Preface

Policy formulation is a vital plank for policy makers in all domains of governance. The edifice provided for the formulated policy must be in consequential sequence to produce the outcomes in accord with the intents and contents of the policy. However, the complexities are manifold and so are the precise predictions pertaining to its being effective. The modern system of governance is based on extrapolating the accurate results of any policy, but the actualities are affected by multiple factors. It would be crucial for any policy maker to understand what these factors may lead to. The concept of Governometrics refers to the application of quantitative and statistical methods for ensuring the excellence in governmental performance. It entails pragmatism in the institutions of public governance to strategize policymaking with inferential exactitude through statistical application. It also provides a perspective plan to resolve simple and complex policy conundrums by studying the data patterns on every single dimension of policy. Its utility additionally lies in identification of variables, computing co-variability, finding out the policy regresses, conducting ratio analysis, etc., which can help the government in defining the most appropriate sub-domains where action is required. These sub-domains include specifics like sets and sub-sets of target groups, the need-based analysis, prioritizing the service areas on the basis of identified needs, and operability of plan. This precisely conceptualizes the application of statistical tools to interpret the governmental data for inferential point of view. The prime focus is to help the policy makers to utilize the large amount of data with statistical predictions that may help the future policy making. These facilitate drawing inferences regarding specific decisions by interpreting data patterns. It incorporates the empirical content to examine the relationship between government and public as the important stakeholders of governance with statistical logic. The quintessence of Governometrics is to quantify the impact of one set of variables on the other. The underpinning principle of Governometrical analysis is to manifest the causal or associational relationship between the variables based on the conditional expectations that help in the projective computation and analysis needed for effective governance. The policy’s meticulousness is the epicenter of good governance, a precept that per-
petuates economy, ethics, and effectiveness as the key sub-constructs of this design. This eventually subscribes to the policy paradigmatic fulcrum balancing the nuances of making scientific policy.

The fundamental objective of the book is to suggest the efficacy of this concept in understanding the policy intricacies to solve the conundrums that policy makers often find difficult to resolve. The obscured vision might lead to roadblocks in arriving at rational decision making. In the times when technological support can really provide enormous data to create a policy design that is flawless in the realm of digital governance, this concept further reinforces the process of accurate policy. This book discovers how the perceptions of conventional nature are getting metamorphosed into unconventional and scientific ways of analyzing the crucial dimensions of policy.

This book presents the conglomeration of various chapters within the ambience of the neologism evolved by Sangeeta and Pankaj. It represents the inimitable presentation of understanding the policy informatics from the perspective of a Governometrician who amalgamates the expertise of governance and statistician.

This book also captures kaleidoscopic viewpoints on various policy standpoints from different parts of the world. The linguistic beauty of various countries is maintained, which gives it a very special character of understanding the intricacies, complexities, and challenges from their perceptive realities. The chapters from India, Poland, Tanzania, and America are included to present widely acceptable policy stances. The entire collection is divided into three sections.

Section one, “Prologue: Introducing Governometrics and its Techniques,” focuses on the basic conceptual construct of this neologism. This section contains six chapters, each aiming at specific theoretical issue. It is high in normative content and therefore has cognitive value. This introduces the concept to the reader or user or researcher to understand the basic contents of the concept, thus preparing them to follow its basic structure before creating policy design for a particular domain.

Dr. Sangeeta Sharma candidly examines how Governometrics, which helps us in unfolding the complexities of policymaking and governance, can be applied both at primitive and advanced levels of application of quantitative and qualitative methods. The discourse only touches the primitive level application in the book chapter, “Evolving Verifiable Causal Mechanisms through Governometrics to Study Critical Policy Issues.”

Dr. Verma expounds the idea of applying factor analysis in his elucidation, “Application of Factor Analysis in Policy Decision.” He puts forth the idea that the factor analysis is a multivariate technique, which is used to reduce the large number of variables into a few underlying factors to explain the variability of the group characteristics. Through factor analysis, he proposes a test battery for assessing group characteristics in formulating public policy, which sets the agenda of any government.
Drs. Rodney Erakovich, Gerald Poppe, John F. Shampton, and Kalpana Pai advocate that the connection between civil society systems, transition to market economies, and the rational and ideological basis for public policy formulation are not easily validated. Yet, the need is to move beyond affected manipulation and frame the foundation on quantitative assessment to support policy decision making in their presentation, “Providing Rational and Normative Policy Evaluation with Hedonic Estimation in Developing and Emerging Market Economies.”

Dr. P. C. Gupta further explores the conceptual nuances in his exposition titled “Estimation of Agricultural Production.” He discusses how the statistical tool like ratio analysis and regression analysis may be quite helpful in estimating the future performance of agricultural outputs. The e-governance can enhance the reliability of its database for effectual policymaking.

Dr. D. K. Ghosh in his exposition, “A Statistical Modeling for Policy Making: A Role of Regression Analysis,” elucidates by constructing examples to compute the relationships between two or more variables that may be helpful to observe the dependency between efficiency, age, habits, and other similar kinds of predictors.

Dr. Pankaj Nagar, in his presentation, emphasizes the role of cluster analysis in policy development. His presentation is entitled “Cluster Analysis: A Statistical Approach for E-Governance for Better Policy Decisions.” The technique of cluster analysis is highly useful in addressing the problems related to managerial decision, psychological solution, and categorization of business organization on the basis of their performance for constructing separate cluster.

Section two, “Applied Governometrics: Case Studies,” collects case studies from different geographical locations to authenticate the application of this concept. The realities are more driven by contextual factors, but an effort has been made to present the data from the local jurisdiction; possibilities have been explored to visualize its operability in the larger platform. All chapters in this section are empirical in nature where results are interpreted on the basis of data from medium-sized samples and extrapolated to envisage the applicability of particular study in a larger context. Further, the references are also limited as empirical analysis is done in this section.

