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Policy and Governance

Perspective and Analytical Framework for Management of Urban Sewage

GRB EMP : Ganga River Basin Environment Management Plan

by

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Preface

In exercise of the powers conferred by sub-sections (1) and (3) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government has constituted National Ganga River Basin Authority (NGRBA) as a planning, financing, monitoring and coordinating authority for strengthening the collective efforts of the Central and State Government for effective abatement of pollution and conservation of the river Ganga. One of the important functions of the NGRBA is to prepare and implement a Ganga River Basin: Environment Management Plan (GRB EMP).

A Consortium of 7 Indian Institute of Technology (IIT) has been given the responsibility of preparing Ganga River Basin: Environment Management Plan (GRBEMP) by the Ministry of Environment and Forests (MoEF), GOI, New Delhi. Memorandum of Agreement (MoA) has been signed between 7 IITs (Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and MoEF for this purpose on July 6, 2010.

This report is one of the many reports prepared by IITs to describe the strategy, information, methodology, analysis and suggestions and recommendations in developing Ganga River Basin: Environment Management Plan (GRB EMP). The overall Frame Work for documentation of GRBMP and Indexing of Reports is presented on the inside cover page.

There are two aspects to the development of GRB EMP. Dedicated people spent hours discussing concerns, issues and potential solutions to problems. This dedication leads to the preparation of reports that hope to articulate the outcome of the dialog in a way that is useful. Many people contributed to the preparation of this report directly or indirectly. This report is therefore truly a collective effort that reflects the cooperation of many, particularly those who are members of the IIT Team. Lists of persons who have contributed directly and those who have taken lead in preparing this report are given on the reverse side.

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1. Brief Summary

During the analysis of the urban sewage problem on the banks of Ganga, an urgent need was felt to evolve and articulate a systematic, comprehensive, conceptually sound, and internally consistent perspective—and an analytical framework based on it—that is focused on the policies and governance. The ‘Policy and Governance Perspective’ and the analytical framework with the same title that are presented here are built on the foundation of some clearly defined basic concepts and terms. It also presents a conceptual schema—called as the ‘Governance Grid’—which takes a comprehensive view of governance of an entire sector. The perspective then presents an ‘ideal type’ of the ‘process of governance’. Using all these as foundation, the perspective then presents a comprehensive and conceptually coherent schema of the actual process of governance as it generally unfolds in reality. The schema begins with the ground-level problems in any sector and helps the analyst identify the core governance maladies of different types in the sector. To address these maladies, the analyst then can evolve recommendations for appropriate changes in—or creation of new—policy instruments and / or governing agencies. The perspective prompts an argument that such core governance maladies cannot be cured by technical, financial, or managerial ‘fixes’. It also makes a note that all governance problems cannot be addressed using the policy and institutional ‘fixes’ either, as they cannot resolve such problems rooted in the ‘political bottom-line’. In other words, the problems rooted in the adverse balance of political-economic powers acting against the goals set for the governance of the sector can be resolved only through political action by the sections of society supporting the goals set for governance.

2. Introduction

In every sector, problems faced by different stakeholders at practical levels or on the ground are aplenty. Often, these are blamed on policy defects, i.e. problems in design of policies, lacuna in implementation, or simply on the unresponsive or irresponsible governing agencies. Despite the efforts made to deal with all these factors, these problems persist.

The problem of pollution of Ganga could be seen as a glaring example in this regard. This is a chronic problem that has been festering despite many attempts by government agencies to clean up the river, including the mega-programs like Ganga Action Plans: Phase I (GAP I) and Phase II (GAP II). One of the main sources of pollution in Ganga is sewage from urban habitats situated on the banks of the river and of its tributaries. Both the GAPs were largely focused on addressing the problem of pollution due to urban sewage.

The problem of pollution of Ganga caused by urban sewage could be viewed and analyzed from different perspectives, and all of these perspectives need not be exclusive of each other. For example, from the technical perspective, the problem could be seen as the result of improper technological choice, inadequate or inefficient equipment, faulty operation or maintenance procedures, and/or inadequate capabilities of the technical work-force.

Similarly, different explanations of the same problem could be proposed from the financial or managerial perspectives. All these explanations need not be exclusive of each other, in the sense that all explanations, to differing extents, could be simultaneously correct.

This document makes an attempt to present another perspective called as the Policy and Governance (P & G) perspective. It also elaborates on the Policy and Governance Framework, based on the Policy and Governance Perspective. The framework will be useful for analyzing the problems evident in various sectors, especially the infrastructure and public services sectors, including the urban sewage sector which is contributing to pollution of Ganga.

The main idea underlying this effort is to prepare a systemic tool in the form of P & G Framework for analysis of the ground-level problems from the P & G perspective. This tool is expected to be (a) conceptually sound and internally consistent (mainly on conceptual grounds) (b) adequately comprehensive to cover all the possibilities, (c) simple in structure to the extent possible, and (d) applicable across many sectors. It needs to be noted that this is not claimed as the only one, correct, or true perspective, neither the framework is seen as the most efficient, effective, or appropriate framework.

While structuring the perspective, a lot of effort is put in defining terms and concepts — which are apparently familiar—in a very clear, precise, and coherent manner. The exercise is aimed at bringing on the same plane or wavelength all those involved in conducting and understanding the analysis using the framework presented here. The main barrier in this effort is multiple interpretations and definitions of various terms and their use in every-day, popular-level language. Hence, significant effort is made here to define these terms in such a systematic and precise and ‘technical’ manner so that they can be employed for ‘analytical’ or ‘theoretical’ purposes.

3. Key Concepts and Terms

The P&G Framework relies on a set of key concepts and terms such as Policy Instruments (PIs), Governing Agencies (GAs), (Formal) Rules (of organizations other than GAs), Norms (Informal / unwritten Rules), Interests (of Stakeholders), and Misalignments. This section presents definitions and explanations of these key concepts. Box 1 presents short definitions of key concepts for ready references¹.

3.1 Governance of Infrastructure Sectors

There are scores of definitions of the term ‘Governance’. At the very preliminary level, governance could be seen as managing and administering of the public affairs in a given

¹ The basic definitions or explanations of the core concepts are introduced here in the box in order to make preliminary introduction of all the core concepts and terms to the readers at the beginning. As all the concepts are interrelated, the references to other terms are unavoidable while explaining of one concept. Such a short introduction is expected to make things easier for the reader.

sector or in a given geographic area by ‘Public Agencies’, with peculiar demands on them of legitimacy and accountability². The idea of governance, especially when it is used to understand the ground-level reality is quite comprehensive and complex. Hence, this note attempts to define the idea of governance in term of a conceptual—but which is more attuned to the practical use—schema called the Governance Grid. This is explained in detail in the later part of this document.

Box 1: Basic Definitions and Explanations of the Core Concepts and Terms

Governance Objectives (GOs): The government having the mandate to represent the public/citizens would decide the objectives guiding all efforts to govern the given sector or issues, so that the broader goal of protecting and promoting public interests can be achieved.

Policy Instruments (PIs): In a practical way, policy instruments (PIs) could be explained as different types of rules, such as laws, rules, regulations, departmental circulars, government notifications, with the Constitution of the country at the pinnacle. Policy Instruments could be seen as instruments for furthering or realizing the governance objectives (or GOs).

Governing Agencies (GAs): The agencies that are entrusted with the responsibility of discharging various governance functions and tasks in order to fulfil the GOs set for the sector (or issue) are called Governing Agencies (GAs).

Governance Instruments (GIs): The PIs and GAs, together are called here as the main Governance Instruments (or GIs).

Governance Processes: Processes that are the direct outputs of the efforts of governing agencies, using policy instruments, in order to achieve the GOs.

Norms: Informal, unwritten, and often unarticulated rules that the stakeholders (individuals, groups, or organizations) accept and adhere to—in conscious manner or otherwise—while participating in governance processes.

Interests: In a simple and practical way, interests could be seen as linked with the benefits (in most cases, economic and political benefits) which would accrue to the stakeholders or are expected by the stakeholder. Thus, interests could be seen as both (a) expectations and desires of obtaining benefits, or (b) the expected or desired benefits.

