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Nota di contenuto	Part I: Concepts, Methodology and Techniques -- 1: Introduction -- 2: Systems Thinking: System Dynamics -- 3: Causal Loop Diagrams -- 4: Stock Flow Diagrams -- 5: Parameter Estimation and Sensitivity Analysis -- 6: Tests for Confidence Building -- 7: Scenario Planning and Modelling -- Part II: Cases and applications -- 8: Modelling of boom and bust of cocoa production systems in Malaysia -- 9: Modeling of hilsafish (Tenulosa ilisha) population in Bangladesh -- 11: Modeling of supply chain of rice milling systems in Bangladesh -- 12: Modeling of solid waste management of Dhaka city in Bangladesh.
Sommario/riassunto	This book covers the broad spectrum of system dynamics methodologies for the modelling and simulation of complex systems: systems thinking, causal diagrams, systems structure of stock and flow

diagrams, parameter estimation and tests for confidence building in system dynamics models. It includes a comprehensive review of model validation and policy design and provides a practical presentation of system dynamics modelling. It also offers numerous worked-out examples and case studies in diverse fields using STELLA and VENSIM. The system dynamics methodologies presented here can be applied to nearly all areas of research and planning, and the simulations provided make the complicated issues more easily understandable. System Dynamics: Modelling and Simulation is an essential system dynamics and systems engineering textbook for undergraduate and graduate courses. It also offers an excellent reference guide for managers in industry and policy planners who wish to use modelling and simulation to manage complex systems more effectively, as well as researchers in the fields of modelling and simulation-based systems thinking.