

Towards Transaction Cost Regulation

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Institutioneller Wandel der Landwirtschaft und Ressourcennutzung

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Aim and Scope of the Series

„Nothing endures but change“. Heraclitus the Ephesian (ca. 535–475 BC)

Institutions, defined as “the rules of the game”, are a key factor to the sustainable development of societies. They structure not only the multitude of human-human interactions of modern societies, but also most of the human-nature interactions. Poverty, famine, civil war, degradation of natural resources and even the collapse of ecosystems and societies often have institutional causes, likewise social and economic prosperity, sustainable use of resources and the resilience of socio-ecological systems. Agriculture, forestry and fisheries are those human activities where the interdependencies between human-human and human-nature interactions are perhaps most pronounced, and diverse institutions have been developed in history to govern them.

Social and ecological conditions are, however, ever changing, which continuously challenge the existing institutional structure at a given point in time. Those changes may be long-term, like population growth or climate change, medium-term, such as new technologies or changing price relations, or short-term, like floods or bankruptcies, but all of them pose the question whether the rules of the game need to be adapted. Failures to adapt timely and effectively may come at a high social cost. Institutional change, however, face a principal dilemma: on the one hand, institutions need to be stable to structure expectations and effectively influence human behaviors; on the other hand, they need to be adaptive to respond to the ever changing circumstance mentioned above. Understanding stability and change as well as developing adaptive institutions and effective, efficient and fair mechanisms of change are, therefore, of central importance for societies and an ongoing research challenge for social scientists.

If we want to improve the effectiveness, efficiency and adaptability of institutions, it stands to reason that we have to develop a good understanding of the causes, effects, processes and mechanism of stability and change. This is the aim of the series “Institutional Change in Agriculture and Natural Resources,” which attempts to answer the questions “How do processes and mechanism of institutional change actually work? What and who are the main determinants and actors driving, governing and influencing these processes? What are the economic, political, social and ecological consequences? How can adaptive institutions be designed and developed, and what governance structures are required to make them effective?” These are the questions at the heart of the series. The works published in this series seek to provide answers to these questions in different economic, social, political and historical contexts.

Volker Beckmann and Konrad Hagedorn

Ernst-Moritz-Arndt-Universität Greifswald und Humboldt-Universität zu Berlin

Focus of the *Governing Sustainability in India* subseries

Deep transformations of interconnected social, ecological and technical systems are taking place in many regions of the world, requiring complex processes of institutional change. In India, such processes of transformation are particularly intense. As in many other countries, the main drivers there can be found in population growth associated with demographic change and economic growth, closely interlinked with technological change. Especially in Indian society, this often occurs in contexts of high population density, extreme resource scarcity, weak carrying capacity of ecosystems and harmful pollution. The growing economy calls for reliable energy provision and increased energy efficiency while, at the same time, also needing to cope with climate change.

The ICAR subseries *Governing Sustainability in India* provides a collection of studies on such action situations in both rural and urban areas. Rural areas are increasingly affected by the above-mentioned problems, as people's livelihoods there often depend directly on well-functioning bio-physical systems. They suffer from soil erosion, declining water tables, loss of biodiversity, impacts of climate change and other crucial problems. In Indian cities meanwhile, particularly its emerging megacities, urbanization is proceeding rapidly, leading to increased demand on natural resources. Changing lifestyles and economic growth are increasing energy consumption and greenhouse gas emissions. Climate change impacts, worsened by such urban developments, are already causing extreme weather events such as floods, heat waves and droughts.

In such action situations, crafting institutions can be the key to achieving sustainable development. The young researchers presenting their analyses in this subseries have accepted this challenge and engaged in excellent, in-depth studies. A variety of related issues were analysed, including enhanced energy efficiency, power-generation efficiency, policies for renewable energy, political discourses for promoting biofuels, sustainable traffic solutions, sustainable food chains, localized food systems, food accessibility for the urban poor, electricity provision for irrigation, microcredit organisations to combat poverty, governance of water allocation, industrial water pollution abatement, collective action in watershed management, rehabilitation of displaced farmers, and local service delivery. We are very grateful to the authors for having employed well-developed analytical frameworks, enlightening theoretical approaches and multiple methods to contribute to our common knowledge base. They have been working together with many partners in India and elsewhere, to whom we also want to express our special gratitude.