² Public affairs are those affairs wherein the transaction between two or more parties spill over (or have potential to spill over) beyond the parties involved, affecting others who are not involved in the transaction. It is expected that the two transacting parties are involved in a private transaction ‘willingly’ and ‘knowingly’. Moreover, public affairs also include those private transactions, wherein there is a possibility that one party is drawn or retained in the transaction not in fully ‘knowing’ or ‘willing’ manner. In other words, when party is seen as very weak or vulnerable and there is strong possibility that the vulnerable party would not be able to make informed decision at its own will—with a possibility of coming under duress—at the time of the entry or exit in the transaction. Further, the public affairs are governed by governing agencies in the public sphere. The governing agencies are ‘public’, because of their following characteristics: (a) they are expected to protect and promote public interests, (b) they use public funds, (c) they possess ‘legitimacy’ (or ‘public mandate’) to work on behalf of the public. This public legitimacy or public mandate with the governing agencies flows from accountability they have towards public or society at large. As against this, the private agencies are controlled by private owners and accountable largely to their owners.

3.2 Governance Objectives (GOs)

The government, having the mandate to represent the public / citizens, would decide the objectives underlying all efforts to govern the given sector (or issues) in order to serve the broader goal of protecting and promoting public interests³. In fact, in the democratic set-up, the party (or the coalition) controlling the government is expected to get the mandate from its constituents on the basis of the proposed governance objectives and targets it present to citizenry before the elections, often in the form of the 'election manifesto'. These Governance Objective (or GOs) would be of two types: (a) sector-specific objectives, and (b) broader social, economic, political, cultural, and other governance objectives. Sector-specific GOs pertain to the direction and the manner in which the sector is to be governed, while the broader GOs emerge from the broader vision of the government. Some of the sector-specific GOs could also be derivatives of broader GOs.

3.3 Policy Instruments (PIs)

In a simple and practical way, policy instruments (PIs) could be explained as different types of rules—made and used by governing agencies—such as laws, rules, regulations, departmental circulars, government notifications, with even the Constitution of the country at the highest level. Policy Instruments can be seen as instruments for furthering or realizing the governance objectives (or GOs). More specifically, policy instruments are the instruments that are used: (a) to guide and influence the thinking and / or behaviour (and hence decisions and / or actions) of different stakeholders, and (b) to create or establish governing agencies (or GAs) and shape their (i.e., GAs') structure and functioning. Here, GAs are expected or employ the PIs in their functioning. The different types of PIs are:

Laws (or Acts): These are created or enacted by the legislature or similar bodies made of representatives of citizens. This type of instruments receives legal sanction due to the very fact that it is approved by the body of representatives of citizens. The laws could be seen as providing basic normative frames for the governing agencies to carry out a set of sectoral responsibilities (SRs) and Generic Functions (GFs) in a particular sector. These terms are explained in the section of Governance Grid. They are often broad in scope and non-specific or ambiguous in content. The laws devolve to GAs other than the legislature the responsibilities: (a) to further articulate the normative frame, (b) to fill up the required non-normative elements in the framework for execution, and/ or (c) carry out execution of generic functions. The laws are also expected to follow the frame provided by the meta-level policy instrument such as the Constitution. The laws are justiciable in the courts in order to ensure their adherence to the Constitution.

³Here the term 'public interests' could be defined in diverse manner. The definition which is simple, practical, and still adequately comprehensive could be as follows: Public Interests are the sum total of the broader and long-term interests of the society as a whole (such as social equity or environmental integrity), as well as the private interests of the disadvantaged and vulnerable sections of society.

The laws are considered to have highest force of law, as they have direct and express sanction from the highest-level 'political' body, viz., the legislature made of representatives of citizens. The concept of force of law establishes the comparative legal status of various policy instruments. Higher the force of the law, higher is the precedence in legal hierarchy.

Rules or Regulations: These are prepared and finalized by the governing agencies other than the legislative bodies, on the basis of the authority delegated to them by the legislative bodies through provisions in the law (or in some cases by the Constitution through constitutional provisions). These are sometimes placed before the legislative bodies for their explicit sanction or implicit ratification. The rules and regulations are expected to further articulate the 'normative frame' provided by the law, and hence they are supposed to be less broad in scope but more specific in content. These are considered to have lower force of law when compared with the law and are justiciable in the court of law within the framework of the relevant laws and the meta-instrument like the Constitution.

Criteria, Government Orders, Notifications, Government Decisions/ Resolutions, Executive Orders, Circulars: These are again created by the governing agencies other than the legislative bodies. Often, these are not placed before the legislature for ratification or information. However, some of these instruments are published in the official gazette of the government in order to required legitimacy. These instruments are expected to fill up the technical, financial, and administrative details—which mostly are non-normative and objective in nature—in the narrow and well-articulated normative frame given by rules and regulations. However, they, sometimes, have some normative components intricately intertwined with non-normative aspects.

Policy Documents: All the above mentioned instruments have differing level of force of law supporting them as well as commensurate legal obligation to implement and abide by them in spirit and in letter. However, there is another type of PIs called Policy Documents. Policy Documents are essentially declarations of the intentions of the government. Though the contents of such document are expected to guide functioning of the governing agencies, they often are not ratified by the legislative bodies, and hence there is no legal obligation to implement them. In a sense, these documents are not justiciable. Often, Policy Documents give rise to the process of preparing and enacting the laws.

Thus, in summary, the first three types of policy instruments have hierarchical relationship. The force of law underlying the instruments reduces from the first to third type. Similarly, while the normative content and substantive scope of instruments reduces from the first to third, the degree of specificity increases from the first to third. In the case of Policy Documents, while there is no force of law, the normative and substantive scope of the policy-document is often wider than the laws and ambiguity is greater. Based on the location of their origins and source of their mandate, first two types (i.e. laws, rules and regulations) could be called as the legislative PIs, while the third set could be called as administrative PIs.

3.4 Governing Agencies (GAs)

The agencies that are entrusted with the responsibility of discharging various governance functions and tasks in order to fulfil the GOs set for the sector (or the issue) are called Governing Agencies (GAs). For achieving the GOs, the GAs are expected to use and employ many PIs. Through some PIs (i.e. laws and rules), these GAs are given the mandate (that includes the responsibility, authority, legitimacy, and obligation of accountability) to discharge certain governance functions.

Any GA could be understood in terms of its structure and functioning. Its functioning could be seen as a result of two factors: (a) strengths and limitations of GAs, which are product of created by the structure of the GA, (b) the mandate given to it, and (c) the PIs it uses (or can use) while discharging its mandate.

The 'structure' of the GAs could be understood in terms of the following 'structural characteristics' or 'structural elements' of the GAs. It needs to be noted here that these structural characteristics are determined and shaped by the PIs that establish GAs, define their mandate, and articulate the elements.

Composition: The term 'composition' of a GA indicates the main characteristics of the individual functionaries occupying important offices within the GA. The relevant characteristics include their education, training, capabilities, experience, and professional background. These, in turn, determine their capacity to carry out the given functions.

Functions and Responsibilities: The scope and depth of the functioning of the GA is determined by the functions, responsibilities, and/or duties given to it as part of its mandate by the relevant defining policy instruments. These functions generally include a mix of generic functions and sectoral responsibilities as explained in the paragraphs discussing the Governance Grid.

Jurisdiction, Powers, Authority: These characteristics determine the overall ability of the GA to carry out the functions mandated to it as well as the efficiency and efficacy of the GA in conducting them. These three characteristics need to be commensurate with the mandated Functions and Responsibilities of the GA, so that the GA would have required legitimacy, ability and to discharge the functions.

Accountability Relationships and Mechanisms: The policy instruments are also expected to define the accountability related characteristics of the GA. These include accountability relationships within the GA across different levels of staff and officials. These also include the accountability relationships of the GA with other agencies and stakeholders. Further, the accountability relationships are accompanied by mechanisms for extracting accountability in all these relationships.

Resources and Capabilities: The PIs that establish and shape the GAs often provide some indication of the level of resources (human, financial, and other) available to the GA. The subsequent PIs (such as the budget documents and government decisions on special grants)

determine the extent of availability of resources and capabilities to GAs. Here, the capabilities of the GA refer to the number and capabilities of the officials, staff, consultants (which the GA is empowered to and afford to hire), and other associates that the GA can have access to in discharging the mandated functions.

Other Characteristics: The structural characteristics described above are directly defined (or not defined) by the policy instruments. However, there are other and equally important structural characteristics which are not directly defined by the policy instruments such as awareness, vision, and willingness of functionaries in the GA. While they are implicitly and partly influenced by the policy instruments, the other broader and external factors do have significant influences on these characteristics. Most important of these other factor influencing directly or indirectly the GAs are the norms and interests of functionaries in GAs.

