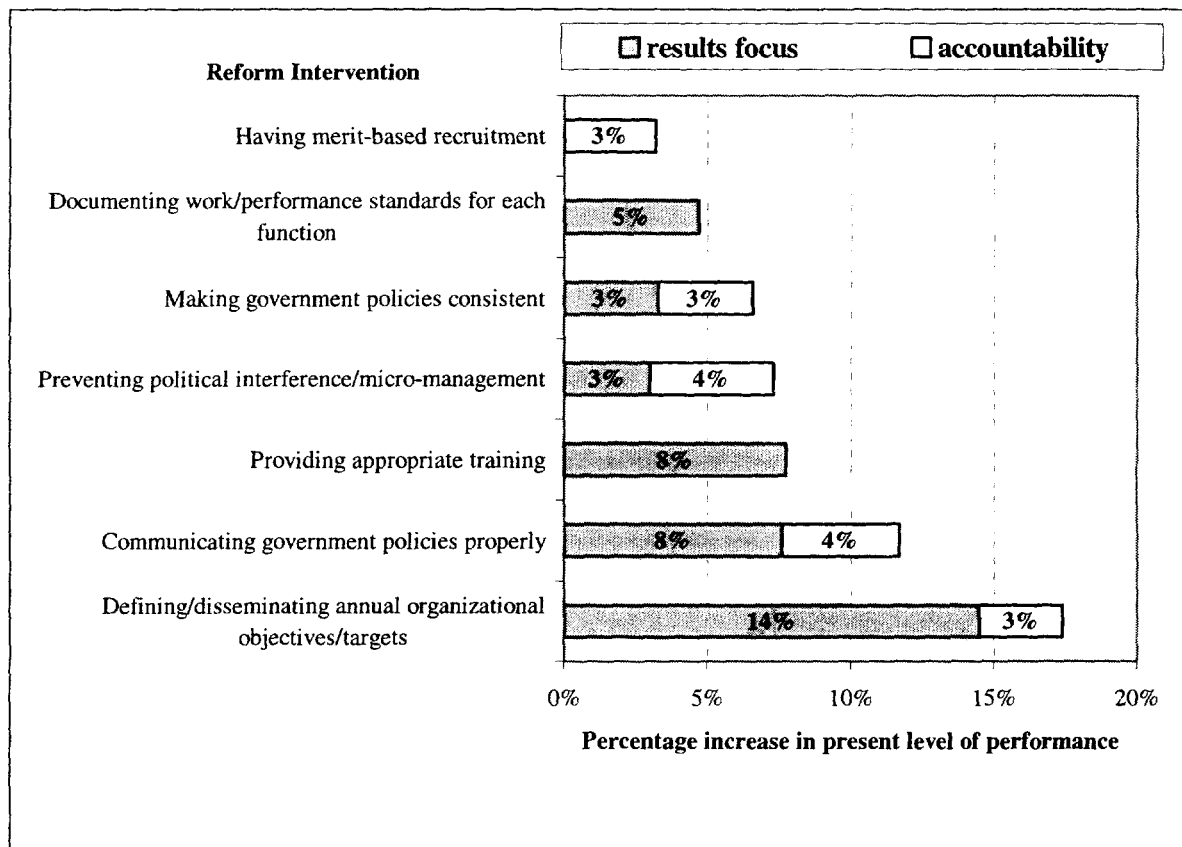
<sup>27</sup> In a linear model, the estimated coefficient for a specific component of the institutional environment variable is the partial derivative of the performance with respect to that component of the institutional environment.

there are inevitable limitations on data quality.<sup>28</sup> Second, theory provides no guidance in suggesting which institutional area in particular most affects performance, thus a more complete model of performance would very likely alter the magnitude of the estimates.

Given the possible imprecision of the measure, rather than predict exact performance improvements, PPOs are used to rank the expected pay-offs from different interventions (i.e., change in institutional arrangements or practices). Accordingly, the PPOs are intended to draw attention to the varying results that are anticipated from different interventions, but given their probable imprecision, it is the general magnitude of the pay-off rather than the exact value that is relevant for policy makers.

Figure 22 summarizes the results for those determinants of performance which have estimated statistically significant coefficients at the 0.05 level or better, for one-tailed test. (For details, see Appendix 6.) This figure assumes that only those perceiving the institutional environment to be poor are affected by the interventions – i.e. that there is no wasted effort.

**Figure 22 Maximum impact of reforms on results-focus and accountability in Guyana**

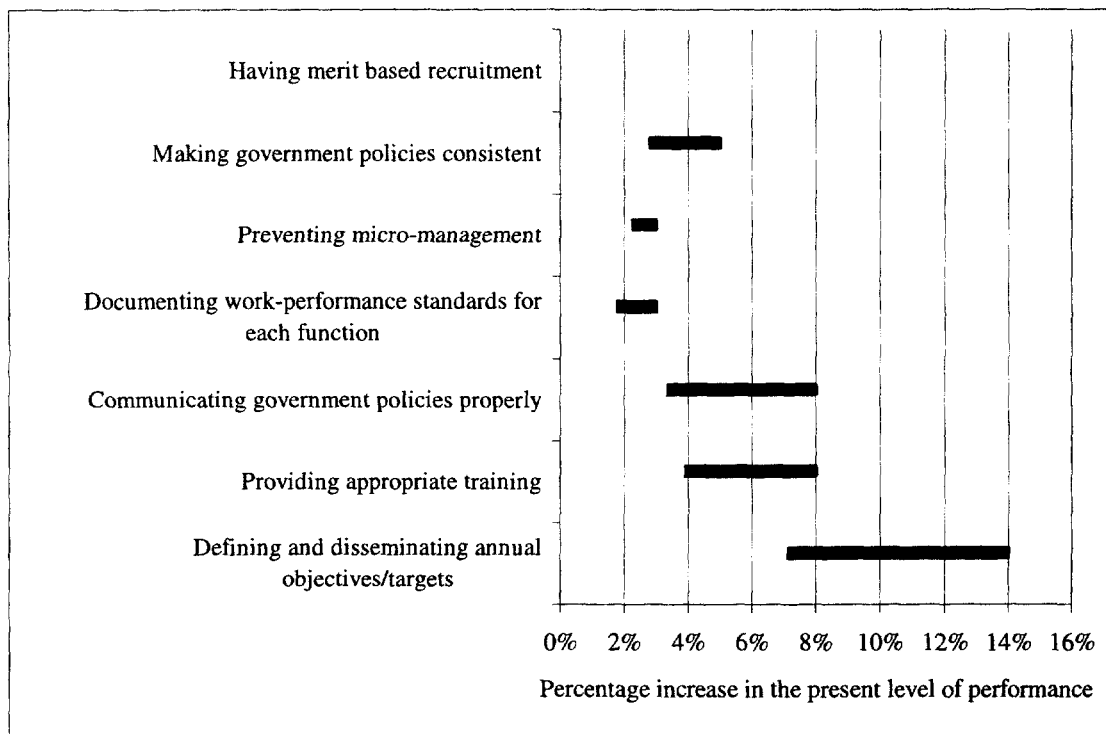


However, in reality, many public officials will be unaffected by an intervention as it will not influence any perceptions that affect their behavior. If, for example, a particular

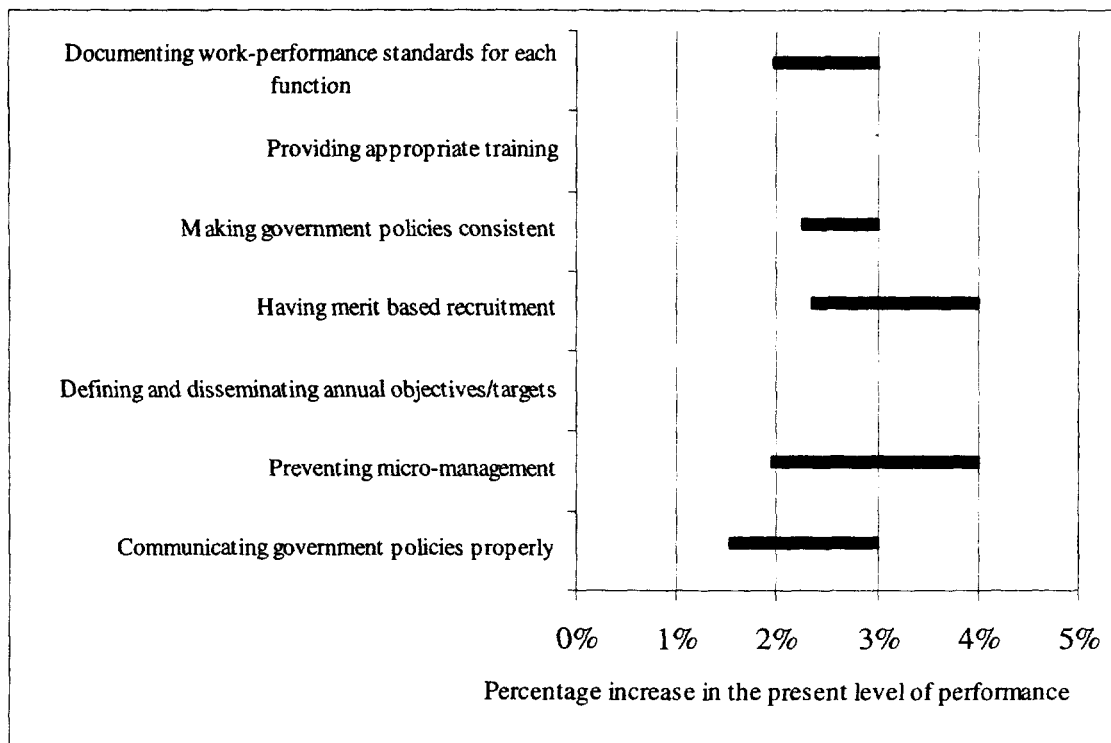
<sup>28</sup> For details, see Section 2.

public official already considers that employment is merit-based, then there is little to be gained by persuading them that recent reforms are introducing merit. In effect, much of any given reform effort is wasted. The exact amount is of course unknown, but Figure 23 estimates a range that lies between optimistic and pessimistic Performance Pay-Offs for 'results focus' and for 'accountability'. For the optimistic PPOs, it assumes that the intervention effectively reforms all of those people that will be affected by it – i.e. that no effort is wasted. Somewhere near this optimistic figure might be achieved if a particular reform intervention were targeted at an agency or a group of officials that consider this aspect of their institutional environment to be particularly weak. The pessimistic PPO is calculated on the basis that the reform intervention is targeted appropriately but successfully reforms only a part of those affected by it, and that it is therefore 'wasted' on those officials whose perceptions of the institutional environment will not be improved by it.

