
Preface

The third International Conference on Integrative Approaches towards Sustainability, titled *Sustainable Development, Knowledge Society and Smart Future Manufacturing Technologies* called “KNOWLEDGE” in short—was organised during 27–30 June 2012, in Jurmala, Latvia. It was among the early international attempts to contribute to the debate on how to link the “classical” issues of sustainable development and those about the development of a “knowledge society”, currently growing in importance at the EU level including starting up the Horizon 2020 research agenda.

In 1987, the United Nations World Commission on Environment and Development (WCED) also known as the Brundtland Commission published its report *Our Common Future*. It introduced the concept of sustainable development to the political agenda with an overall substantial impact on the way we perceive the world and how political systems globally redirect themselves, since the report was published. Its substantial and deeply transforming implementation, however, has still to a large extent, to be established. The report led up to the three United Nations Conferences on Sustainable Development, starting in 1992 with the Rio de Janeiro conference on Environment and Development (UNCED also known as *the Earth Summit*) followed by the Johannesburg World Summit on Sustainable Development (WSSD) in 2002 and the 2012 world Conference on Sustainable Development, also in Rio and called *Rio+20*. All these events have had a substantial content of knowledge development in the fields being central to the concept of sustainable development. In 1992, the focus was on the “environment”, in particular on climate and biodiversity. In Johannesburg, the focus of its “Plan of Implementation” was on research, education and technology. It led among other things to the 2005–2014 UN decade of Education for Sustainable Development. Finally at the 2012 Rio Summit, the focus was on the economy, in particular the so-called *Green Economy*, and the transition process to achieve a sustainable society was summarised in the document *The Future We Want*, the main conference report. It is in this context also worth mentioning that the Nobel Peace Prize was awarded in 2007 to the former US Vice-President Al Gore dealing with exactly these issues. Thus the Nobel Prize could also be regarded as a contemporary recognition of the importance of knowledge for world peace and sustainable development.

The key role of knowledge for development has a long background. Sociologist and management guru Peter Drucker identified knowledge (different from information) as a key economic resource in 1969, and in his 1993 short book entitled *Post-Capitalist Society*, he pointed at knowledge rather than capital, as a key resource for development. Despite the fact that the Internet was still in its pre-browser infancy in 1993, Drucker believed that the developed-world economies were entering a new *knowledge-based* era—a leap in civilisation as large as the one from the agrarian based to the industrial era.

This change was also recognised by the EU as it included the priority *Citizens and governance in a knowledge-based society* as a domain for research in the Sixth Framework Programme in 2002. A few years later, in 2005, the UNESCO-led Report *Towards Knowledge Societies* was published. The Report underlines the role a knowledge society will have to promote human rights and equity, and establishes the principles for forming an equitable knowledge society in which all people have equal, inclusive and universal access to knowledge.

Information and Communication Technologies (ICT) and Internet (World Wide Web) particularly have key roles to ensure that a knowledge society is functional. The speed at which data and analysis of data can be searched, produced and distributed has been dramatically increased. Data and the resulting knowledge are now available at the tip of our fingers in unforeseen quantities in all areas of science and social life. The role of universities, leaders and policymakers is to reduce the digital divide ensuring that everyone has access to the training and skills needed to access, use, manage and produce knowledge at any time actively.

It is obvious that this development is of great significance to our efforts to approach a sustainable society. Yet it is difficult to find any publications, documents or policy papers where the two concepts—knowledge society and sustainable development—are discussed, analysed and investigated together. A few recent policy documents from, e.g. the OECD points to this important crossover field. Nevertheless, a search on “Google” where both terms are used together gives only a few articles or editions of interest. During recent years, the UN University (UNU) has shown interest on this topic.

The present volume *Sustainable Development, Knowledge Society and Smart Future Manufacturing Technologies* is meant to contribute to an analysis of the role of knowledge society to achieve sustainability. It is based on the above-mentioned conference with the same name. It includes conference papers and articles from conference speakers as well as a few articles from invited authors.

The title of the book highlights sustainable development, knowledge society and smart future manufacturing technologies together, and will hopefully serve as inspiration for further efforts to understand how the interception between sustainable development and knowledge society issues could lead to a better future.

The content of the book is only a small and modest contribution to the interplay between sustainable development and knowledge society. It is the last one in a series of three complementary conference books.¹

The team of authors has a plan to upkeep the Forum *Sustainable Development and Knowledge Society* in Riga for the future.

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¹Integrative Approaches Towards Sustainability in the Baltic Sea Region, Ed.: W. Leal, A. Ūbelis, Peter Lang Europäischer Verlag der Wissenschaften 2004. 556 p.
Sustainable Development in the Baltic Sea Region and Beyond, Ed.: W. Leal, A. Ūbelis, D. Berziņa, Peter Lang Europäischer Verlag der Wissenschaften 2006. 700 p.

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