These structural characteristics largely determine the functioning of the GAs. However, it needs to be acknowledged that the GAs do not function in vacuum; rather their functioning is highly influenced by the other actors. This issue is discussed later in the document in detail.

3.5 Interrelationship between Governance Instruments

The PIs and GAs, together, are called here as the main Governance Instruments (or GIs). While the GAs employ or use different PIs to carry out their functions, the structure and functioning of GAs are, in turn, defined and shaped by some PIs.

Following this, PIs could be roughly classified in three groups: (a) those PIs which only establish GAs or define mandate and/or their structure, (b) those PIs which are employed or used by the GAs in their functioning or discharging their functions an duties, and (c) those PIs which do both of the above. Here, a PI can be seen at the level of the policy instrument as a whole (such as a law or the Constitution) or at the provision level (a section in the law or an article in the Constitution).

There is a need to understand the relationship between the PIs and GAs. Prima facie, they appear to be cyclical. But, a close scrutiny reveals that the relation is spiral in nature. The Constitution (PI₁) gives rise to the legislature (GA₁). Then the legislature (GA₁) produces the Laws (PI₂). The laws (PI₂) set up new authorities and / or departments (GA₂). The departments and authorities (GA₂) prepare notifications, departmental circulars, and even regulations (PI₃). This spiral relationship between PIs and GAs make the P&G perspective and the framework more complicated.

3.6 Formal Rules of Other (Non-Governing) Agencies

Most agencies and organizations from the public sphere could be called GAs, as they are often created through PIs and/or given a mandate though PIs for some public cause and have role in governance of some issue or sector. However, there are many formal agencies and organizations in the private sphere that—as stakeholders—respond to or participate in efforts of GAs to govern the issues or sectors and interact with GAs.

The structure and functioning of such formal private agencies are often partly regulated by the PIs which are meant to guide and control the behaviour of these formal agencies. However, there is a lot of flexibility and latitude available to these agencies to set their own formal rules. These formal (often written) rules also shape their behaviour and that of their influence in the public sphere.

3.7 Norms

Apart from the formal public governing agencies and private formal agencies, many stakeholders participate in the governance processes. They do not have any formal rules of their own, though many GAs (through PIs) and private agencies (through their formal rules) wield influence on behaviour of these informal groups or individual stakeholders. But, equally, if not more, important are the informal, unwritten, and often unarticulated rules or norms that these groups and individuals accept and adhere to, while participating in governance processes. These informal norms, together, are often called by an umbrella term: 'the culture'. Norms wield immense influence especially on those individuals who often have very few formal rules of their own to guide their behaviour in public sphere.

These norms are often linked with the two other related concepts, viz., behavioural patterns and perceptions. The informal rules or norms are often rooted in perceptions of the respective stakeholders about the reality that surrounds the issues or sectors and about the other stakeholders. But, the relationship between the behavioural patterns, norms, and perceptions is not necessarily always a one-way, causal relationship. Many times, repeated behaviour might give rise to new norms, and a particular normative perspective can also engender new perceptions. In short, the relationship between behaviour patterns, norms, perceptions is cyclical and mutually reinforcing.

However, norms are not restricted only to individual stakeholders or small groups. Individuals working in the public or governing agencies as well as private formal agencies also have their own norms, behavioural patterns, and perceptions. Some of these norms, behavioural patterns, and perceptions are shared by a large number of members of the particular organization or agency (public or private); rather, the individuals adopt some of these norms, behaviours, and perceptions, largely because they become members of the organizations. These shared norms, perceptions, and behaviours become characteristics of the particular agencies. Thus, in addition to the formal rules (in the case of public or governing agencies, the PIs), the organizations also possess informal norms. The umbrella term that is used often for all these norms, perceptions, and behaviour patterns—which are shared by a large number of members of the organization—is the 'organizational culture'.

3.8 Interests

Apart from the norms, another factor that significantly influences behaviour of stakeholders, whether individuals or groups, are the interests or stakes they hold. In a simple and practical way, interests could be seen as linked with the benefits (in most cases,

economic and political benefits) which would accrue to the stakeholders or are expected by the stakeholder. Thus, interests could be seen as both (a) expectations and desires of obtaining benefits, or (b) the expected or desired benefits.

The stakeholders have a variety of interests around an issue on in a sector. They could be of different types (e.g. economic, financial, political, social or ideological). There is some kind of order of priority among these interests, where priority depends largely on—and varies across—the stakeholders. Similar to interests, the individuals and groups within GAs and formal private agencies also have their own interests. Moreover, individual stakeholders, the GAs or a formal private agency, as a whole would have its own organization-level interests.

3.9 Impact of Norms and Interests on GAs and PIs

As mentioned before, the GAs also have their own organizational culture—made up of unwritten norms, underlying perceptions, and behaviour patterns—and organization level interests. In addition, the functionaries who decide and act on behalf of the GA also have their own norms and interests—at the individual and group levels. All these three levels or types of norms and interests immensely influence the functioning of the GAs, their interpretations of their mandates and, their use of PIs in their functioning. This influence and impact on functioning of the GAs is carved through their actions to their outputs and outcomes of these output. One of the critical outputs of some GAs is the PIs which they create. As a result, the PIs are also influenced heavily by the all the three levels or types of norms and interests of the GAs that produce the PIs.

4. Governance Grid

To explain the concept of ‘Grid of Governance’, it is envisaged that the governance of the infrastructure sectors involves discharging various responsibilities, functions, and tasks that can be organized in a nested, hierarchical grid of three levels, each level representing one level of responsibility of governance. The three hierarchical levels, in the order of nesting are: (a) the broad and major Sectoral Responsibilities (or SRs), (b) Generic Functions (GFs), under each of these SRs, and (c) Core Tasks of Governance (CTs) to be performed in order to discharge each of the GFs. In other words, governance of infrastructure sector, at the first level, involves discharging the main sectoral responsibilities. Discharging each of these sectoral responsibilities require carrying out certain generic functions. Finally, carrying out each of the generic functions (for each of the sectoral responsibilities) involve conducting all the (three) core governance tasks.

4.1. Sectoral Responsibilities (SRs)

At the outset, governance of the infrastructure sector (or for that matter any sector) involves ensuring smooth conduct of some broad and major responsibilities in the sector. For example, in the case of the electricity sector, the major sectoral responsibilities (SRs)

are: Generation of Electricity, Transmission of Electricity and Distribution of Electricity. In the case of urban water sector, the SRs include: Sourcing of Water, Transport of Water, Treatment of Water, and Distribution of Water. Similarly, the sectoral responsibilities (or SRs) for the urban sewage sector taken here as an example, are:

- Collection of Sewage (from the points of generation)
- Conveyance of Sewage (to the treatment facility)
- Treatment of Sewage (as per the desired process and up to the desired standard)
- Disposal of Treated Sewage (in an appropriate manner)

Table 1: Basic Structure of the Governance Grid

	Sectoral Responsibility 1	Sectoral Responsibility 2	Sectoral Responsibility 3	Sectoral Responsibility 4
Generic Function 1				
Generic Function 2				
Generic Function 3				
Generic Function 4				

4.2. Generic Functions (GFs)

For successful discharge of each of these sectoral responsibilities, certain generic functions are to be carried out. Table 1 presents basic structure of the ‘governance grid’, comprising of GFs and SRs. The following discussion briefly presents these generic functions:

Survey, Planning, and Technical Designing: This includes Survey, which essentially means collection of the quantitative and qualitative data required for conducting the planning function and preparing technical designs of the facilities and equipment. The planning function includes decisions like appropriate site-selection and planning for ensuring smooth supply of inputs and transport of outputs. Technical design includes design of civil facilities as well as of mechanical and electrical equipment and systems. Technical designing should also include development of management systems. After finalizing technical designs, necessary approvals from designated authorities sanctioning technical designs should also be secured.

Administrative Approvals and Financing: This involves obtaining the necessary sanctions from all the administrative agencies that have jurisdictions pertaining to the particular generic function to be performed. This also involves all the activities that need to be conducted in order to ensure timely availability of finances, such as identifying sources of finance, negotiating and entering into contracts and agreements, and securing the actual fund-flow in timely manner.