**Figure 23 Range of impact on results focus**



**Figure 24 Range of impacts on accountability**



Bearing in mind the caveats on data quality and the lack of theory to provide guidance in this area, these interpretations suggest two key messages for reform design.

If the reform goal is to achieve a larger proportion of employees that consider that their own performance is geared towards organizational objectives and who find that available incentives have some significance for their behavior, then being clearer about annual organizational targets is a very useful way to start. This is not about work standards – measures that set detailed benchmarks for small elements of public officials’ tasks – it is about being clear what the larger objectives of the organization are, and letting employees know whether they are getting close to achieving them. So, one message from the survey is to publicize larger goals and targets.

The second message is very consistent. Reducing political micro-management and communicating policies more clearly to employees is likely to be associated with increasing the proportion of employees that consider themselves to have been held accountable – in the sense that they feel that regulations applied to them are enforced, that they have adequate delegation and that corruption is limited.

## 5. Implications for interventions

The public sector of Guyana is undoubtedly under severe pressure. Two thirds of respondents to the survey supplement their salaries with support from relatives or help from overseas. The public service employs people with few qualifications, and then fails to train about half of them. More than half had not had their performance appraised within the last two years, and 95% felt that corruption is significant. Responses to survey questions were used to quantify officials' assessment of their own organizations' institutional environments and this suggests that some organizations provide particularly weak institutional environments for their staff.

Overall, the results of the data analysis support some common beliefs about the public sector. Officials agreed that decision-making in the public sector is characterized by poor communication and low employee participation, that corruption is a serious concern and that budget management is weak. Only 60% consider that jobs are allocated on merit and only the same proportion feels that politicians do not meddle in day to day operations.

That said, it is not a public sector in crisis. Five out of six respondents said that their lives were good or at least acceptable. Recognizing that there are political appointees, a majority of employees feel that these are treated the same as everyone else. Above all, it is a public sector with staff able to exercise judgement. When asked what measures would most likely improve their organizations' performance, the same officials who complained that their salaries were not sufficient to pay their living expenses chose consistent performance evaluations as the reform intervention most likely to improve performance. Officials selected performance evaluation over higher pay as the most potentially effective reform intervention. So officials know that their own organizations' performance is low – with an average score of 4.4 out of a maximum possible of 10 – yet they believe that extra resources or higher salaries alone, without other changes, will not improve performance.

Across the fifteen sampled organizations of the public sector, there is strong evidence that performance does indeed depend on organizations' institutional environment, and therefore reform interventions targeted at improving the institutional environment will be accompanied by higher performance. Data analysis shows that overall, officials rate the public sector's institutional environment at a score of 5.5 out of a maximum possible of 10, though within this weak environment, policy credibility is relatively strong. Indeed, officials disagreed with the common belief that they are often asked to implement inconsistent and conflicting policies. It is rule credibility that is the weakest element, which means that officials believe that even if they perform poorly, there will be little or no consequence. Indeed survey evidence brings out remarkable lack of incentives in the public sector. There are no incentives for good performance, and few punishments for bad performance.

The results point the way to alerting local managers to particular weaknesses in the institutional environment that their agency provides for their staff, and the contrast

between the Ministry of Works and Communications and the Office of Auditor General is instructive.

In considering broader cross-cutting reforms, data analysis shows that some interventions are more likely than others to result in higher performance. The two key messages for reform design are that publicizing larger goals and targets, and reducing political micro-management and communicating policies more clearly to employees, are likely to be associated with significant improvements in results-focus and in perceived accountability.

This report presents one set of interpretations of the survey findings. To enable deeper interpretation of survey data, the results have been posted on the Internet, where readers are invited to peruse it and draw their own conclusions.<sup>29</sup> The ensuing debate will increase awareness of the need for reform and engender a more robust evaluation of the available reform options.

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<sup>29</sup>

<http://www1.worldbank.org/publicsector/civilservice/countries/guyana/index.htm>



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## Appendices

### *Appendix 1 Details of public sector organizations*

**Table A 1 List of ministries**

Ministry of Home Affairs	Ministry of Human Services and Social Security
Ministry of Finance	Ministry of Public Works And Communications
Ministry of Foreign Affairs	Ministry of Local Government
Ministry of Legal Affairs	Ministry of Information
Ministry of Agriculture	Ministry of Housing And Water
Ministry of Health And Labour	Ministry of Culture, Youth And Sports
Ministry of Education	
Ministry of Trade, Tourism And Industry	

**Table A 2 List of semi-autonomous agencies**

Ayanganna Consultants Ltd.	MARDS Workshop
Black Bush Polder	MMA/ADA
Central Housing and Planning Authority	National Commemoration Commission
Commonwealth Youth Programme	National Dairy Development Programme
Complaint	National Data Management Unit
Demerara Harbor Bridge	National Frequency Management Unit
Drainage and irrigation Board	National Library
Georgetown Sewage and Water Commission	National Museum
Go-Invest	National Sports Commission
Guyana Export Promotion Council	National Trust
Guyana Information Service	Police Authority
Guyana National Bureau of Standards	Public Utilities Commission
Guyana Relief Committee	SIMAP
Guyana School of Agriculture	Statistical Bureau
Guyana Water Authority	Sugar Industry Labour & Welfare Fund
Hope Estate	University of Guyana
Institute of Distance and Continuing Education	

**Table A 3 List of constitutional agencies**

Office of the Auditor General	Teaching Service Commission
Office of the Ombudsman	Public Prosecutions
Public and Police Service Commission	Public Service Appellate Tribunal
Elections Commission	

**Table A 4 List of public corporations**

Berbice Mining Enterprise Limited	Guyana National Shipping Corporation Limited
Guyana Broadcasting Corporation	Guyana Oil Company
Guyana National Co-operative Bank Trust Corporation	Guyana Post Office Corporation
Guyana National Co-operative Insurance Services Limited	Guyana Rice Milling and Marketing Authority
Guyana National Cooperative Bank	Guyana Television Broadcasting Company
Guyana National Mortgage Finance Bank	Guyana Sugar Corporation
Guyana National Newspaper Limited	Linden Mining Enterprise Limited
Guyana National Printers	National Insurance Board
	New Guyana Marketing Corporation

**Table A 5 List of regions**

Region 1 - Barima/Waini
Region 2 - Pomeroon/Supenaam
Region 3 - Essequibo Islands/West Demerara
Region 4 - Demerara/Mahaica
Region 5 - Mahaica/Berbice
Region 6 - East Berbice/Corentyne
Region 7 - Cuyuni/Mazaruni
Region 8 - Potaro/Siparuni
Region 9 - Upper Takatu/Upper Essequibo
Region 10 -Upper Demerara/Berbice

**Table A 6 Grades and pay scales**

Band	Minimum		Mid-point		Maximum	
	Guyana \$	US \$	Guyana \$	US \$	Guyana \$	US \$
01	19,000	105	20,342	113	21,679	120
02	20,728	115	22,373	124	24,019	133
03	22,405	124	24,254	134	26,097	144
04	23,427	130	25,408	141	27,391	153
05	26,395	146	29,816	165	33,238	184
06	30,384	168	34,338	190	38,288	212
07	34,991	194	43,371	240	51,755	287
08	42,664	237	53,311	296	63,960	355
09	51,646	286	66,035	366	80,428	446
10	63,871	354	84,210	467	104,550	580
11	80,328	446	106,950	594	133,579	742
12	98,886	549	136,515	758	174,141	967
13	125,167	695	172,790	959	220,418	1,224
14	152,130	846	217,542	1,208	282,775	1,570

## *Appendix 2 Questions behind the prior assertions*

<i>Public sector jobs are attractive</i>
--

Q17. If it is insufficient, how do you make up the shortfall?

salary or wages from another job   overtime in my organization   support from other family members   support from relatives overseas   pension   additional financial benefits from my organization

Q18. Would you describe the quality of life that you have maintained over the past year as unacceptable, acceptable, or good?

unacceptable   acceptable   good

Q19. How worried are you about losing your job sometime in the near future? Are you very worried, somewhat worried, or not at all worried?

