

Book review

THEESFELD, I. and F. PIRSCHER (2011):

Perspectives on Institutional Change – Water Management in Europe. Studies on the Agricultural and Food Sector in Central and Eastern Europe, Vol. 58.

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Sustainable water management has become an issue of major concern – in developing and developed countries. In a recent newspaper article on the success of economic reforms in India, it is said that agriculture remains laggard. This sector would be still crying out for reforms, one of them being institutional change, especially in water management (GULATI, 2011). Flourishing nations, RIJSBERMAN (2011) calls them hydro-civilizations, were able to successfully manage water for agriculture, especially when rainfall was not sufficient to grow high-yielding crops.

Obviously, food security is closely intertwined with water management but the speed at which water resources have been exploited in recent history, especially in the 20th century has been unprecedented. To some extent this was due to the general belief that any value coming out of water that is having zero value in nature is a contribution to society. Consequently, governments around the world were bearing the cost for investment in water infrastructure to provide often heavily subsidized irrigation water to farmers. The unanticipated consequences of this old approach to water resources development do not really need explicit mentioning, just think of the Aral Sea. But what are the challenges ahead?

Over the next 40 years, it is estimated that food demand will almost double, even with technological development to improve water efficiency, and that implies that the amount of water used to achieve global food security would also have to double. This is not a realistic option because (1) increasing land under cultivation cannot be easily achieved, (2) drawing more water from nature is difficult as the easiest accessible rivers and groundwater aquifers already have been tapped, (3) in fact there are many signs that too much water has already been taken. The only realistic option for water managers is to increase productivity of water already in use, or as RIJSBERMAN (2011) spells it out: produce more value per drop – for food,

for jobs, for health and for the environment. This productivity increase must maintain or even improve ecosystem services. However, silver bullets, such as high yielding varieties that did the trick during the ‘green revolution’ are not broadly available. Some solutions might be found in technological breakthroughs – albeit these might be capital intensive. Other solutions are not expensive, but require institutional change both in water management and in accountability to users. Both are tough to achieve.

It is this institutional context of water management that the volume “Perspectives on Institutional Change – Water Management in Europe”, edited by Theesfeld and Pirscher, explores. The two editors start with an overview entitled “Mapping Institutional Change”. Besides sketching all five contributions in the book, they provide an interesting framework for differentiating institutional change. They point out that all contributions follow the prevailing understanding of institutions, basically formal and informal rules that facilitate coordination. Obviously, water management regimes, as institutions in general, are not static but dynamic. Institutional change in the water sector may result from climate change, groundwater depletion and contamination, topical rural policies or demographic trends such as depopulation. To effectively address these issues, intentional and designed institutional change seems to be required. Yet, depending on the leading protagonists also evolutionary institutional change occurs.

The book comprises contributions with regard to intentional institutional change in the water sector (Albania, Portugal or Ukraine) as well as spontaneous institutional change (Germany). Subsequently, the editors continue to state that the case studies in the book contribute to answer two critical questions in a matrix like fashion. Under which circumstances is institutional change in Europe’s water sector (1.1) a spontaneous, evolutionary process and when (1.2) is it

a deliberate design through a political process? What are the reasons within the water sector that (2.1) lead to intended and (2.2) unintended outcomes? The editors point out that the simultaneous consideration of these theoretical aspects of institutional change (in Europe's water sector) is the specific contribution of the book.

Gawel and Bretschneider ask the question whether "Affordability [...] [is] an Institutional Obstacle to Water-Related Price Reforms"? They claim that until recently the main objective of intentional water price reforms was to attain full cost coverage of the environment-related services. Distributive aspects of the price reform were neglected. However, the lack of affordability for some population strata can impede the establishment of sustainable price reforms for all. Therefore, Gawel and Bretschneider argue that affordability as well as cost-covering pricing should be considered in political decision making. Nevertheless, the presently used indicator to measure affordability is misleading, which prompts them to propose an improved approach.