Infrastructure Development: Once approvals and finances are available, development of infrastructure or actual establishment of facilities and equipment is the next step. This often

involves: Site-Preparation, Procurement of Material, Erection of Facilities, and Commissioning and Pilot-testing of equipment and facilities.

Operation, Maintenance, and Service-Provisioning: Once the equipment and facilities are ready, the operation and maintenance of the equipment and facilities are the main functions. There is need to emphasize on the sub-function of maintenance, considering the almost universal experience of utter neglect of maintenance of facilities and equipment in the infrastructure sector in the country. The 'operations' also includes provisioning of services or of resources generated by the facilities to customers. The function of 'Provisioning of Services', in turn, covers all the other related activities, including Metering of Consumption, Billing for Consumed Services, Recovery of the Bills, and Grievance Redressal.

The sub-function of 'Grievance Redressal', alike the sub-function of 'maintenance of facilities,' also needs a special mention. Though logically it is the sub-function of service provisioning, the function needs elaborate and careful treatment in developing the PIs and GAs. Here, the term 'Grievance' is restricted to complaints of individual consumers of services—about the quality and quantity of the service or about the metering, billing and recovery of bills. In other words, here we are considering, service-related grievances of consumers⁴. Redressal of service-related grievances requires separate and special treatment, because; (a) such grievances are of individual concern, (b) the number of such grievances could be large, (c) they often are recurring in nature, and (d) timely, effective, and efficient service related grievances often determine the acceptability and credibility of the governance in the eyes of large number of consumers. Further, redressal of consumer-grievances involves ensuring compliance of the service code, which is a normative document providing standards for service provisioning.

Monitoring and Evaluation: The last generic function is monitoring of performance along the parameters which are selected a priori. The data collected through monitoring activities is used to evaluate performance of the agencies, by comparing the actual performance with pre-determined standards or benchmarks.

The particular grouping or order of the generic functions (or GFs) presented here is illustrative; it is more at the conceptual level. The grouping and the order could be different in practice, depending on the nature or volume of work involved in each of the functions or depending on the existing policy, institutional arrangement, or governance system.

⁴There could be other types of grievances such as grievances of project affected people (or PAPs) against the design and implementation of rehabilitation and resettlement (R&R) package. Here, the grievances are of individual nature and the potential number of aggrieved individuals could be large. Hence, such situation also requires a separate mechanism for redressal of grievances. However, such a mechanism needs not to be permanent as in the case of the mechanism for redressal of consumer grievances.

4.3. The Core Governance Tasks (CTs)

At the very basic level, there are three core tasks involved in conducting any generic (governance) function, viz., (a) Laying normative foundation (i.e., preparing the Normative Frame) pertaining to the particular GF within the particular SR, (b) Execution (or Implementation) of Normative Frame, pertaining to the particular GF within the particular SR (c) Ensuring Compliance, i.e., compliance with the relevant and binding PIs while performing the first two tasks. Thus, while conducting each of these generic functions, the three core governance tasks will have to be carried out. Table 2 is the revised version of Table 1, in which these three core governance tasks (CTs) are integrated. Thus, Table 2 presents the full picture of the Governance Grid. The following paragraph discusses these three governance tasks in some details.

Normative Framing (NF)

This essentially means creating a Normative Frame or a frame of ‘normative’ or ‘value’ choices, within which a particular Generic Function in a particular Sectoral Responsibility is to be carried out. This CT includes three sub-tasks: (a) outlining ‘value contours’ for the particular GF (to chart out operational area or what is in and what is out of the purview of or ambit of ‘public governance’ pertaining to the GF), (b) stipulation of specific governance objectives to be achieved through conduct of the particular GF, (c) providing some additional guidelines—optional or mandatory — or standards to be followed during the process of execution or implementation of the GF. These guidelines may sometimes include non-normative elements⁵.

This is called ‘Normative’ because all these sub-tasks involve making critical decisions that, in turn, are shaped by ‘subjective’ choices that are guided or determined by the ‘societal values’ or ‘norms of society’. These values or norms of the society (as a whole), pertaining to the particular GF would then determine what should be achieved through Execution of the particular GF, and in what manner. Therefore, these decisions are called normative decisions. The norms also provide guidelines for ensuring compliance in terms of benchmark or standards against which the performance (i.e., output, outcome, or even the process of conduct) of the concerned GA in the case of the particular GF is to be assessed.

To elaborate further, the society’s ‘values’ would, for example, decide which section of society would receive benefits and which section would pay costs involved. They would also decide the quantum and timing of share of costs and benefits that would accrue to different sections of society. Because such decisions form the core of ‘politics’ of the society, these decisions are also called as ‘political’ decisions. Further, these decisions are expected to be based on ‘value’ choices of society as a whole, the task of preparing Normative Frame

⁵ The boundary line between normative and non-normative elements, in practice is often blurred. In many cases, apparently technical or administrative elements are based on implicit normative choices. So use of the term ‘normative’ here is made with this caution in mind.

should be handled by the authorities or agencies that have clear and ‘expressed’ mandate from society (or polity) to make such decisions on behalf of the society.

A good example in this case is enactment of a law by the elected legislature. The law would contain provisions that would provide the Normative Frame for those GFs under the particular SRs in the sector, which are covered by the law. The institutions or agencies which obtain such ‘political’ mandate through the electoral process have authority to make such decisions on behalf of society. In short, the core governance task of ‘Normative Framing’ involves making subjective choices based on societal values, and hence, it needs to be performed by GAs that have ‘political’ mandate from society. The task of ‘Normative Framing’ can be seen as laying ‘normative foundation’ for the two subsequent CTs in the entire process of governance.

The process of ‘Normative Framing’ often takes place in stages, producing a hierarchical range of outputs in the form of different PIs with varying force of law. The source of all policy (legal and administrative) instruments that provide ‘Normative Framing’ in India is the Constitution of India. The Constitution provides basic Normative Frame and also is the original source of legitimacy—required to make normative decisions—for all GAs. The Constitution devolves the duty and required legitimacy to legislatures to enact laws which translate or adapt the broader values in the Constitution to the situation in the concerned sector, with more specifications. The legislature then devolve the duty and required legitimacy to other GAs to make rules, regulations and other instruments which further elaborate the normative frame provided in the law, along with some non-normative guidelines. In other words, while the Constitution and the law are broad in scope and ambiguous, the rules, regulations, and other instruments are expected to be narrow in scope but specific.

In sum, the Normative Frame for any GF (within any SR) is the frame provided by all the relevant provisions in the PIs (right from the Constitution) that have implications for the concerned GF. The GF has to be executed in this frame. Even the compliance of execution function is to be checked against this frame.

Table 2: Grid of Governance for Infrastructure Sectors
 [Matter in the brackets gives details for the urban sewage sector]

	SR 1 (Collection of Sewage)	SR 2 (Conveyance of Sewage)	SR 3 (Treatment of Sewage)	SR 4 (Disposal of Sewage)
GF 1 : (Survey, Planning, & Technical Design)	Normative Framing	Normative Framing	Normative Framing	Normative Framing
	GF Execution	GF Execution	GF Execution	GF Execution
	Compliance-Ensuring	Compliance-Ensuring	Compliance-Ensuring	Compliance-Ensuring
GF 2: (Financing & Administrative Approvals)	Normative Framing	Normative Framing	Normative Framing	Normative Framing
	GF Execution	GF Execution	GF Execution	GF Execution
	Compliance-Ensuring	Compliance-Ensuring	Compliance-Ensuring	Compliance-Ensuring

Table continued to next page

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	SR 1 (Collection of Sewage)	SR 2 (Conveyance of Sewage)	SR 3 (Treatment of Sewage)	SR 4 (Disposal of Sewage)
GF 3: (Infrastructure Development)	Normative Framing	Normative Framing	Normative Framing	Normative Framing
	GF Execution	GF Execution	GF Execution	GF Execution
	Compliance- Ensuring	Compliance-Ensuring	Compliance- Ensuring	Compliance- Ensuring
GF 4: (Operation, Maintenance, & Service Provision)	Normative Framing	Normative Framing	Normative Framing	Normative Framing
	GF Execution	GF Execution	GF Execution	GF Execution
	Compliance- Ensuring	Compliance-Ensuring	Compliance- Ensuring	Compliance- Ensuring
GF 5: (Monitoring and Evaluation)	Normative Framing	Normative Framing	Normative Framing	Normative Framing
	GF Execution	GF Execution	GF Execution	GF Execution
	Compliance- Ensuring	Compliance-Ensuring	Compliance- Ensuring	Compliance- Ensuring

4.4. Execution of Generic Function

This core governance task (or CT) involves every activity that needs to be conducted in order to translate the Normative Frame into achievement the governance objectives. The ‘Governance Grid’ presented in Table 2 explains this point further. Once the Normative Frame is prepared for execution of every GF of every SR, then the next step is to execute these GFs within the Normative Frame. These GFs would be executed by GAs which are mandated by the PIs to perform the particular GF. The structure and functioning of GA would be defined by the PI so that the GF would be performed in efficient and effective manner. Execution of task would include two main groups of sub-tasks: (a) making Non-Normative Decisions (within the given Normative Frame), and (b) Implementing both types of the decisions.