very worried   somewhat worried   not at all worried

Q22. There are many different reasons why people choose to work for the government. Below is a list of factors that other people say influenced their decision to join the public sector. Please tell me if any of these factors influenced your decision to pursue a government job, and how would you rank them in terms of greatest influence? [If you feel that two or more factors contributed the same amount to your decision, you can rate them the same number]. Secondly, indicate whether any of these features are absent from your job.

job security

good salary

benefit

flexible hours

reasonable work load

opportunity for personal development

social status

power

limited opportunities elsewhere

personal satisfaction in work

commitment to organization mission

other [ specify]

Q24.10 Within an organization, different people are hired for different reasons. This survey is interested in learning about general hiring trends. In your organization would you say that employees were hired more often for:

	Almost all	Most	About half	Fewer than half	Very few
good performance at entry test					
qualifications met job requirements					
personal connections					
political connections					
family status in community					
payment of gift to some public authorities					
knew a senior official					

Q41. At what levels would you say there is a high turnover of staff?  
 clerical levels      technical levels      middle management level      senior technical  
 levels      top management

*Public employees are poorly prepared for their jobs*

Q 9. What is your highest academic qualification?  
 CXC / GCE (Certificate)      undergraduate diploma      bachelor's degree      post  
 grad. diploma      masters' degree      Ph D

Q11. Have you ever received any training or education outside of this country?  
 yes      no

Q27. In your organization, is there a period of job/ organizational orientation before an officer is placed to function?  
 yes      no

Q28. In your organization which of the following methods have you used to learn your job:  
 a written procedure guide      verbal instructions from a superior      verbal instructions  
 from a colleague      self – taught

Q29. During the past year have you received any formal training at all?  
 yes      no

Q31. How much of this new knowledge are you now using on the job?  
 a great deal      about half of it      a little      none at all

*Policy credibility is low*

Q63. Agencies receive instructions and policies from different parts of the government, some complement each other, others present conflicts.

Overall, how do you see these various instructions: i.e. the relationship of these instructions/ policies with each other?

very consistent    more consistent than inconsistent    more inconsistent than consistent  
very inconsistent

Q64. How often do you disagree with the policies that your organization is asked to implement?

often    occasionally    rarely    not at all

*Recruitment is not merit-based*

Q21. Are positions like yours generally advertised to the public?

yes    no

Q24. Within an organization, different people are hired for different reasons. This survey is interested in learning about general hiring trends. In your organization would you say that employees were hired more often for:

almost all    most    about half    fewer than half    very few

good performance at entry  
test  
qualifications met job  
requirements  
personal connections  
political connections  
family status in community  
payment of gift to some  
public authorities  
knew a senior official

Q25. Before you applied for your current job or when you first joined the government, were you assured that you would get the job?

yes    no

Q26. Would you say that written tests are a regular practice in your organization's recruitment process?

yes    no

*Politicians meddle in day-to-day operational decisions of the public sector*

Q67. In your opinion, how would you rate the frequency of incidents of political interference in your organization?

very frequent    frequent    infrequent    almost never

Q24. Within an organization, different people are hired for different reasons. This survey is interested in learning about general hiring trends. In your organization would you say that employees were hired more often for:

24.4 political connections

almost all    most    about half    fewer than half    very few

*No incentives for good performance and few disincentives for bad performance*

Q34. When was your performance last appraised by your supervisor?

last quarter    within a year    end of first quarter    one year ago    two years ago  
three years ago    more than three years    my performance was not appraised

Q35. Did you agree with your supervisor's appraisal of your performance?

yes    no

Q37. Are there documented work / performance standards for each function in your organization?

yes    no

Q38. (a) Are you aware of these standards?    (b) Are they generally achieved?

yes    no    yes    no

Q39. Are you allowed to make any decisions relating to the performance of your duties?

I seldom need to refer decisions to my boss  
I refer half of the decisions that need to be made to my boss  
I refer most of the decisions that need to be made to my boss  
Any decision that is required is made by my boss

Q44.1 To the best of your knowledge, within the past three years, has anyone in your organization been subject to any of the following types of sanctions?

dismissal    demotion / reduction of position status    denial of other benefits    loss of salary or wages    postponement of promotion or pay increase    fine    public censure or reprimand    official warning    other [ specify]

Q46. Can an employee appeal a dismissal?

yes    no



Q48. In the past year have staff in your organization been recognized/rewarded for any of the following reasons?

yes                      no

Providing outstanding service

Q50. How many employees of your organization with excellent performance have not received recognition / reward?

many    some    a few    no one

Q51.2 Why do you think some employees with outstanding performance have not received rewards / recognition?

There is no money for rewards      No functioning performance system in place  
Good work is generally not appreciated      No incentive scheme exists  
Not having the "right" party affiliation      Absence of a "recognition" culture

Q66.2 Which of the following do you think would contribute most to improving the organizational performance of your organization?

merit-based pay scheme    performance evaluation scheme    institutionalizing work /  
performance standards    restructuring agencies and developing    improvement plans  
revise pay structure

*If only more money were available, organizations would perform better*

Q23. Sometimes factors at work cause any organization to perform poorly. Below is a suggested list, please indicate, first, which of these contribute to poor performance in your organization, next, rank them in order of greatest influence / impact . If you feel that two or more qualities are equally important, you can rate them the same number.

management style  
unclear objectives and targets  
poor communication  
poor physical working conditions  
missing deadlines  
unresponsive policies to customers needs  
low concern for workers' welfare  
inadequate resources  
lack of employee recognition  
poor pay and inadequate benefits  
limited use of technology  
poor supervision  
cumbersome systems  
limited technical capacity in organization  
conflicting instructions from different sources  
other [specify]

Q66. Which of the following do you think would contribute most to improving the organizational performance of your organization?

merit-based pay scheme      performance evaluation scheme      institutionalizing work/  
performance standards      restructuring agencies and developing improvement plans  
revise pay structure

*Decision making in the public sector is characterized by poor communication and low employee participation*

Q53. To what extent are you involved in budget preparation?

very involved      somewhat involved      \_ not at all involved

Q54. When your division's budget is cut, to what extent are you involved in the adjustment of planned programs?

very involved      somewhat involved      not at all involved

Q65.2 How are changes in policy usually communicated to you?

written correspondence      orally      staff meetings      management      not at all

*Corruption in the public sector*

Q43. In the past year have staff members in your organization been disciplined for any of the following reasons?

poor work performance      insubordination      absence from work without leave  
embezzlement      accepting bribes      doing another job to the detriment of  
substantive job      for lack of discipline

Q68. In your opinion, to what extent is corruption a significant problem in the public sector as a whole?

very significant      significant      somewhat significant      not significant at all

Q70. Page 2 in the booklet lists relationships which are prone to corruption. In your view, where is corruption most common ( if any where )?

[ Please tick appropriate boxes. ]

officials in service delivery agencies and the public      officials in regulatory agencies  
and private business      officials with responsibilities for purchasing and private business  
all public officials and the public      all public officials and private business      public  
officials and their superiors or subordinates within agencies      government ministers and  
private business      members of parliament and private business      other [specify]

Q72.5 Read page 3 of the booklet.

Which of these measures do you think would encourage public officials to report corruption cases in their organizations to proper authorities?

[ Please tick appropriate boxes ].

Certainty that the authority will follow up on the reported incidents of corruption.  
Protection of the identity of the public employee who reports corruption

If the identity of the person reporting is known, protection from intimidation and retaliation

Clear procedures for reporting corruption

Publication of public officials assets

Legislation to allow investigation of any level of public officer whose assets are clearly beyond his / her income level

Other [specify ]

Q73. Read page 4 of the booklet.

Which of these measures do you think would help to reduce corruption?

[ Please tick appropriate boxes ].

better pay to public employees

performance recognition schemes

merit-based recruitment

strengthen and support the Office of the Auditor General

legislate stiffer penalties for both parties (public officials and persons) who offer bribes

asset declaration by public officers

other (specify)

*Budget management remains weak*

Q55. Do you think that actual funds approved for next year's budget will exceed or fall short of budgeted requirements?

exceed    fall short

Q56. In what way do you expect that actual funds will differ from budgeted funds ?

a large amount    a moderate amount    a small amount

Q57.3 When budget cuts are made, where are they most likely to be made first?

employment costs    other charges    capital expenditure    other [specify ]

Q59.2. Are any penalties applied to an organization if it exceeds its budgetary authorization?

yes    no    I do not know

### ***Appendix 3 Institutional environment indicators***

The survey obtained verbal responses, and it was necessary to convert these to a consistent numerical scale. Qualitative responses from all questions were converted into numbers on the scale of 0 to 10. For questions having yes / no answers, the responses possible were either “0” or “10”. For questions with four qualitative responses such as strongly agree (1), agree (2), disagree (3), strongly disagree (4), the following formula was used for the conversion:

$$\text{Scaled response} = 40/3 - 10/3 (\text{Un-scaled response}).^{30}$$

Thus every response on the survey was converted to a number between 0 and 10.

These numbers were used to calculate rule credibility, policy credibility, resource adequacy and predictability, and eventually the institutional environment indicators. To find either rule credibility (RC) or policy credibility (PC) or resource predictability (RP), the first step was to go into the components of these three elements of institutional environment. Responses to all questions in the each box in Figure 18 were averaged. Next the average of the four boxes under RC, three boxes under PC were taken. These were the measures of RC and PC, and RP had already been obtained in the previous step. Finally, the institutional environment indicator was derived as a simple arithmetic average of the three components of the institutional environment.