The Ukraine is presently intentionally decentralizing the urban waste water sector – and faces difficulties. In this context, Unnerstall and Hagemann deduct "Institutional Options for Modernization" when "Analyzing the Shortcomings of the Ukrainian Urban Waste Water Sector". The authors use the Theory of Federalism and the European Charter of Local Self-Government as conceptual framework for analyzing the key institutional factors affecting the urban waste water sector. They conclude that the local self-governance in Ukraine is lacking effectiveness, partly because the administrative units are too small to shoulder the task of modernizing the waste water sector. Unnerstall and Hagemann propose several intentional institutional solutions, but also point to the difficulties involved.

Röhring, Mass, Gailing and Gutermann theoretically analyze public goods and public interest with respect to gaining meaningful insights into regional development, specifically water infrastructure and cultural landscapes. Their contribution is entitled (and written in German) "Public Goods and Public Interest: Theoretical Reflections and Practical Relevance for Regional Development – The Examples of Water Infrastructures and Cultural Landscapes". Obviously, there is a constant institutional change in public interests, leading also to changes in the perceived necessity of adequate public goods. As regards the water sector, the four authors exemplify the importance of making a

distinction between water as a natural resource and the resource system (public infrastructure). They identify conflicts between using water efficiently, using less of it, and using the water infrastructure efficiently. The latter requires using the infrastructure to near-maximum capacity.

Thiel and Egerton explore the reform of water governance in Portugal subsequent to the implementation of the Water Framework Directive (WFD) by the European Commission. In their contribution, they explain "Top-Down Institutional Design" with regard to the "Introduction of River Basin Management in Portugal". The WFD organizes water management according to river basin districts; these mostly coincide with hydro-geographic boundaries. With regard to the Directive, the Commission recognizes differences in national legal and governance frameworks. Especially in federally organized countries, water management may fall at least partly under the competence of sub-national or regional authorities. In Portugal, the political decision makers opted for a radical restructuring of water governance. The governance role was shifted from administrative districts to hydro-geographic regions; water administration was intentionally changed and rescaled. By applying the theory of Distributional Instructional Change, the two authors explain the timing and content of the water administration reform.

In many policy fields, such as in the water sector, decentralization is advertised as remedy to inefficiency. Theesfeld and Schmidt analyze the often concealed negative side effects of decentralization in their Albanian case study on "Decentralization Failures in Post-Socialist Fishery Management". Recently, Albania intentionally transferred property rights from the central government to local resource users. With regard to Albania's Lake Ohrid fishing region, the two authors identify determinants for and effects of elite capture. Apparently, the de-facto informal rules as well as the top-down blueprint implementation of decentralization led to an unintended empowerment of already privileged locals.

By way of summary, the book combines five high-level case studies that are discussing intentional or evolutionary institutional change in the European water sector and subsequent intended and unintended effects of this institutional change. The case studies are given a theoretical framework within the editorial contribution of Theesfeld and Pirscher. As the contributions start from a relatively high level of understanding with regard to concepts used in the theory of

New Institutional Economics, the book may not be suitable for newcomers to the field. Nevertheless, it is an asset to all who want to learn more about natural resources management issues from an institutional change perspective. For this reason, scientists and practitioners interested in institutional issues of European water management, particularly with reference to the agricultural sector, may want to add this book to their personal library.

RIJSBERMAN, F. (2011): One liter = One calorie. A critical link that equals water scarcity. U.S. Department of State, Bureau of International Information Programs, Washington, D.C., USA (July 18, 2011). URL: http://iipdigital.usembassy.gov/st/english/publication/2011/07/201107_18113603yeldnabc0.2565206.html#axzz1T7IFEzPV (accessed July 25, 2011).

References

GULATI, A. (2011): Agriculture remains laggard as India celebrates two decades of economic reforms. In: The Economic Times, July 22, 2011. URL: http://articles.economictimes.indiatimes.com/2011-07-22/news/29803550_1_bt-cotton-agriculture-seeds (accessed July 25, 2011).

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