The first group of sub-tasks would, involve preparing a variety of policy instruments that are primarily non-normative and technical, or administrative in nature. These would, for example, include preparation and promulgation of various PIs such as criteria, notifications, and circulars. The second group of sub-task would, for example, include setting-up new agencies or restructuring, re-equipping the existing ones, or conducting training programs.

It needs to be clarified here that the neat distinction between normative and non-normative decisions and their conduct is somewhat unrealistic and difficult to achieve in practice. So, even during the task of execution of GF, the ‘executive’ agencies in charge of this tasks have to make many normative decisions—though of less importance and with impact that are less significant.

4.5. Compliance Ensuring (CE)

This essentially means ensuring that each of the decision and action undertaken during discharge of the first two tasks is in adherence to the relevant PIs (i.e., law, rule, regulation, or government order) which is applicable and binding on the concerned functionary and

agency, while making the particular decisions as taking the particular action. This is primarily aimed at ensuring and extracting accountability—towards the members of society—of the functionaries in the governing agencies who have been given the mandate—direct or indirect—and powers to act on behalf of the society.

This task could be seen as divided in three sub-tasks: (a) setting the benchmarks/ standards for the parameters of performance to be monitored⁶, (b) monitoring performance on the relevant (for which the standards are set) parameters and comparing the performance with the standards, and (c) enforcing compliance with the standards. The third sub-task primarily involves penalizing the actors who default on compliance.

Thus, the Governance Grid depicted in Table 2 is based on the three concepts of Sectoral Responsibilities, Generic Functions, and Core Governance Tasks. The governance of infrastructure sector like the urban sewage sector can be viewed and analyzed using this governance grid.

5. The Governance Process: Limitations and Failure

5.1. The Ideal type of Process of Governance

The governance process is, ideally, seen as a conscious attempt by GAs to simultaneously achieve both types of governance objectives (or GOs). GAs carry out core governance tasks mandated to them in order to achieve these two sets of governance objectives. Ideally, the separate GAs are structured to carry out separate CTs. Thus, there are GAs that carry out only the task of Normative Framing for all GFs in all SRs. In other words, the legislature enacts a law that covers all the relevant SFs & GFs. Similarly, the ministry preparing the rules for a law covers all the SRs and GFs covered by the law. The GAs, carrying out ‘Execution’ tasks are often organized as per the SRs and/or GFs. Whereas the GAs carry out the task of ‘compliance Regulation’ are organized as per the capabilities. For example, the Office Account General looks into accounts of all the GFs of all the agencies, while technical audit will be done by technically competent agency like NEERI or IT. Agencies like CAG, IRAs often possess multiple capacities. This arrangement of work in GAs has evolved through a long history.

In discharging their mandate, the GAs employ PIs to influence thinking and behaviour of certain targeted stakeholders in the sector, in order to fulfil the governance objectives. Various stakeholders, including other GAs, respond to these efforts of GAs, especially to their use of PIs. These responses are expected to help and facilitate efforts by GAs to achieve governance objectives. Thus, both the instruments of governance (GIs), i.e., the PIs and GAs, together, are expected to work in unison to achieve governance objectives, while

⁶The sub-task of standard setting, when it does not involve normative or value choice, and which essentially pertain to non-normative matter could be handled by an agency which has expertise in the concerned non-normative matter. However, when the standard setting involves significant normative component, then it should be handled by a ‘politically competent’ GA.

the other stakeholders are expected to respond 'positively' and work in alignment of the efforts of GAs made through employing of PIs to achieve the governance objective.

5.2. Governance Process in Practice

However, in practice, this ideal process of governance often does not work as narrated in the previous paragraphs. As a result, many deficiencies (limitations and failures) in performance of the GAs are evident in reality. In other words, the GAs, in many instances, fail to realize or achieve the governance objectives placed before them. Rather, in some situations, they end up creating many unintended adverse effects or problems. This failure in governance or failure of GAs to perform efficiently and effectively, and hence, their failure to achieve GOs is postulated here as the result of the following main causes:

1. Different types of lacunas in the structural characteristics or structural elements of the GAs involved
2. Different types of lacunas in various policy instruments (PIs) that are available to or used or employed by the GAs during their functioning, in order to discharge its mandate

The following paragraphs discuss three sets of lacuna one by one:

5.3. Lacuna in the Structural Elements of GAs

The lacunas in the structure of GAs need to be identified in terms of lacunas in different structural elements or characteristics. They, then, can be traced to the PIs defining the particular structural element of the GAs. As we have seen before, there are five types of elements or characteristics of the structure of the GAs. The following discussion explains different type of lacuna in the structural elements of GAs.

Vagueness or Ambiguity: One type of structural lacunas in GAs emerges from the vagueness/ambiguities (i.e., lack of specificity and elaboration) in articulation of any of the elements itself. This is often is the result of vagueness or ambiguity in the concerned PI defining the problematic element. The vagueness or ambiguity in the structural element creates an opportunity or latitude for the functionary in-charge to use its own discretion, while interpreting the provisions. This in turn, provides an opportunity to the functionary for adapting the interpretation of the element to its own taste, interest, and convenience. Such a convenient interpretation is often at odds with the original interpretation assumed at the time of articulating the PI. This leads to performance of GA that is divergent from the expected performance. Also, this often leads to multiple interpretations and confusion, resulting in non-performance or conflict and even litigation.

Inadequacies: The second type of the structural lacunas in GAs emerges from the inadequacies in the characteristics or elements of structure of the GAs. The provisions defining the concerned problematic characteristic, even if a specific could provide for limited authority, or jurisdiction, or a certain function might be missing in the provision. This could also result in non-performance or conflict.

Inconsistencies: The third type of structural lacunas emerges from the inconsistencies across the five elements or characteristics. For example, the defining PIs could create a GA that does not have jurisdiction, authority, or resources that are commensurate or consistent with the functions and responsibilities entrusted to the GA. These could be attributed to the problem with provisions in the PIs that define the inconsistent elements. Such inconsistencies also lead to inefficiencies and ineffectiveness or conflict.

In short, the lacuna in the structural elements of the GAs could be traced to the PIs that define these elements.

5.4. Lacunas in the Policy Instruments

Often, PIs are found to fail or to be inadequate as instruments for the GAs to achieve or fulfil the goals of governance. Alternatively, as demonstrated in the previous section, the structural lacunas in GAs are created due to lacunas in the PIs that define these structural elements of the GAs. In such situations, the failure or limitations of PIs could be traced to the following types of lacunas in the PIs.

Gaps: These refer to complete failure on the part of the concerned PI to take cognizance of certain aspect of the GFs, CTs, or SRs. This failure results in a sort of vacuum or gap in governance as far as the particular aspect is concerned. Such vacuum either leads to complete neglect of the particular aspect or leads to multiple interpretations—as a result of efforts by the functionaries to fill up the gap in an ad-hoc manner. This, in turn, leads to confusion, conflict, and litigation, all of which are deleterious for governance.

Overlap: This situation is exactly opposite to the previous situation. Here, the two provisions in one or different PIs deal with the same aspect of the GF or SRs. Such overlap or multiplicity also leads to similar harmful effects on governance, especially if there is some discrepancy in the articulation or interpretation of the two overlapping PIs.

Inconsistencies: In this situation, two provisions in the single or different PIs are not overlapping but still lead to not only different but also mutually inconsistent interpretations of the same aspect of GF or SR, or they lead to different and inconsistent answers/paths to the same issue. Such inconsistency also creates similar deleterious effects on governance.