In more detail, *rule credibility* in the public sector was measured by creating an indicator covering the existence of formal rules in four areas: recruitment, training, performance appraisal, and appeal. Seven questions from the survey were utilized. These questions, as well as the details of the constructed rule credibility indicator, are listed in Tables A7 and A8. Rule credibility includes some consideration existence of the formal rules, with an eye toward the of those rules as well.

*Policy credibility* was measured through three dimensions: whether policies were consistent; whether they were communicated properly; and whether there was no political interference/micro- management. Responses from four questions were used to calculate the policy credibility indicator. The questions and details of the constructed policy credibility indicator are listed in Tables A9 and A10.

*Resource adequacy and predictability* was measured by creating an indicator compounded from two questions about whether the actual funds approved for the following year will exceed or fall short of budgeted requirements. The questions used and the details of the indicator are shown in Tables A11.

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<sup>30</sup> For consistency, the affirmative responses (e.g., “useful,” “helpful,” “working” [as opposed to “not working”]) were converted to “10.” Negative responses (e.g., “not useful,” “not helpful,” “not working,”) were converted to “0”. For example, for the question “Are job openings advertised?” “yes” was converted to “10,” and “no” was converted to “0.” Similarly, in the question “How consistent are the various policies your organization?” “very consistent” was converted to “10”; “more consistent than consistent” to “6.7”; “more inconsistent than consistent” to “3.3”; and “very inconsistent” to “0”.

Using the method described in section 4.1, as in the individual indicators, the institutional environment indicator was also constructed on a scale of 0 to 10 (0 = worst, 10 = best) by taking the simple arithmetic mean of the rule credibility, policy credibility and resource adequacy and predictability indicators. The institutional environment indicator was calculated for the entire public sector and for fifteen different public sector organizations. Table A12 in Appendix 1 presents indicators for each organization and for the entire public sector in Guyana.

**Table A 7 Questions used for calculating rule credibility in Guyana**

21. Are positions like yours generally advertised to the public?						
Yes <input type="checkbox"/> No <input type="checkbox"/>						
24. Within an organization, different people are hired for different reasons. This survey is interested in learning about general hiring trends. In your organization would you say that employees were hired more often for:						
	<b>almost all</b>	<b>most</b>	<b>about half</b>	<b>fewer than half</b>	<b>very few</b>	<b>none</b>
1. good performance at entry test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. qualifications met job requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. personal connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. political connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. family status in community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. payment of gift to some public authorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. knew a senior official	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. In your organization, is there a period of job/ organizational orientation before an officer is placed to function?						
yes <input type="checkbox"/> no <input type="checkbox"/> sometimes <input type="checkbox"/>						
28. In your organization ,which of the following methods have you used to learn your job:						
a written procedure guide	<input type="checkbox"/>					
verbal instructions from a superior	<input type="checkbox"/>					
verbal instructions from a colleague	<input type="checkbox"/>					
self - taught	<input type="checkbox"/>					
33. Does your organization have a system where annual objectives/ targets that are measurable are agreed to between employees and supervisors at the beginning of every year?						
yes <input type="checkbox"/> no <input type="checkbox"/>						
38(a) Are there documented work/performance standards for each function in your organization?						
yes <input type="checkbox"/> no <input type="checkbox"/>						
46. Can an employee appeal a dismissal?						
yes <input type="checkbox"/> no <input type="checkbox"/> I do not know <input type="checkbox"/>						

**Table A 8 Rule credibility indicator and its components in Guyana**

	Recruitment	Training	Evaluation	Appeal	Rule Credibility
<b>Public sector</b>	5.2	4.7	5.3	6.1	5.3
<b>Ministries</b>					
Agriculture	5.1	5.1	4.9	6.0	5.3
Education	4.9	4.0	6.6	6.3	5.4
Finance	4.4	4.8	4.7	8.3	5.6
Housing & Water	5.6	6.3	4.3	4.7	5.2
Labor & health	5.8	3.6	6.4	7.1	5.7
Works & Communication	4.0	6.5	2.3	0.5	3.3
<b>Regional Administrations</b>					
Region 2	4.3	5.3	4.8	5.8	5.1
Region 3	4.6	4.8	4.6	3.9	4.5
Region 6	6.2	4.4	5.2	5.3	5.3
Region 10	6.9	4.2	6.2	6.4	5.9
<b>Control Bodies</b>					
Office of Auditor General	5.2	6.0	7.8	6.0	6.2
Public service commission	4.0	6.0	5.3	7.3	5.7
Parliament office	2.9	3.7	3.7	4.0	3.6
<b>Service Delivery Agencies</b>					
Water Authority	5.8	3.5	5.3	6.0	5.1
Georgetown Sewage Commission	5.6	3.7	3.7	9.3	5.6

**Table A 9 Questions used for calculating policy credibility in Guyana**

<p>52. In your experience do you think that employees with high political connections or who are from wealthy or prominent families are treated differently from employees who have lesser connections?</p>	
much better than	<input type="checkbox"/>
somewhat better than	<input type="checkbox"/>
the same as persons without these connections	<input type="checkbox"/>
<p>63. Agencies receive instructions and policies from different parts of the government, some complement each other, others present conflict.</p> <p>Overall, how do you see the relationship between these various instructions/ policies?</p>	
very consistent	<input type="checkbox"/>
more consistent than inconsistent	<input type="checkbox"/>
more inconsistent than consistent	<input type="checkbox"/>
very inconsistent	<input type="checkbox"/>
<p>64. How often do you disagree with the policies that your organization is asked to implement?</p>	
often	<input type="checkbox"/>
occasionally	<input type="checkbox"/>
rarely	<input type="checkbox"/>
not at all	<input type="checkbox"/>
<p>65. How are changes in policy usually communicated to you?</p>	
written correspondence	<input type="checkbox"/>
orally	<input type="checkbox"/>
staff meetings	<input type="checkbox"/>
management	<input type="checkbox"/>
not at all	<input type="checkbox"/>
<p>67. In your opinion, how would you rate the incidents of political interference that exists in your organization?</p>	
very frequently	<input type="checkbox"/>
frequently	<input type="checkbox"/>
infrequently	<input type="checkbox"/>
Almost never	<input type="checkbox"/>



**Table A 10 Policy credibility indicator and its components in Guyana**

	<b>Policy consistency</b>	<b>Policy communication</b>	<b>No political micro-management</b>	<b>Policy Credibility</b>
<b>Public sector</b>	6.6	4.9	6.0	5.8
<b>Ministries</b>				
Agriculture	6.2	3.1	6.6	5.3
Education	6.7	6.3	6.7	6.5
Finance	7.1	3.0	5.5	5.2
Housing & Water	6.2	5.3	5.3	5.6
Labor & health	6.8	5.6	6.7	6.4
Works & Communication	6.2	1.5	3.9	3.8
<b>Regional Administrations</b>				
Region 2	6.3	4.5	4.4	5.1
Region 3	7.2	5.7	4.9	5.9
Region 6	6.4	4.8	5.4	5.5
Region 10	6.4	8.4	5.9	6.9
<b>Control Bodies</b>				
Office of Auditor General	7.3	4.5	7.5	6.4
Public service commission	7.1	3.3	9.2	6.5
Parliament office	7.6	4.0	9.0	6.9
<b>Service Delivery Agencies</b>				
Water Authority	6.2	3.0	5.0	4.7
Georgetown Sewage Commission	6.2	4.7	7.2	6.0

**Table A 11 Questions used for calculating resource adequacy and predictability in Guyana**

<p>55. Do you think that actual funds approved for next year's budget will exceed or fall short of budgeted requirements?</p> <p>1. exceed <input type="checkbox"/></p> <p>2. fall short <input type="checkbox"/></p> <p>3. other [specify] _____</p>
<p>56. In what way do you expect that actual funds will differ from budgeted Funds?</p> <p>1. a large amount <input type="checkbox"/></p> <p>2. a moderate amount <input type="checkbox"/></p> <p>3. a small amount <input type="checkbox"/></p> <p>4. other _____</p>

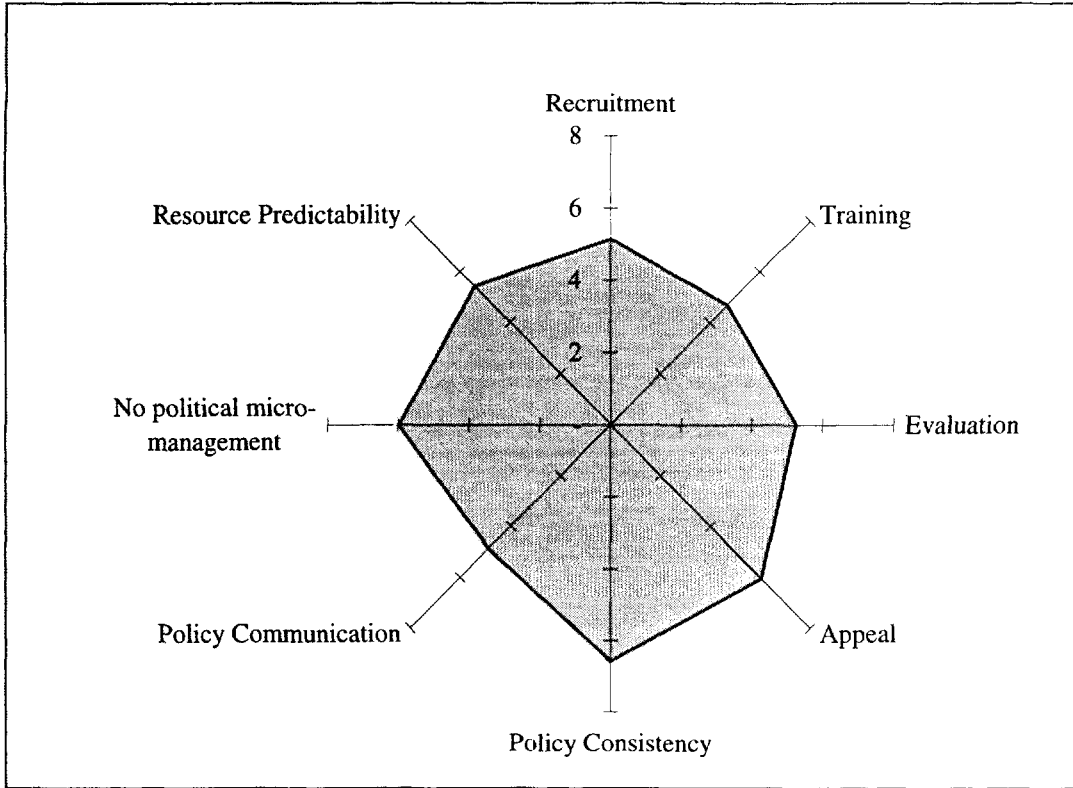
**Table A 12 Indicator of institutional environment and its components in Guyana**