Dr. Manju Sharma and Dr. Sudhanashu Sharma have addressed the health issue by analyzing the data patterns about an important program implemented in Jaipur, in the chapter entitled “Policy Intervention of Janani Shishu Suraksha Karyakram in Jaipur City, Rajasthan.” This study was conducted on a medium-sized sample to measure the correlation between the variables.

Dr. Sabyasachi Nayak explores the importance of partnerships in management of the scarce water resources in the chapter, “Water Resource Management: Case Study of Pathrapadi,” which reiterates the positive social, economic, and environmental outcomes as a result of interventions that are scientific and participative in
nature. They examine the inter-correlation between various variables to understand the efficacy of the partnerships.

Drs. Mabebe Ntumva and Josephat Itika present a case study from the African continent that provides important insight to understand their perception through data presented and analysis by them. Their chapter, “Managing Human Resource Management through Empowerment Policy: Assessing Structural Perceptions at a Local Authority Level,” is an imminent exhibition of policy in the African milieu.

Dr. R. W. Kisusu, Dr. H. N. Macha, Dr. S. P. Manda, Dr. E. M. Magembe, and Dr. S. P. Nyaonge, in their discussion, “Policy Factors Influencing Reduction of HIV/AIDS Stigma in Tanzanian Local Government Authorities” reveal factors influencing reduction of the stigma associated with HIV/AIDS. They conclude that creating awareness and treatment policies can be instrumental in addressing the menace of HIV/AIDS’s social disharmony.

Dr. Anurag Kumar Srivastava, in his presentation, discusses the service quality mechanism at the local level. Amongst all structures, the local administrative level is the gateway for citizens to directly interact with the governmental machinery. In his chapter, “Applying Service Quality Metrics for E-Urban Governance: A Case Study of Lucknow Municipal Corporation,” the empirical data has been statistically analyzed to propose a module for enhancing service qualitatively. This study explores how e-initiatives can generate more data patterns that are essential constituents for policy of the improvisation of service delivery.

Drs. R. W. Kisusu, N. Kalimangasi, N. Macha, and L. Mzungu, in another interesting presentation illustrate Population Variables (PVs) affected by alcohol and suggested control measures in Tanzania. The chapter is titled “Effects of Alcohol Policy on Population Variables and Control Measures: A Case Study in Dodoma Municipal Council, Tanzania.” Therefore, to combat alcohol, the study recommends using legal measures and educating the masses on the effect of alcohol.

Section three, “Emerging Paradigms,” includes chapters on newer models, which may be put to test by the users. Since this is a neologism, it opens many vistas for evolving new paradigms in the field of governance. This section is philosophically and pragmatically oriented.

Dr. Parag Vyas explores the unorganized sector and suggests the mechanics of drawing a pragmatic policy in his chapter, “Pragmatism in Making Policies: Insights from the Domain of Gems and Jewelry.” His model presentation is inspired by anthropic principle. His proposed model provides a practical tool to objectively assess the diverse profile.

Dr. Lech W. Zacher highlights government’s accountability for more rational and effective functioning of authorities and societies. His chapter, “Reflections on Government’s Accountability in Complex Socio-Economic Realities (In the Post-Political Era),” reflects the government’s characteristics, and the present contexts are diverse and their responses to new challenges limited and differentiated.
Dr. Alka Sharma, in her exposition, “Formulating Policies for the Environmentally Sustainable Solution to Mitigate Corrosion,” creatively presents the policy paradigm on corrosion. It has been a big challenge ever since the discovery of metals. Like other natural calamities (earthquakes or severe weather disturbances), it has a huge economic and environmental impact on practically all facets of the world’s infrastructure.

Dr. Balbir Sihag paraphrases the Kautilyan writings from a refreshed outlook. He argues that Kautiliya, a 4\textsuperscript{th} century philosopher, has come close to suggesting the precision for the government to perform. The approach reflected in the philosophical anecdote was methodical and logic-based on the collection of necessary information.

Dr. Snigdha Sharma raises the issue of morality in her presentation, “Development Management: A Spiritual Approach.” She proposes that development without vital parameters of self-restraint and wisdom does not yield the desired outcome. Any effort of development has to be imbued with ethical content for securing the future.

Dr. Inderjeet Singh Sodhi emphasizes that with increasing demand for basic/citizen services over the Internet, it has become important to protect data and ensure efficient backup and data recovery. The chapter proposes the need for better and more effective policy and strategy for communication data and network security to make the working of government. The chapter is titled, “Policy Perspectives and Strategy for Communication Data and Network Security Projects and Tools: Issues and Challenges in India.”

The marathon task of justifying a neologism is attempted through this book. Three aspects that are interwoven include theoretical, operable, and prognostic are needed to comprehend various facets of application of statistics in the field of governance with the help of e-intervention. An unequivocal focus emerges, while the reader journeys through different chapters about various contours of policy process. Any academic endeavor is successful when it satisfies its readers with logical content but also leaves some scope for further exploration. Its accomplishment is also judged by the guideposts it leaves behind. We hope that this genuine effort will be appreciated by the readers who are looking forward to getting an answer for making a precise, pragmatic, and prognostic policy in any field of governance.

\textit{Sangeeta Sharma}  
\textit{University of Rajasthan, India}

\textit{Pankaj Nagar}  
\textit{University of Rajasthan, India}

\textit{Inderjeet Singh Sodhi}  
\textit{University of Dodoma, Tanzania}