Contradictions: In some situations, the two provisions (from the same or different PIs) not only give inconsistent solutions or directions, but they provide exactly opposite answers. This is also a very harmful situation.

5.5. Different type of Lacuna in Functioning of GAs

There could be situations in which one cannot trace the failure of GAs to either of the two abovementioned problems, i.e., lacunas in the structure of GAs (a) lacunas in the PIs to be used by GAs to perform their functions. In such situation when the GA is not able to perform despite having appropriate structure and PIs to use, its failure to perform could be traced to the following two factors. First, the failure lies within the GA, which is not able to perform

due to internal contradictions. Second, alternatively, the problem lies outside the GAs or PI if used and with the other stakeholders whose behaviours and thinking the GA attempting to guide using the PIs. These internal and external problems are explained using the concept of misalignments.

Misalignments

Interests and (informal) norms are expected to influence the governance process in significant manner. The interests and / or norms of a stakeholder—which are internal to the stakeholders—guide and prompt the stakeholder to think and / or act in a particular manner and in a particular direction in relation to a particular aspect of the issue or of the sector. At the same time, from outside, the GIs attempt to guide the thinking and behaviour of the stakeholder in a particular direction, in relation with the same aspect of the issue or a sector. This is attempted in order to ensure that the thinking and actions of the targeted stakeholder are conducive to achievement of governance objectives. GIs make such attempts by providing certain incentives or disincentives to the targeted stakeholder through a variety policy instruments. If these two directions are not aligned, then there is tussle and tension between the two sets of forces pushing the stakeholder in the two contradictory directions.

The there is a third set of actors, the other stakeholder or non stake-holding actors that provide some pressures and/or enticements to the targeted stakeholder in a particular direction; when it comes to the concerned issues or sector. These third party forces acting on the stakeholder targeted by GA could be intentional or non-intentional, implicit or explicit, benevolent or malevolent, bonafied or malafied; but often these forces play crucial role in determining the behaviour of the targeted stakeholder. These forces again work through different incentives/disincentives which could be tangible or intangible.

In such situation, the actual behaviour of the stakeholder depends on how the stakeholder responds to these three sets of forces: (a) incentives and disincentives provided through policy instruments, (b) internal compulsions—guiding the thinking and/actions—created by the ‘misaligned’ norms and/or interests, and (c) forces exerted by the third party or the other actors. If the force of the internal compulsion and/or the force of the third party actors overwhelms the motivation provided by policy incentives or disincentive, then the resultant thinking and / or behaviour of the stakeholder proves divergent if not counter-productive to the efforts of the GAs and to the governance objectives they want to achieve. Such behaviour results in some distortion or perversion in the governance process, which create deficiencies in performance of governing agencies, harming the efforts to achieve governance objectives.

Thus the misaligned behaviour of the stakeholder targeted by GAs create problems. This misaligned behaviour could be rooted in ‘misaligned’ norms and/or interests of the stakeholders itself can be called as secondary misalignment. This could also be simultaneously rooted in the misaligned influence or incentives offered by the third party

actor. This can be called as tertiary misalignment. Both types of misalignments create pervasive or distortion in the governance process.

Such distortions or perversions require efforts or measures to convince or motivate the concerned stakeholder to realign its 'misaligned' thinking or behaviour and contribute 'positively' to the efforts of GAs to achieve governance objectives.

In case of tertiary misalignments, created due to influence of third party actors, one approach is to employ measures to nullify these influences by focusing on the influences themselves or on the third party actors. This is especially, true in case of pressures or perceived threats from the third party actors, where the stakeholder would need protection. Alternatively efforts can be aimed at creating strong incentives to wean away the targeted stakeholder from the attractions/enticements provided by third party actors.

In the case of misaligned norms or perceptions of the stakeholder itself (i.e. secondary misalignment), these measures for realignment could, for example, come in the form of effort to create awareness aimed at changing or modifying the norms or perceptions influencing the behavioural pattern of the stakeholder.

These measures might attempt to incentivize realignment of the behaviour or to disincentives the counter-productive behaviour. The existing PIs could be modified to include, accommodate, or reflect these measures or new PIs could be designed for this purpose. However, the efforts and incentives should be adequately strong to result in the change or modification in the 'misaligned' norms and perceptions, or behavioural pattern, which often are hard to change.

Similarly, in the case of misaligned interests of the stakeholder, some incentives or disincentives—adequately strong—are required to produce realignment of interests and behaviour supportive of the policy objectives. Here, again, it needs to be noted that one's own interests are powerful drivers and to dissuade the stakeholder to behave against the interests requires really strong disincentives or incentives. Considering this, in the case of dominant stakeholders, the penalizing disincentives, in all probability, will not work, as the stakeholders would resist or attempt to dodge the disincentive, creating new sets of problems. At the same time, the positive incentives will have to provide significant benefits to dominant stakeholders in order to counter the lure of misaligned interests. However, such significant benefits might defeat the very governance objectives, especially those with the equity and sustainability at the heart. This situation leads to two options: (a) adjust the objectives and policies so that the misalignment with the interests of dominant stakeholders will be minimal or (b) working on 'norms' on 'perceptions' of the dominant stakeholders so that they will see the need to give up their misalignment interests.

Primary Misalignment

This leaves us with a situation wherein there is failure in governance but there is no problem with the PIs that define the GAs and that the GIs can use; neither is there problem of

secondary or tertiary misalignment. As mentioned before, in this case, the problem lies within the GA.

The GA is composed different types of functionaries including political appointees, permanent staff, contracted staff, and hired consultants. These functionaries act as individuals and even as interests groups organized along different shared interests and attitudes/values. Thus individual functionary has norms and interests at individual level. Various groups have norms and interest at individual level. Various groups have norms and interests at the group level. Finally the organization itself has its own set of interests and norms.

In addition to the PI that define and shape GAs structure and functioning, these norms and interests openly at the three levels-individual, group, and organization-do create incentives for the functionaries to think and act in a particular direction. If this direction is not aligned with the direction defined by the PIs, then there is misalignment, which is within the GA. This is called as the primary misalignment. Efforts are needed in the forms of incentives and disincentives operating at individual or group, and organizational level to realign the norms and create misaligned interests within the GAs. The incentives could be diverse in the form of economic or behavioural incentives or they could be disincentives in the form of penalties or punishment.

Roots of the Lacunas in the PIs

The failure or limitations in the PIs could be further analysed to trace their roots in the faulty design of the PIs. Considering the fact that PIs are created by the GAs, the lacunas in the PIs or the faults in their designs which could be traced to the following two factors:

- (a) The first factor could be the misalignments between the GOs on one hand, and the norms and interests within the GA (operating at the three levels, viz., organizational, group-level, and individual). This type of misalignments described here could be called as 'Internal Misalignments' as they are within the governance system.
- (b) The second factor could be deficiencies in the level of preparedness of the GAs (that produced or articulated the particular PI) that is required to produce an efficient and effective PI. The preparedness, here, could be seen in terms of the five attributes: Awareness, Vision, Capability, Resources, and Willingness.

The Policy and Governance Perspective

The Policy and Governance (P&G) Perspective could be presented now using the concepts and terms explained in the previous sections.

The perspective essentially argues that the problems of performance in different sectors and issues are often rooted in the deficiencies (failures and limitations) in the performance of the governing agencies responsible for achievement of given governance objectives.

These deficiencies (failures and limitations) in the performance of the GAs are, in turn, rooted in the five core maladies presented in box 2.

Box 2: Five Core Governance Maladies

Different types of lacunas in various policy instruments (PIs) that are used or employed by the GAs during their functioning (Gaps, Overlaps, Inconsistencies and Contradictions)

Different types of lacunas in the PIs that define the problematic structural characteristics or structural elements of GAs involved (Vagueness/Ambiguities, inadequacies, Inconsistencies)

Primary Misalignments: Misalignment (Internal) between the internal norms and / or interests of the GAs (at group, individual and organizational level) on one hand, and the Governance Objectives (GOs)

Secondary Misalignments: Misalignment between the efforts of GIs (using PIs) to achieve GOs on one hand, and the norms and/or interests of the targeted stakeholders (Individuals or Organizations)

Tertiary Misalignments: Misalignment between the efforts of GIs (using PIs) to achieve GOs one hand, and the pressures, threats or enticement exerted of stakeholders, by third-party actors

Many deficiencies or problems in the working of the GIs are often observed to be arising out of non-governance factors or aspects such as Technical, Economic, Financial, Managerial (TEFM) factors. However, on many occasions, on closer scrutiny, some of these T, E, F, and M problems are found as not essentially the TEFM problems but which are becoming problems because of: either (a) lacunas in the structural elements of GAs or (b) the PIs that are used or employed by GAs. In such situations, these two types of lacunas need to be integrated with the earlier list of the lacunas. However, it must be admitted that there would be many TEFM factors that are inherently, essentially, or purely technical, economic, financial, or managerial in their nature⁷.

