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# INTRODUCTION

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## WELCOME TO WJSTSD

We are pleased to present the first special issue of World Journal of Science, Technology and Sustainable Development (WJSTSD) after 6 years from its inauguration in 2004. WJSTSD is a multidisciplinary international refereed journal on issues that will be central to world sustainable development through efficient and effective technology transfer, the challenges these pose for developing countries, and the global framework for dealing with science and technology.

## SPECIAL ISSUE

The theme of this special issue of WJSTSD is "ICTs, Technological Change and Development in the Developing World". In its conceptualization it sought to give voice and visibility to the realities and experiences of the developing world. More particularly, this compilation showcases and analyses the special circumstances of developing countries endeavouring to escape the bowels of economic depression by embracing and employing ICTs.

This special issue of the journal is ambitious in its intent. The geographic breadth

stretches across the world with contributions representing the outcome of many comprehensive research programmes undertaken in Africa, Asia, Europe, Americas and the Middle East. The countries represented here have populations ranging from 165,000 to 10.6 million inhabitants. The plurality of issues interrogated reminds the reader of the complexity of the subject matter under investigation and the multifariousness of the concept development itself.

## CONTENTS OF SPECIAL ISSUE

In the first paper in the special issue, Rossitza Rousseva contends that despite the extensive studies on latecomer software development activities, the issue of technological capability has often been peripheral to the discourse. She argues, therefore, that any assessment of the development of latecomer software industries ought to investigate the technological capabilities which the latecomer companies have been able to accumulate. Her work endeavours to fill the gaps, by outlining the "specifics" in analyzing technological capabilities in latecomer software sectors, in particular.

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The shift from resource and manufacturing-based to a knowledge and information-based global economy has led to an array of new challenges and opportunities. Increasingly ICTs are perceived as effective tools in promoting knowledge creation and sharing. Michelle M.S. Phang and Soon-Yan Foong are particularly concerned about the specific impact of the paradigmatic shift in the global political economy (GPE) on the accounting profession in Malaysia. They argue that the accounting professionals in particular, are challenged to broaden their scope of knowledge and skills to remain competitive. However, the field does not lend itself to the ready embrace of ICTs especially in developing countries, as highlighted by the Malaysian example.

Rigobert's piece on E-ducation in St. Lucia highlights the difficulties confronting small island developing states (SIDS) as they endeavour to situate ICTs at the core of the education system. The example of St. Lucia is particularly telling, reflecting traditional impediments associated with small size and resource shortages, for example, but compounded by other socio-psychological, cultural and political issues that contribute to the risk aversion and technophobia that characterize that society. As St. Lucia seeks to diversify its economy away from agriculture to a service-based economy, it has become necessary to equip the next generation with the requisite e-skills to help propel that country into the e-age. The chapter highlights the socio-economic costs of the delay in the full incorporation of ICTs in the pedagogic process.

Similar to Rigobert's research, Williams E. Nwagwu investigates the information and learning needs of youth in Uzoagba rural community in southeastern Nigeria. In doing so Nwagwu used data collected from 220 and 250 male and female youth through Focus Group Discussion (FGD) and a questionnaire survey respectively. The

first category investigated includes those under 12 where education, health/HIV/AIDS and income dominate. Another is the group of those above 12 where the issues that dominate their needs are income/employment and education. Nwagwu's results show that youth want to remain healthy to develop their personal efficacy through education and then be usefully integrated into wider social and economic life. Meanwhile, they are concerned about how to participate in generating income to achieve this ultimate aim, and to assist their families and community.

The paper by Ramlan and Musa Ahmed assesses the impact of ICTs on Malaysia's aggregate output between 1965 and 2005. They argue that ICTs are directly related to aggregate output in Malaysia, with income per capita proving to be an important economic stimulant.

The piece by Stefanovic, Matijevic and Devedzic highlights the specific experience of Serbia with respect to ICTs and development. The specific challenges of the ICT sector in particular are highlighted. The authors conclude that Serbia continues to lag behind the developed countries due in large measure to inadequate financial resources being devoted to the ICT sector.

Polenakovik and Pinto focus on the utilization of ICTs with SMEs in particular. The concern is to raise the level of investment in that sector with a particular thrust towards R&D. Some of the recommendations include the establishment of science parks, and providing attractive tax incentives geared towards jump starting the SME sector.

## **CONCLUSION**

We hope that the outcome of this special issue will help to outline the major issues that frame the current state of the different

aspects of ICTs, *Technological Change and Development in the Developing World*, and contribute to a better understanding of the important role that ICTs can play in achieving sustainable development across the world. Of particular concern is the problem of the digital divide in Africa, which is but an additional variant of its socio economic challenges and warrants a greater and immediate response from the global community.

Finally, we would like to congratulate the authors for their valuable contributions and it is hoped that the ensemble of papers presented in this special issue will help to stimulate debate amongst scholars, researchers and policymakers that will ultimately lead to a more integrated and multidisciplinary approach to policy design. We are especially grateful to all reviewers for graciously offering their invaluable comments, suggestions and criticisms which greatly enhanced the quality of this issue of *WJSTSD*.

### BIOGRAPHY

Allam Ahmed holds a PhD in Technology Transfer with backgrounds in agriculture, economics, marketing, strategy and international business/management. He is currently the Director of the MSc programme

in International Management, University of Sussex (UK) and has substantial experience in research and teaching in Europe, the Middle East and Africa. He is the founding Editor of *World Journal of Science, Technology and Sustainable Development* (WJSTSD) and *World Journal of Entrepreneurship, Management and Sustainable Development* (WJEMSD). He is the founding President of the World Association for Sustainable Development (WASD) and an Expert Advisor to the European Commission on International Scientific Cooperation and the United Nations.

Gale T C Rigobert holds a PhD in International Relations. She is Coordinator of the MSc Global Studies programme and Lecturer of Advanced Methodology and Theory of International Relations, and Multilateralism and Global Governance at the Institute of International Relations (IIR), The University of the West Indies, St. Augustine, Trinidad and Tobago. Her background is in Caribbean International Relations and development of SIDS. Her areas of expertise and publications are centred around the theme of Information Communication Technologies and Development (ICTD) with a specific focus on the socio economic implications of the digital divide. She is the author of a forthcoming book *Bridging the Digital Divide? Prospects for Caribbean Development in the New Techno-Economic Paradigm*.

