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### BOOK REVIEW

#### Finnish water services: Experiences in global perspective

by Tapio S. Katko, Finnish Water Utilities Association, 2016, 288 pp.  
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Great Turkish poet Necip Fazil Kısakurek summarized the importance of water in a unique way:

“Kâınatta ne varsa suda yaşadı önce;  
Üstümüzden su geçer doğunca ve ölünce”

“Whatever in the universe lived in water first;  
Water passes over us when we born and when we die”

In technical sense, water is essential for living beings (human and animals) to pursue their lives, for irrigation of agricultural areas, and for hydroelectric power. However, the sudden and heavy rainfall that we face as a result of global warming in recent years, is transforming life-giving water into life-taking water.

The increase in population, consumer habits and accordingly the consumption, natural resources, especially water resources, are rapidly decreasing and a significant part of water is being polluted before being used. Unfortunately, in many parts of the world, especially in Africa, people are unable to reach adequate and healthy water, and many people die related to the lack of adequate clean water.

Preservation of water resources, treatment of drinking water with appropriate methods, and the treatment of the consumed water before discharging to the receiving environment requires public awareness and certain technologies.

Water is essential for our lives as well as the air we breathe. Although most of the earth is covered with water, it is not always ready for human consumption. About 2.5 billion people live with insufficient clean water and 750 million people do not have access to safe water.

Non-clean water or inadequate water sources can cause people and animals to become ill for years and

even lead to the end of their lives. Furthermore, natural water cycle, starting from rain falling from the sky to water consumption by the end user requires a long time. Water service industries include public or private institutions that supply, transmit, process and refine water.

The book, “Finnish Water Services: The Global Perspective” written by Tapio S. Katko is 288 pages altogether. The book summarizes the history and development of water services and water regulations in Finland and in other countries. The book is well organized and divided into four parts including 19 chapters discussing technological, environmental, governance and social issues; a poetic epilogue and references. The expressed data and examples are very rich and interesting.

The first part, Water Problems, Solutions and Technology Development, consists of 9 chapters. These chapters expressed a detailed confirmation to the reader about the importance of water services in Finland and trends in international water policy from 1960s to 2020s. The discussed sections are about important milestones in the development of water services, expert networks, selection of water resources, efficiency of water usage, development of water treatment, status of old storage and distribution systems, and environmental protection and pollution control. Additionally, the various environmental, sociological and technological challenges that Finland and other countries need to provide their basic services successfully are discussed in this section. Part 1 constitutes the majority of the book (40%).

Operational Environment and Economics of Water Services constitutes the second part with two chapters. In this section, alternatives for the improvement of water services for both customers and citizens are described. Recommendations for

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effective water management to different water providers and their assistants are also given. The author offers practical advice to further increase the needs and wishes of the customers.

The third part "Institutional Development and Governance" consists of five chapters and discussed policies and laws, development of competencies, professional and voluntary cooperation, public and private sector cooperation, and changing international water arena. The development of competencies in Water Services chapter is examined in terms of education, research and development. There are several examples for water managers in this part.

The fourth part, "Societal Importance and Futures", focuses on socially-learned and future-oriented courses. Katko compares water service applications in different countries and expressed the lessons learned. The challenges of water and sanitation until 2030 are also examined by the author. In addition, it presents different reactions/opinions of seven international experts and academicians from developed and developing countries (Latin America, India, Japan, Kenya, Netherlands, Ukraine, USA-Colorado). Katko synthesizes the data from other departments by reviewing urban water resources in terms of political, economic, social, technological, environmental and legal aspects.

At the end of this part, a poetic epilogue called "Keep Services Rolling" is included. This creative epilogue contains the main points in the book. This section shows to what extent the author's interest in water services.

The handling of water issues in Finland may not be applicable for many other countries. Population is small (5.4 million) and surface area is large (304000

km<sup>2</sup>). Most importantly, Finland is very rich in ground and surface water sources (56000 lakes over 1 ha and 30 rivers over 100 km). But it is important to benefit from the solutions developed for Finland. The Finns share their experiences in water services and apply their knowledge/experience in different countries (Egypt, Ethiopia, Kenya, Nepal, Sri Lanka, Tanzania, Vietnam). In addition, Katko generalizes the local knowledge and makes it possible to attract the attention of readers from outside the Nordic countries. For this reason, Finnish Water Service book, written by Professor Tapio S. Katko, who has devoted his life to water issues; is attractive for anyone wishing to increase their knowledge about water services. Katko has not only presented the fascinating and legible history of the Water Services industry in Finland but also addressed many water issues facing other countries, including Finland. Water security, which is one of the important geopolitical issues of the 21st century, hence the water services sector will be important for everyone. In this respect, the introduction of this book with larger nations should be welcome.

This colorful volume written by Katko is very well illustrated with various photographs. Thus, reading the book becomes more enjoyable.

It is concluded that the future of water services is as dynamic as the past and that new challenges are constantly emerging. The industry is moving slowly as the planning horizon of water assets can exceed a century. This book, which addresses the past, present and future of Finnish Water Services, is a guidebook that offers multidisciplinary perspective that emphasizes a nation's expertise in water management.