	<b>Rule Credibility</b>	<b>Policy Credibility</b>	<b>Resource Adequacy and Predictability</b>	<b>Institutional Environment</b>
<b>Public sector</b>	5.3	5.8	5.4	5.5
<b>Ministries</b>				
Agriculture	5.3	5.3	5.3	5.3
Education	5.4	6.5	5.7	5.9
Finance	5.6	5.2	5.9	5.5
Housing & Water	5.2	5.6	6.2	5.7
Labor & health	5.7	6.4	5.3	5.8
Works & communication	3.3	3.8	4.7	4.0
<b>Regional Administrations</b>				
Region 2	5.1	5.1	6.4	5.5
Region 3	4.5	5.9	5.0	5.1
Region 6	5.3	5.5	5.2	5.3
Region 10	5.9	6.9	4.8	5.9
<b>Control Bodies</b>				
Office of Auditor General	6.2	6.4	7.5	6.7
Public service commission	5.7	6.5	2.7	5.0
Parliament office	3.6	6.9	2.7	4.4
<b>Service Delivery Agencies</b>				
Water Authority	5.1	4.7	5.4	5.1
Georgetown Sewage Commission	5.6	6.0	5.2	5.6

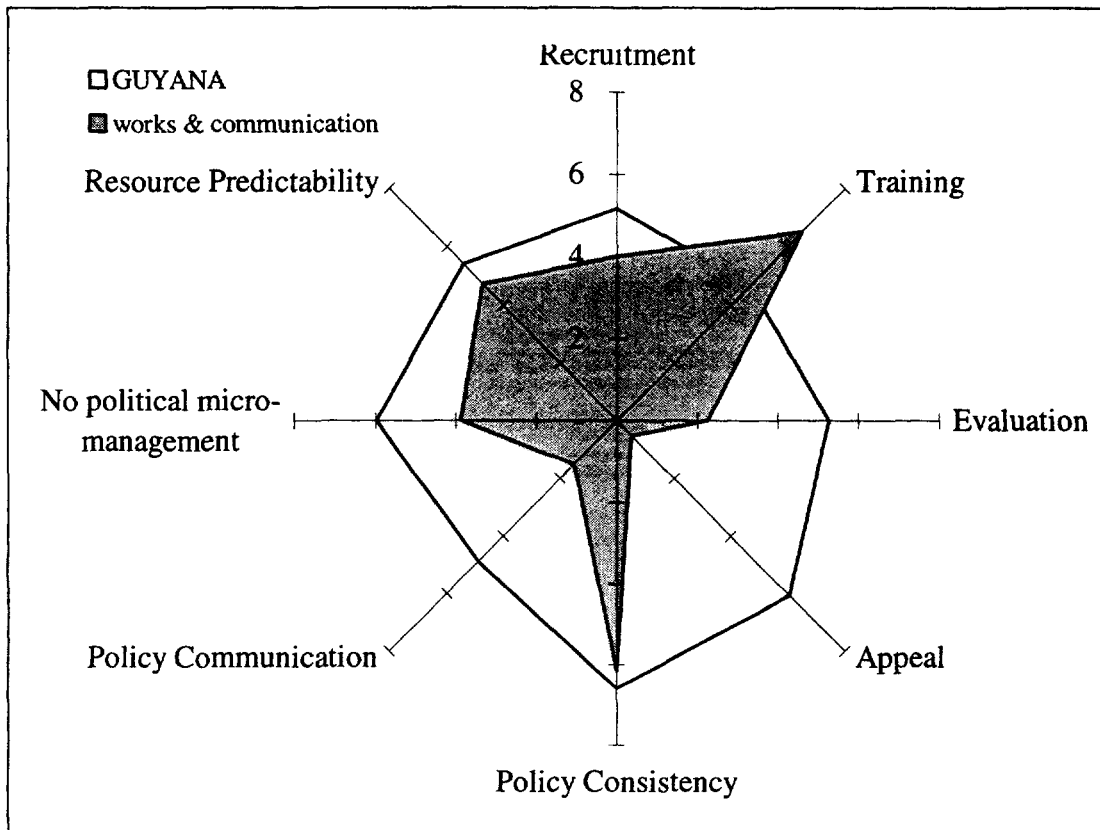
**Table A 13 Institutional Environment in Guyana (standardized)**

	<b>Rule Credibility</b>	<b>Policy Credibility</b>	<b>Resource adequacy &amp; predictability</b>
<b>Ministries</b>			
Min. of Agriculture	0.15	-0.54	0.07
Min. of Education	0.35	0.86	0.41
Min. of Finance	0.50	-0.67	0.54
Min. of Housing & Water	0.07	-0.19	0.80
Min of Labor & Health	0.69	0.67	0.07
Min. of Works & Communication	-2.28	-2.26	-0.38
<b>Regional Administrations</b>			
Region 2	-0.12	-0.84	0.98
Region 3	-0.85	0.15	-0.13
Region 6	0.15	-0.30	0.00
Region 10	0.95	1.28	-0.33
<b>Control Bodies</b>			
Office of Auditor General	1.31	0.74	1.85
Public Service Commission	0.62	0.87	-2.02
Parliament office	-1.98	1.23	-2.02
<b>Service Delivery Agencies</b>			
Water Authority	-0.02	-1.26	0.15
Georgetown Sewage Commission	0.48	0.26	0.01
Average	0.00	0.00	0.00
Standard Deviation	1.00	1.00	1.00

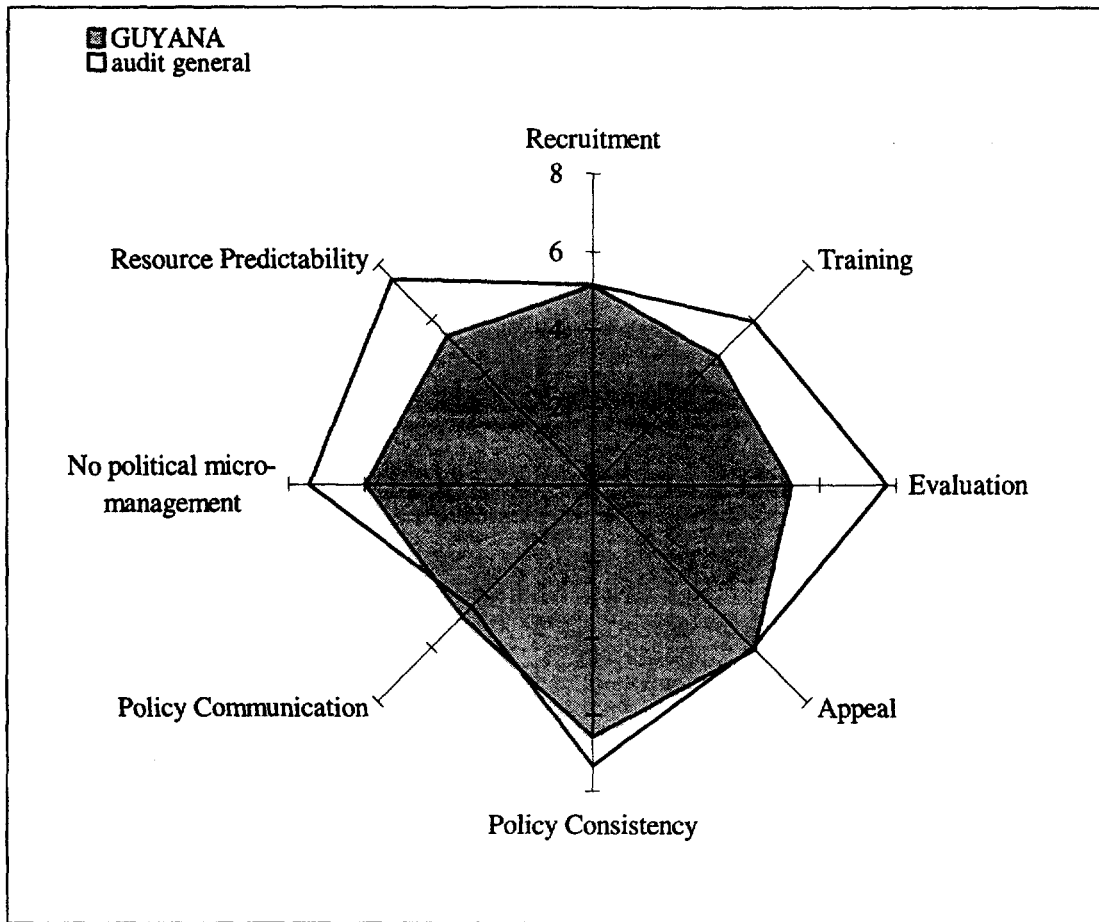
**Figure A 1 Eight dimensions of the institutional environment in the public sector of Guyana**