Thus, apart from the factors that are essentially and inherently TEFM in nature, all deficiencies in the performance of GAs are rooted in the six types of core governance maladies identified before (presented in Box 2).

⁷ For example, factors like non-availability of desired technology on the shelf, extremely high requirement of financial resources, very high level of managerial capabilities that can be expected only from highly trained or motivated functionaries. These could be seen as results of governance failures or maladies in other sectors like 'Science and Technology Policy'.

It needs to be noted that there are some problems in the sector, which are TEFM in nature or even of policy and governance in nature, are created by the PIs or GAs from the other sectors. In that case, the solution lies in the policies and governance in the other sectors⁸.

The Policy and Governance Framework

Based on the P&G Perspective, a framework could be developed to analyze problem situations in different sectors or around problematic issues, in order to assess and determine the core governance maladies underlying the problems encountered. The framework is presented in this section in step-wise manner. The framework has two parallel streams of actions. Stream A is based on desk research. It involves textual analysis of all the policy instruments (i.e., it is based on secondary data) relevant for the conduct of Sectoral Responsibilities (SRs) and Generic Functions (or GFs) of all the SRs in the sector under study. Alternatively, the study could be restricted to one or more GFs or SRs.

Stream B begins with the real-life empirical data about the deficiencies (or failures) in the governance, more precisely in the performance of governing agencies (which can be seen as symptoms of governance failure). The work in the stream begins with collection of primary and secondary data about various performance-related problems in the sector. These are to be traced to various deficiencies in the Policy Instruments, Governance Agencies, and the Governance Process. Both the streams are explained in the subsequent paragraphs.

Stream A: Textual Analysis of Policy Instruments

Step 1: Preparation of the Governance Grid for the Sector

Preliminary information collected from the literature and through interviews of the experts and practitioners should be used to prepare the Governance Grid for the sector on the lines of Table 1.

Step 2: Data Collection

All the policy instruments need to be collected that pertain to the governance of the sectorial responsibilities and generic functions that are to be studied. These include: laws or acts, rules and regulations, government orders or resolutions or decisions, notifications, and policy documents.

Step 3: Organization of the Provisions from Different PIs

Organize various provisions and sections in different policy instruments as per their relevance for each of the cells in the Governance Grid for the sector. This will help bring the

⁸ For example, the attendance in the rural school may be affected by the combination of P & G factors from outside the education sector such as: (a) policies for economic development that force entrepreneurs (in order to ensure their survival) to cut down their labour costs drastically, and (b) failure of GAs in the social-security sector to curb child labour.

relevant provisions from different policy instrument, together, facilitating their study and comparison.

Step 4: Identity Different Types of Lacunas in the Policy Instruments

Study the provisions from different PIs to identify different types of the lacunas in the policy documents, such as Gaps, Overlaps, Inconsistencies, and Contradictions.

Step 5: Making Recommendations

Using the above analysis, prepare a list of recommendations for addressing the lacunae identified in the previous step. After going through all the identified lacunas individually, try to organizes the recommendations for amendments in the policy instrument in a coherent and systematic manner.

Stream B: Analysis of Deficiencies in Performance of Governing Agencies

Step 1: Preparation of the Governance Grid for the Sector

Preliminary information collected from the literature and through interviews of the experts and practitioners should be used to prepare the Governance Grid for the sector on the lines of Table 1. This step is similar to Step 1 in the Stream A.

Step 2: Preliminary Mapping and Analysis of the Governing Agencies

Using the data and information collected, preliminary mapping of the governing agencies entrusted with different sectoral responsibilities and different generic functions is to be conducted. This mapping should lead to better understanding of the history and current status of these agencies. These GAs then could be mapped using different techniques such as drawing an organogram and/ or mapping of the agencies on the governance grid made up for the sectoral responsibilities and generic functions. While the organogram would point out organizational gaps and gaps in the accountability relationship, the fitting GAs on the Governance Grid would help see the gaps or overlaps in organizational responsibilities.

Step 3: Documentation of Problems in the issue under the study

The next step will be to articulate and document in detail the various problems encountered in the sector or the issue under to be studied/analysed. There is a need to go beyond the anecdotal evidence and collect sound qualitative and quantitative data and information. However, anecdotal information is equally important, especially when it is difficult to obtain hard data.

Step 4: Building of Causal Tree Diagram of the Problems

These problems will then be analyzed to unravel underlying successive causal factors at deeper and deeper levels, by preparing the 'Causal Tree Diagram'. This causal analysis is to be conducted using information and data collected from primary and secondary sources.

Step 5: Classification of the Causal Factors

All the causal factors identified in the last layer of the causal tree diagram are to be first separated in the four main groups.

1. The causal factors that are clearly rooted in or related to deficiency in any of the policy instruments that are used by the GAs
2. The causal factors that are clearly rooted in or related to deficiency in any of the structural characteristics or structural elements of any of the governing agencies
3. The causal factors that are clearly rooted in or related to deficiency in the functioning of any of the governing agencies
4. The causal factors that at least prima-facie do not appear to be related to policy instruments or to governing agencies; and rather are related to technical, economic, financial, managerial, (i.e., TEFM) or any such aspect.

Step 6: Analysis of Causal Factors Traced to PIs

The causal factors from the first group clearly point out some deficiency or lacuna in the policy instrument either at the instrument level or at the provision level. Such deficiencies can be addressed by the following measures either at the instrument level or provision level: (a) appropriate changes or amendments in the concerned PI, (b) creation of new PI(s), and/ or (c) deletion or repealing of the unwanted PI(s). Appropriate recommendations for changes, modifications, additions, or deletions in the PIs need to be evolved and articulated.

However, while evolving the recommendations for modifying or changing the PIs, the two sources of deficiencies in PIs that are mentioned before need to be noted here. One source of the deficiencies in PI is the lack of preparedness of the GAs which created the PI. In this situation, the choice is between two options. One option is to give the ready-made solution in the form of changed or modified or an entirely new PI (instead of the suggestions for changes / modifications or creation of new PI). The other option is to work on the preparedness of the GA that is entrusted with the task of creating the particular PI and help it to modify or create a new PI required. This will be helpful in the long term.

The second source of deficiencies in the PIs the misalignment of the norms and interests of the GA producing the PI with the GOs themselves (primary misalignment). In this case, the above-mentioned two options do exist, but the challenges are more daunting. There is the danger that the suggestions for changes in PIs or for creating new PIs will never be addressed or acted upon seriously or effectively. Nor would there be willingness to respond to efforts to enhance preparedness.

Further, there are two problems with the strategy of giving the ready-made solution (in the form of articulation of modification or creation of PIs). First, there are chances that the GAs which are going to use the PIs have norms and interest similar to those of the GAs producing these PIs (Double, Primary Misalignment). In this situation, the ready-made PI will never be employed effectively. Second, the GA entrusted with the task of creating the PIs at that level will continue to produce problematic PIs in the future, as its capabilities remain at the lower level. The more sustainable solution in this situation is to work on the norms and interests of both the sets of the GIs, one preparing and the other using the PI.

Step 7: Analysis of Causal Factors Traced to Lacunas in the Structural Elements of GAs

The causal factors that are found to be rooted in the deficiencies or lacunas in the structural elements of the GAs (the second group) can be first analysed to see what type of lacuna in the structural elements is creating this causal factor. This will help clarify the situation further. Once the clear understanding of the lacuna in the structural elements of GAs is obtained, it can be traced to lacunas in the PIs which define the problematic structural element of the GA. The lacunas in the PIs then can be addressed by adopting the procedure explained in Step 6.

Step 8: Analysis of Causal Factors Related to TEFM Aspects

The causal factors from the above-mentioned fourth group are to be probed further and classified in the following two sub-groups.