Volker Beckmann and Konrad Hagedorn
Ernst-Moritz-Arndt-Universität Greifswald & Humboldt Universität zu Berlin

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Ranjan Kumar Ghosh

Table of Contents

Table of Contents	xi
List of Tables	ix
List of Figures	ix
1. Introduction and Problem	1
1.1 Genesis of Indian Power Sector Reforms.....	2
1.2 Persistent Problems.....	4
1.3 Thesis Structure: Key Questions and Leitmotif	8
2. The Institutions of Regulation: Governance over Incentives	11
2.1 Main Streams of Economic Research on Regulation.....	11
2.1.1 ‘Normative Analysis as a Positive Theory’: Dominant Paradigm	12
2.1.2 Special Interests	15
2.2 Brief History of Public Utility Regulation	19
2.2.1 The Theory of Natural Monopoly	19
2.2.2 Franchisee Model, Edison and John R. Commons.....	22
2.2.3 The ‘End of Natural Monopoly’ and Williamson’s Challenge	25
2.3 Regulatory Governance	27
2.3.1 Regulatory Commitment	29
2.3.2 Supply Side of Regulation.....	31
2.4 Summary.....	33
3. Methodology: Coase, Pragmatism and Micro-analytics	35
3.1 Introduction.....	35
3.2 Economic Methodology: A Brief Overview	37
3.3 Coasean Methodology and New Institutional Economics	39
3.3.1 Elements of Coase’s Methodology.....	39
3.3.2 Williamson’s Pragmatic Methodology.....	42
3.3.3 Abduction and Pragmatism	46
3.4 Qualitative, Case Study and Field Research.....	48
3.5 Conclusion	50

3.6	Summary of Empirical Methods Used	51
4.	The Problem of Private Investment: A Comparative Transaction Cost Analysis	53
4.1	Background and Problem	53
4.2	Nature of the Investment Problem.....	55
4.3	Why Economics of Governance?	58
4.4	The Cases of Private Investment in Andhra Pradesh and Gujarat	60
4.4.1	Investment in Andhra Pradesh: Supply and Contractual Hazards	61
4.4.2	Investment in Gujarat: Gas Supply and Minimizing Hazards	63
4.4.3	Summarizing the Two Cases	65
4.5	Coal Supply Risks and Vertical Integration	67
4.6	Transaction Cost Underpinnings and Lessons Learnt.....	69
4.7	Conclusions.....	71
	Appendix	74
5.	Transaction Specificity and Electricity Self-Generation: A Discrete Choice Analysis	77
5.1	Introduction.....	77
5.2	Background of Captive Power Production in India.....	79
5.3	The Make or Buy Dilemma?	80
5.3.1	Electricity Shortages and Self-generation	80
5.3.2	Investment Decision for Self-generation.....	82
5.3.3	Vertical Integration.....	84
5.4	Model, Data and Variables	86
5.4.1	Binary Choice (Probit) Model.....	86
5.4.2	Data.....	87
5.4.3	Variables	89
5.4.4	Results	91
5.4.5	Discussion.....	94
5.5	Conclusions.....	95
	Appendix	97

6. Thermal Efficiency and Regulatory Governance: A Stochastic Frontier Analysis	99
6.1 Introduction.....	99
6.2 Background.....	100
6.3 Literature Review	102
6.3.1 Efficiency of Indian Thermal Power Plants	102
6.3.2 Determinants of Technical Inefficiency	103
6.3.3 Role of Regulatory Governance	104
6.4 Empirical Strategy	107
6.4.1 Stochastic Frontier Formulation	107
6.4.2 Model, Data and Variables.....	108
6.4.2.1 Production Inputs and Output	108
6.4.2.2 Regulatory Governance Index.....	109
6.4.2.3 Translog Inefficiency Effects Model	112
6.5 Results.....	113
6.5.1 Estimated Model Parameters.....	113
6.5.2 Technical Efficiency Analysis.....	116
6.5.3 Discussion on Regulatory Determinants of Technical Inefficiency .	117
6.6 Conclusions.....	118
7. Regulatory Commitment Revisited.....	127
7.1 Introduction.....	127
7.2 Commitment, Public Information and Stakeholder Models.....	128
7.3 An Actor-Centered Game Based Illustration	132
7.3.1 The Model.....	134
7.4 The Case of Private Investment in Andhra Pradesh, India.....	139
7.4.1 The Role of Civil Society Actors and Regulatory Decision	141
7.5 Discussion: Institutions for Information Production	143
7.5.1 Long Run Equilibrium.....	143
7.5.2 Conditions for Long Run Equilibrium: Public Information.....	145
7.6 Conclusions.....	146

Appendix	147
8. Conclusions and the Way Forward	151
Synopsis of Research Findings	151
8.1 Summary	151
8.2 Policy Implications	154
8.3 Summum Bonum: Transaction Cost Regulation	155
8.4 Limitations and Future Scope	156
References	159
Annexure	173
A. Descriptive Statistics and Information on Primary Data	173
B. Captive Power Survey: Step-by-Step Explanation	175
C. Questionnaire: Industrial Survey	184
D. Descriptive Statistics of Thermal Power Plants and Efficiency	191