**Figure A 2 Institutional environment in the Ministry of Works and Communication**



**Figure A 3 Institutional environment in the Office of the Auditor General**







**Table A 15 Indicator of results focus and its components in Guyana**

	<b>Geared Towards Objectives</b>	<b>Efficiency</b>	<b>Merit-Based Incentives</b>	<b>Results-Focus</b>
<b>Public sector</b>	4.2	5.4	4.2	4.6
<b>Ministries</b>				
Agriculture	3.7	3.3	3.8	3.6
Education	4.8	4.3	4.9	4.7
Finance	5.0	4.6	3.6	4.4
Housing & Water	3.3	6.0	3.3	4.2
Labor & Health	4.5	5.8	3.2	4.5
Works & Communication	1.3	2.7	2.3	2.1
<b>Regional Administrations</b>				
Region 2	3.2	4.8	5.5	4.5
Region 3	5.0	7.5	5.2	5.9
Region 6	3.8	5.2	3.9	4.3
Region 10	4.6	5.6	4.6	4.9
<b>Control Bodies</b>				
Office of Auditor General	5.5	6.7	6.4	6.2
Public service commission	4.7	7.1	5.8	5.8
Parliament office	4.0	9.1	2.4	5.2
<b>Service Delivery Agencies</b>				
Water Authority	4.5	6.0	5.6	5.4
Georgetown Sewage Commission	4.0	6.2	6.5	5.6

**Table A 16 Questions used to calculate accountability indicator in Guyana**

<p>25 Before you applied for your current job or when you first joined the government, were you assured that you would get the job?</p> <p>yes                      no</p>
<p>31. How much of this new knowledge are you now using on the job?</p> <p>a great deal about half of it a little none at all</p>
<p>34 When was your performance last appraised by your supervisor?</p> <p>last quarter      mid year      end of first quarter one year ago two years ago      three years ago      more than three years My performance was not appraised</p>
<p>39 Are you allowed to make any decisions relating to the performance of your duties?</p> <p>I seldom need to refer decisions to my boss I refer half of the decisions that need to be made to my boss I refer most of the decisions that need to be made to my boss Any decision that is required is made by my boss</p>
<p>40 Do you think that there is need for divisional heads to have more authority in their areas of work in relation to reward and discipline staff?</p> <p>a lot more the present level is adequate a little more I am uncertain</p>
<p>42 How difficult is it to obtain adequate and timely information from the records management system in your organization??</p> <p>very difficult      difficult      easy      very easy</p>
<p>Public opinion seems to indicate that one of the main problems affecting the performance of the government and some of its organizations is corruption.</p> <p>67. In your opinion, to what extent is corruption a significant problem in the public sector as a whole?</p> <p>very significant significant somewhat significant not significant at all</p>
<p>71 How often are cases of corruption, generally, reported to the proper authorities?</p> <p>almost always frequently occasionally almost never</p>

**Table A 17 Accountability indicator and its components in Guyana**

	<b>Enforceability of Regulations</b>	<b>Delegation</b>	<b>Corruption</b>	<b>Accountability</b>
<b>Public sector</b>	5.4	6.1	3.7	5.1
<b>Ministries</b>				
Agriculture	5.7	5.6	4.0	5.1
Education	5.1	6.8	4.1	5.4
Finance	4.5	7.0	4.7	5.4
Housing & Water	4.1	4.0	2.3	3.5
Labor & Health	5.3	7.8	3.7	5.6
Works & Communication	4.0	4.3	3.1	3.8
<b>Regional Administrations</b>				
Region 2	5.9	6.3	5.3	5.8
Region 3	6.0	6.1	4.5	5.5
Region 6	5.8	6.0	3.6	5.1
Region 10	5.3	5.7	2.7	4.6
<b>Control Bodies</b>				
Office of Auditor General	6.2	5.2	2.5	4.6
Public service commission	5.3	4.0	3.3	4.2
Parliament office	5.0	4.0	1.1	3.4
<b>Service Delivery Agencies</b>				
Water Authority	5.3	6.8	4.1	5.4
Georgetown Sewage Commission	6.0	7.8	3.4	5.7

**Table A 18 Questions used for calculating employee morale in Guyana**

16	Is your salary sufficient to meet your living expenses?	yes	no
18	Would you describe the quality of life that you have maintained over the past year as unacceptable, acceptable, or good?		
	unacceptable		
	acceptable		
	good		
20	During periods of economic difficulty and austerity, some people talk about decreasing the size of the government as a means of saving money. Decreasing the size of the government would, in some areas, entail organization streamlining and staff cutbacks. Given that, how worried are you about losing your job sometime in the near future? are you very worried, somewhat worried, or not at all worried?		
	very worried	somewhat worried	not at all worried
43	How often do you receive salary or wages late?		
	very often	sometimes	a few times no time at all

**Table A 19 Employee morale indicator and its components in Guyana**

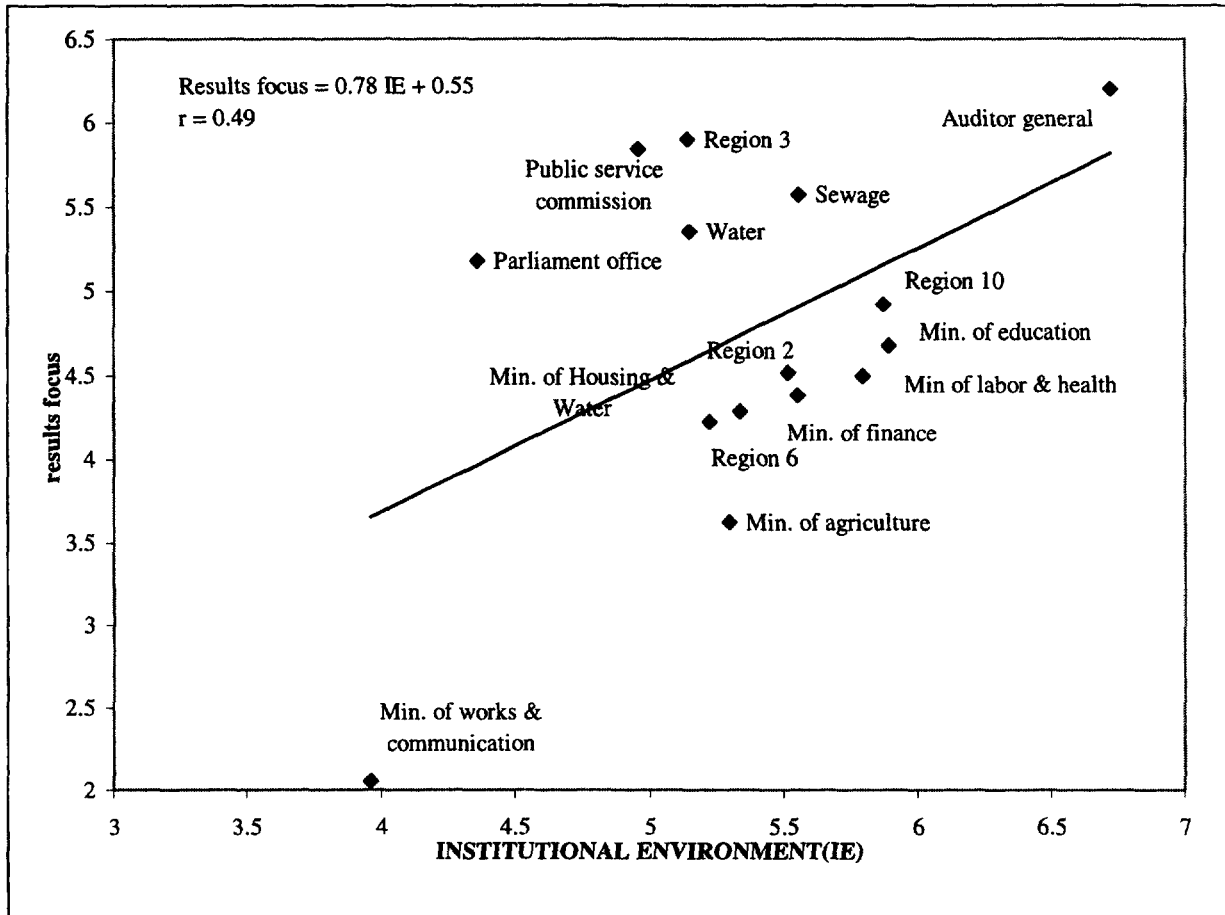
	Salary	Quality of Life	Job Security	Employee Morale
<b>Public sector</b>	1.5	5.4	4.8	3.9
<b>Ministries</b>				
Agriculture	1.7	5.1	4.0	3.6
Education	1.6	5.1	5.9	4.2
Finance	1.1	5.5	4.0	3.5
Housing & Water	0.6	2.3	4.0	2.3
Labor & Health	1.2	4.9	6.3	4.1
Works & Communication	1.3	4.0	4.8	3.4
<b>Regional Administrations</b>				
Region 2	1.6	5.5	4.2	3.8
Region 3	1.9	6.3	4.6	4.3
Region 6	1.1	6.3	4.5	3.9
Region 10	2.1	5.2	3.4	3.6
<b>Control Bodies</b>				
Office of Auditor General	1.9	6.3	6.8	5.0
Public service commission	0.9	7.0	3.7	3.9
Parliament office	2.1	5.7	3.3	3.7
<b>Service Delivery Agencies</b>				
Water Authority	2.5	6.3	5.8	4.8
Georgetown Sewage Commission	1.8	5.7	3.7	3.7