The first sub-group will contain those TEFM factors that are inherently, essentially, or purely TEFM factors and no amount of modifications in the existing PIs or GAs from the sector under study can resolve these causal factors. In this situation, the technical design or the accepted benchmarks will have to be changed and, if necessary, even the governance objectives will have to be changed to accommodate this reality. The relevant changes in PIs and structural characteristics of GAs will have to be made, following these changes in governance objectives, technical design, or benchmarks. Appropriate recommendations for changes in relevant provisions in the concerned PIs or in the concerned structural elements of GAs will have to be evolved at this stage.

The second sub-group will contain those TEFM factors that do not fall into the first sub-group. These TEFM factors could, after in-depth scrutiny, be traced to certain deficiencies either in PIs or in GAs from the sector under study. Thus, these causal factors, though of TEFM in nature, are, at least partially, can be addressed by changes in the PIs and GAs from the sector under study. If these apparent TEFM factors could be traced to some deficiency in any of the PIs, then as we did for the first group, appropriate recommendations are to be evolved to change or amend the relevant provisions in the concerned PIs, with proper cautions mentioned in the Step 6. If the deficiency is found to be related or rooted in any of the structural element of any of the GAs, then these causal factors should be treated by following the procedure explained in Step 7. Coming to the final possibility, if the deficiency is traced to the lacunas in the functioning of the GAs, it needs to be addressed by following the procedure described in Step 9.

Step 9: Analysis of the Causal Factor related to Functioning of the GAs

The causal factors that are traced to the problems in the functioning of any of the governing agencies [i.e., in the third group mentioned in steps] could then be further divided in the following four sub-groups.

(a) Lacunas in the PIs guiding or shaping the functioning of the GAs

- (b) Primary Misalignment between the governance objectives, on one hand, and, the norms (along with behaviours and perceptions) and / or interests within the GAs (at the organizational, groups, and individual levels)
- (c) Secondary misalignment between the governance objectives, on one hand, and, the norms, and/or interests of the targeted stakeholders (individual or organizations)
- (d) Tertiary misalignment between the governance objectives of GAs (and PIs), on one hand, and, the pressures and enticements exerted by third party actors on the targeted stakeholders(individual or organizations)

Though we have taken into consideration the first sub-group earlier, it is possible that such problematic PIs are identified at this level of analysis. This is to be addressed following the procedure presented in Step 6.

Coming to the subsequent two groups, we essentially have to deal with the misaligned norms and interests of either GA functionaries or targeted stakeholders. To deal with the misaligned norms of the stakeholders or functionaries of GAs, it is necessary to employ measures for changing or modifying norms or perception or affect change in the behavioural patterns. This can be achieved through a category of measures often titled as 'behavioural measures' such as the 'naming and shaming' measures. Alternatively, measures can be employed to create awareness about the negative aspects of the old norms and positive aspects of the new or modified norms (in the form of awareness campaigns).

To deal with the misaligned interest, adequately strong incentives or disincentives would have to be created, which would nullify the internal compulsions created by the interests. In order to build the new incentives and disincentives, new PIs and GAs might need to be introduced or the existing PIS and / or GAs need to be modified. The necessary recommendations for such changes in PIs and GAs will have to be articulated.

To deal with the misaligning pressures/threats executed by the third-party actors on the stakeholders targeted by the GAs, appropriate PIs to be used to protect the targeted stakeholders from these third-party actors. These could be targeted to these threatening actors. In the case of misaligning enticements offended by the third party actors, similar efforts could be made to nullify the attraction of these enticements. Alternatively, new incentives could be offered to the stakeholders to wean away from these enticements.

It needs to be noted that, in the real-life circumstances, the norms and interests of the stakeholders act in a complex and intermingled way. Hence, the misaligned norms and interests of the particular stakeholder and the ways to address them need to be thought in an integrated manner.

Step 10: Organizing Policy Recommendations

All the changes in PIs to address the Lacunas in the PIs could be listed as Policy Recommendations. Further, in order to address the lacunas in GAs, some changes in structural elements of the GAs might be required. The required changes in PIs that define

these structural elements could then be added to the list of Policy Recommendations. Some PIs that are used by GAs in their functioning might also require some changes. These could also be added to the list of Policy Recommendations.

Addressing the misalignments require provision of some new incentives and disincentives in order to ensure realignment. Changes in the existing PIs or structuring of new PIs would be required to create these new incentives or disincentives. In some cases, the changes in existing PIs would be required to discontinue the current incentives that create or strengthen misalignments.

Similar to these changes in PIs, some changes might be required in existing GAs or there could be need to create new GAs. These changes in GAs would require changes in PIs that define the structural element of these GAs. Further, some of the norms and perceptions could be addressed by building awareness and inculcating new norms in stakeholder. These require special efforts and campaigns. The PIs and GAs required for such efforts could also be part of the Policy Recommendations.

The list of these policy recommendations could be organized along the existing PIs, GAs, or any other convenient manner.

Conclusion

The P & G Framework presented in this note, which is based on the P & G Perspective, could be used to analyze problems of performance on the ground, especially in the infrastructure and public services sector. This framework could also be used for other sectors, with certain adaptation.

In summary, the P & G Perspective views the problems in infrastructure and public services sectors as the outcome of the deficiencies in the functioning of governing agencies (GAs) that are entrusted with the responsibility of achieving governance objectives (GOs).

However, these efforts of GAs are often marred by the five types of core governance maladies (or CGMs) mentioned in Box 2. To address these CGMs, some changes in the PIs and GAs will have to be affected. In order to address the misalignments, some measures altering the current incentives and disincentives will have to be undertaken. This would require some modifications in existing or creation of new PIs or GAs. To deal with the misaligned norms, some behavioural measures for creating new values or vision will have to be undertaken. These measures will also require some changes in existing PIs or GAs or creation of new PIs or GAs.

To conclude, the perspective prompts an argument that until these five types of core governance maladies (CGMs) are addressed and corrected, the problems rooted in these maladies cannot be addressed or resolved. No amount of financial or knowledge inputs, capacity building, or infrastructure building will make much headway in changing the ground situation. In other words, the technical, financial, managerial 'fixes' will not be able to correct the core governance maladies mentioned above. What is required here is diligent and patient efforts to deal with the CGMs though the P & G approach elaborated above.

This needs to be considered while developing programs or projects for cleaning up Ganga in future.

At the same time, one caution needs to be mentioned here. The changes in PIs and GAs aimed at addressing the CGMs have their own limitations. The policy and governance (P & G) measures identified and evolved through the above-mentioned framework can work up to a certain extent. However, these Policy and Governance 'fixes' cannot correct all the P & G lacunas. The boundary or limits of the efficacy of P & G measures is defined as the 'political bottom-line'.

The 'political bottom-line' exists in every sector (or around any issue) and is defined by the existing balance of political and economic power between actors that are supporting the governance objectives (GOs) and actors who are against. If those who are for and supporting the GOs have overwhelming power, then there is no bottom-line or limitation for the P & G measures. If this is not the case, then the dominant stakeholders who are not for GOs will decide to what extent the P & G measures will be allowed to work effectively. This extent of efficacy of the P&G measures called here as the 'political bottom-line' will depend on to what extent these dominant stakeholders are ready to allow the measures to work against their interests (and / or norms).

The only way in this situation is to change the existing balance of political and economic powers. This can be affected by expanding the coalition supporting the GOs⁹. Alternatively, this could be achieved by political mobilization or political action by the stakeholders who are in favour of the GOs. Such political mobilization or action is beyond the purview of the P & G measures envisaged here.

However, even in such a situation, changes in Policy Instruments and Governing Agencies can make some contribution. Changes in PIs and GAs could be devised to increase opportunities for non-dominant stakeholders to intervene in governance processes in order to counter the dominant stakeholders working against the GOs. These changes in PIs and GAs should be aimed at creating new and effective mechanisms for transparency, accountability, and participation (or TAP) so that interventions by non-dominant stakeholders in governance processes would be effective and affordable. In order to ensure use of such mechanism, changes in PIs and GAs should also attempt to prepare the non-dominant interests¹⁰. Again, these changes would not prove as a panacea, by themselves, for the fundamental problem of adverse political-economy balance. Here is the crucial role for another element that might change the 'political bottom-line,'—viz., action by citizens and stakeholders.

⁹ This could be achieved even by making some changes in the GOs or in the existing coalition.

¹⁰ Preparedness, here, includes five elements: awareness, vision, resources, capabilities, and willingness (to act).