**Table A 20 Indicator of performance and its components in Guyana**

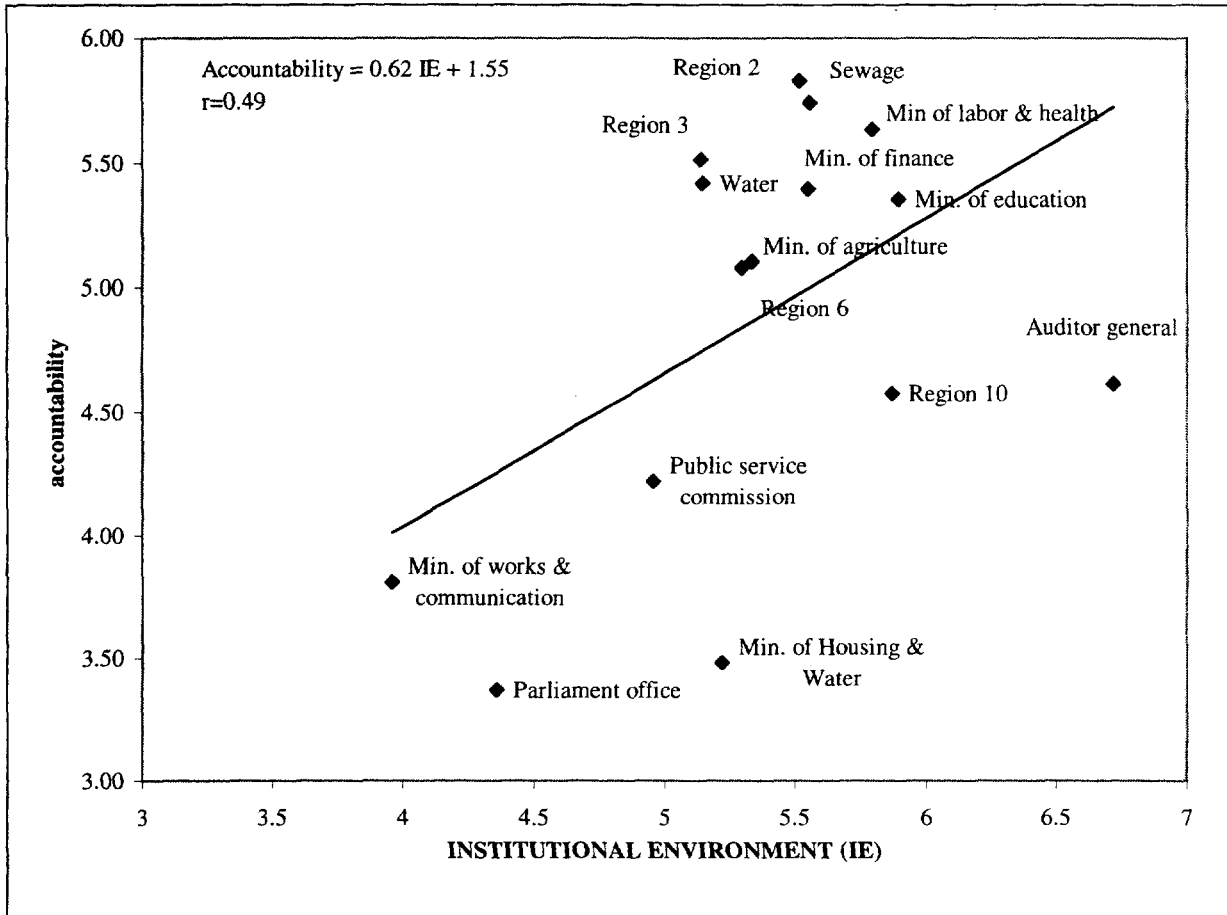
	<b>Results-Focus</b>	<b>Accountability</b>	<b>Employee Morale</b>	<b>Performance</b>
<b>Public sector</b>	4.6	5.1	3.9	4.5
<b>Ministries</b>				
Agriculture	3.6	5.1	3.6	4.1
Education	4.7	5.4	4.2	4.7
Finance	4.4	5.4	3.5	4.4
Housing & Water	4.2	3.5	2.3	3.3
Labor & Health	4.5	5.6	4.1	4.7
Works & Communication	2.1	3.8	3.4	3.1
<b>Regional Administrations</b>				
Region 2	4.5	5.8	3.8	4.7
Region 3	5.9	5.5	4.3	5.2
Region 6	4.3	5.1	3.9	4.4
Region 10	4.9	4.6	3.6	4.4
<b>Control Bodies</b>				
Office of Auditor General	6.2	4.6	5.0	5.3
Public service commission	5.8	4.2	3.9	4.6
Parliament office	5.2	3.4	3.7	4.1
<b>Service Delivery Agencies</b>				
Water Authority	5.4	5.4	4.8	5.2
Georgetown Sewage Commission	5.6	5.7	3.7	5.0

*Appendix 5 Connection of performance and institutional environment*

**Figure A 4** The relationship between institutional environment and results-focus in Guyana

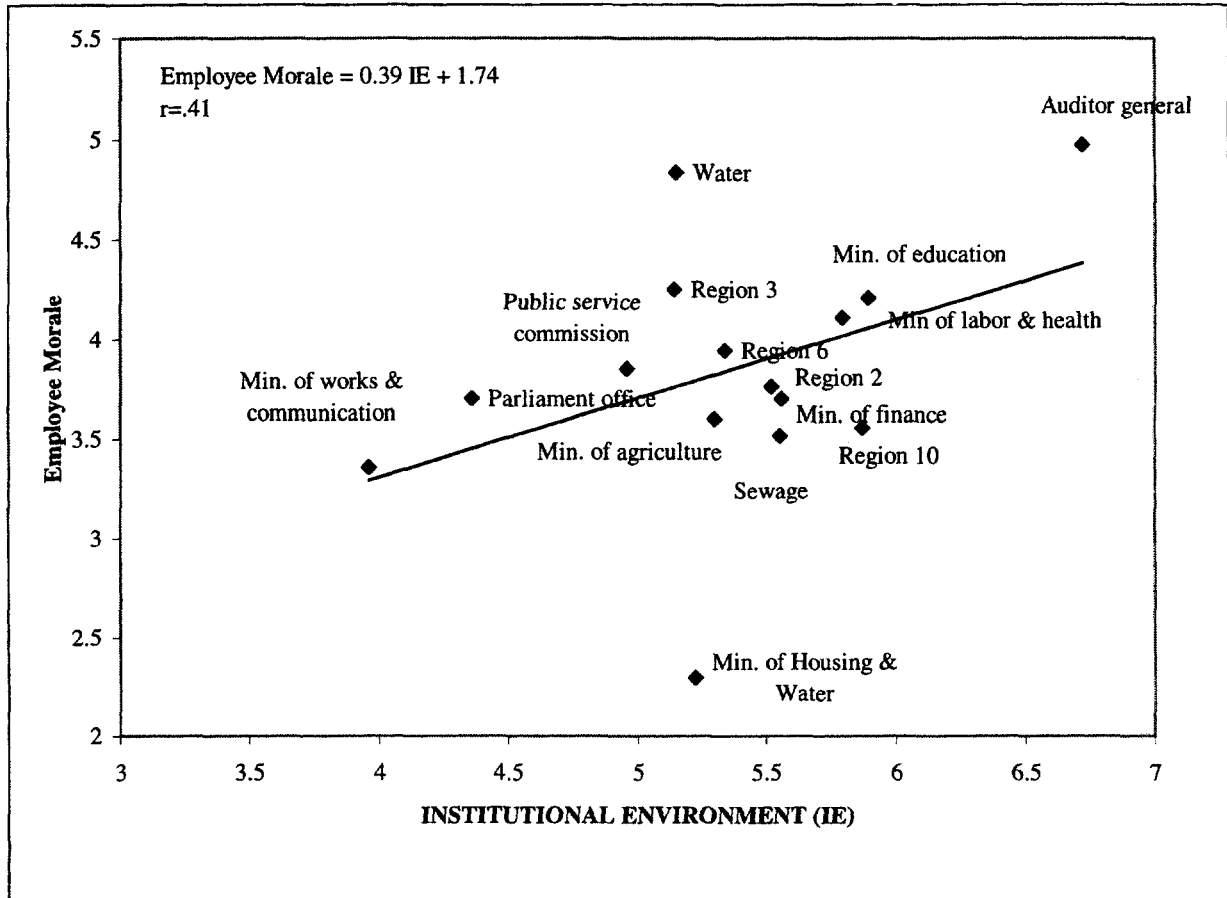


**Figure A 5 The relationship between institutional environment and accountability in Guyana**





**Figure A 6 The relationship between institutional environment and employee morale in Guyana**



## ***Appendix 6 Econometric and analytical issues***

This appendix has four sections. Section A6.1 presents the econometric models. Section A6.2 discusses the data and estimation problems and describes how these problems were tackled. Section A6.3 includes the estimation results for the entire public sector of Guyana. Section A6.4 briefly explains the construction of the Performance Pay-Offs for Guyana.

### *Econometric models to estimate*

Econometric Model I:

$$Y_{ij} = a + b IE_i + e_i,$$

where

Y = performance indicator, with j = aggregate performance, accountability, employee morale, and results focus;

IE = institutional environment; and

e = a well-behaved stochastic error term.

A linear functional form was chosen to keep the analysis simple.

This model was estimated by using data points from 15 different public organizations in Guyana. The estimations results are presented in Section 6 and in Appendix 3.

Econometric Model II:

$$Y_j = \sum_{k=1}^{11} \beta_k X_{jk} + u_j$$

where,

Y<sub>j</sub> = performance-j, with j = accountability (ACC), employee morale (MOR), and results-focus (RFO);

X<sub>k</sub> = component-k of the institutional environment, with k=1,2, ..., 11; and

u<sub>j</sub> = a classical error term.

In particular,

x1 = Existence of rules in recruitment (Q24)

x2 = Existence of rules in training-1 (Q29)

x3 = Existence of rules in performance appraisal-1 (Q33)

x4 = Existence of rules in performance appraisal-2 (Q38a)

x5 = Existence of rules in training-2(Q28)

- x6 = Existence of rules in appeal (Q46)
- x7 = Policy consistency (Q63)
- x8 = Policy communication (Q65)
- x9 = Political interference/micro-management (Q67)
- x10 = Resource adequacy & predictability - 1 (Q55)
- x11 = Resource adequacy & predictability - 2 (Q56)

*Dealing with data and estimation problems*

*Small number of observations*

In model II, having 11 independent variables (and a constant term), and only 15 organizations, i.e., data points, was a problem. In order to calculate PPOs, responses from each public official were utilized in running regressions. This essentially gave (after some data cleaning) 464 observation points for the entire Guyana.

*High level of correlation among independent variables*

Explanatory variables were transformed into binary responses: an indicator with results lower than 5 out of 10 points were converted to "0", otherwise to "1." This calibration also allowed the interpretation of the estimated coefficients in a more sensible way. Instead of referring to increasing policy credibility by one or by a certain amount, it was possible to refer to making policies credible. Similarly, instead of referring to two public officials who believe that rules in place 72.4% or 39.8%, we could refer to two public officials who believe and don't believe respectively that rules are in place.

**Table A 21 Correlation coefficients for the (converted) institutional environment indicators for Guyana**

	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11
x1	1.00										
x2	0.09	1.00									
x3	0.16	0.17	1.00								
x4	0.05	0.19	0.28	1.00							
x5	0.17	0.13	0.19	0.16	1.00						
x6	0.10	0.14	0.17	0.13	0.00	1.00					
x7	0.07	0.07	0.05	0.15	0.11	0.02	1.00				
x8	0.06	0.19	0.09	0.11	0.00	0.14	0.07	1.00			
x9	0.13	0.05	0.07	0.04	0.17	0.09	0.17	0.06	1.00		
x10	-0.02	0.03	0.00	-0.13	-0.06	0.04	-0.13	0.08	-0.04	1.00	
x11	-0.03	0.01	0.00	0.04	0.03	-0.02	0.16	0.03	0.04	-0.23	1.00

*Correlation among the error terms of different performance regression equations*

In the left hand side of Model II, there are three specific performance indicators, namely results-focus (RF) accountability (ACC), and morale (MOR) as a function of eleven different aspects of the institutional environment (IE). In other words, we are saying that much of the systematic component of these three elements will consist of the same type of variation—variation due to aspects of the institutional environment. But, it is also likely because of the matching across public officials that random components of the performances will be related. Thus, some knowledge of the random component of RF variations would give us some predictive insight into the random component of ACC variations. Consequently, it is reasonable to expect that the errors of these three regression equations— $RF=a(IE)$ ,  $ACC=v(IE)$ ,  $MOR=c(IE)$ —may be correlated across equations. However, when the errors are correlated across the equations, OLS results in biased variance estimates. Therefore, to improve efficiency, Seemingly Unrelated Regression Equations (SURE) approach was used in the estimations. If the errors of the equations were not correlated, then SURE results and OLS results became the same.

**Table A 22 SURE estimation results for the Guyana's public sector**

Estimates for equation: <b>Results-focus</b>						N=454
Variable	Coefficient	Standard Error	z=b/s.e.	P[ Z _z]	Mean of X	
Constant	2.373531	0.37428	6.342	0.00000		
Q24	0.9389700E-01	0.20076	0.468	0.63999	0.6616	
Q29	0.6075911	0.19375	3.136	0.00171	0.4181	
Q33	0.4840812	0.19942	2.427	0.01521	0.5582	
Q38A	1.349764	0.19868	6.794	0.00000	0.5108	
Q28	0.3066279	0.19376	1.583	0.11353	0.4806	
Q46	0.1952959	0.19583	0.997	0.31863	0.6078	
Q63	0.5973676	0.22031	2.711	0.00670	0.7457	
Q65	0.6764702	0.18898	3.580	0.00034	0.4871	
Q67	0.3284515	0.19360	1.697	0.08978	0.5862	
Q55	-0.1428734	0.22522	-0.634	0.52584	0.7608	
Q56	-0.2787939	0.22066	-1.263	0.20643	0.7522	
Model test: F[ 11, 451] = 14.64,						Prob value = 0.00000
Estimates for equation: <b>Accountability</b>						
Variable	Coefficient	Standard Error	z=b/s.e.	P[ Z _z]	Mean of X	
Constant	3.116571	0.26232	11.881	0.00000		
Q24	0.4253304	0.14070	3.023	0.00250	0.6616	
Q29	-0.1115887	0.13579	-0.822	0.41122	0.4181	
Q33	0.2979080	0.13977	2.131	0.03305	0.5582	
Q38A	0.1822602	0.13925	1.309	0.19058	0.5108	
Q28	0.3734510E-01	0.13580	0.275	0.78331	0.4806	
Q46	0.1404441E-02	0.13725	0.010	0.99184	0.6078	
Q63	0.5988795	0.15441	3.879	0.00011	0.7457	
Q65	0.4731137	0.13245	3.572	0.00035	0.4871	
Q67	0.4702702	0.13568	3.466	0.00053	0.5862	
Q55	-0.7553748E-01	0.15785	-0.479	0.63226	0.7608	
Q56	0.2286695E-02	0.15466	0.015	0.98820	0.7522	
Model test: F[ 11, 451] = 7.66,						Prob value = 0.00000
Estimates for equation: <b>Employee Morale</b>						
Variable	Coefficient	Standard Error	z=b/s.e.	P[ Z _z]	Mean of X	
Constant	4.140896	0.39190	10.566	0.00000		
Q24	0.1365675	0.21021	0.650	0.51590	0.6616	
Q29	0.4242991E-01	0.20287	0.209	0.83434	0.4181	
Q33	0.6101321E-01	0.20881	0.292	0.77014	0.5582	
Q38A	-0.2513755	0.20804	-1.208	0.22692	0.5108	
Q28	-0.1948372	0.20288	-0.960	0.33687	0.4806	
Q46	0.7254887E-01	0.20505	0.354	0.72348	0.6078	
Q63	0.2715829	0.23068	1.177	0.23908	0.7457	
Q65	0.2406922	0.19788	1.216	0.22384	0.4871	
Q67	0.4025840	0.20271	1.986	0.04703	0.5862	
Q55	0.2875617E-01	0.23582	0.122	0.90295	0.7608	
Q56	-0.1034993	0.23105	-0.448	0.65419	0.7522	
Model test: F[ 11, 451] = 1.01,						Prob value = 0.4401

*Constructing the indicators for pay-offs*

The following is a demonstration of how a PPO was constructed by using the estimated coefficients—which were reported in the previous section.

Based on the following formula, which was explained in section 7, particularly for policy consistency, two pieces of information were required to construct a specific PPO.

$$PPO_{policy\ consistency} = \frac{\Delta performance / \Delta policy\ consistency}{performance_0},$$

In general, to construct Results-focus PPOs

- (1) We need estimated partial derivatives of the results-focus with respect to particular potential reform interventions—i.e., the coefficient of the related variable from Model II. Yet, for statistical significance of the constructed PPO, only the estimated coefficients which were statistically significant at 0.05 for one-tailed test were used in the construction of the indicators.
- (2) We need the initial level of the results-focus indicator.
- (3) We need the initial level of the particular component of the institutional environment.

As the reported regression results show, six of the estimated coefficients in the results-focus equation were statistically significant for one-tailed test. The initial level of the result focus-indicator was 4.56. For instance the Results focus-PPO of “defining/disseminating annual organizational objectives/targets” were constructed as shown in the following table.

**Table A 23 Mechanics of calculating the PPOs**

<i>Institutional environment<sub>k</sub></i>	$\frac{\partial (results - focus)}{\partial (institutional\ environment_k)}$	Initial level of ‘defining/disseminating annual organizational objectives/targets’	Initial level of results focus	<i>Results-focus-PPO<sub>k</sub></i>
Defining/disseminating annual organizational objectives/targets	1.35	5.11	4.56	14.5%

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