

## Foreword

The burgeoning population growth coupled with an escalating demand and over exploitation of scarce resources for the production of goods to satisfy human needs and disposal of waste is underpinned by inherent risks. Such risks result from natural and anthropogenic sources that require assessment and effective management. Hence, contemporary environmental protection paradigms call for a multidisciplinary problem-solving approach that integrates environmental disharmonies consequent of the interaction between human and the dynamic natural world. Such a holistic view upholds a political ecology based perspectives that appreciates the fundamental role of socio-economic and geopolitical realities. It recognises the momentous purpose of integrating numerous diversified social experiences and ethical principles that internalise environmental science principles. These principles are underpinned by discourse of complex interrelationships that incorporate the interconnectivities of all the above mentioned tenets. Human impact on the global and local context has created undesirable consequences with significant risks that undermine intergenerational justice and environmental sustainability. The Sub-Saharan African region though influenced by numerous socio-economic, political and resource management challenges has in recent years began to pay growing attention to environmental issues. In spite of the daunting pressure from the above mentioned problems, significant efforts towards solving current short and long term environmental problems necessitates the regular assessment and management of prevailing risks.

This book offers the first ever successful attempt to create a table top companion for the edification of the population and stakeholders in environmental sustainability initiative in the Sub-Saharan African region. This scholarly work approaches the environmental risk prevention issue from a multidisciplinary problem-solving and broad-spectrum perspective. It draws insight from the scientific, technological and social science remarkable erudition and experience of the various experts with developed and developing world backgrounds. This anthology presents a robust compendium of versatile recommended solutions applicable in risk minimisation within the sustainability triple bottom line. It is divided into four main parts and composed of 20 chapters arranged in an optimally logical array that enhances understanding. One of the key aspects examined in the first part is an economic analysis of environmental management systems and possibilities of implementation within Sub-Saharan Africa. The psychophysical determinants of workforce performance and fundamental cost-effective risk assessment and management schemes for environmental protection within various case studies also constitutes a core component of part one. The second part focuses on fundamental concepts of effective resource management as core values to environmental sustainability practice. Such sustainable management optimises the effective use of goods and services with effective management of issuing risks to waste management, forest and biodiversity conservation and affordable infection risk prevention in health facilities. The third part deals with risk management through environmental assessment tools within the context of environmental legal instruments and also climate change mitigation strategies. The final part offers a detailed assessment and management mechanisms of risks associated with surface and groundwater degradation. This book is truly international in scope bridging the risk-management-knowledge gap through an ideological unison of views from developed and developing countries.

*Cottbus, December 2010*

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## **Acknowledgement**

This book is the result of the Brandenburg University of Technology Alumni Conference held from 8<sup>th</sup> - 11<sup>th</sup> December 2008 at the University of Buea, Cameroon. Our heartfelt appreciation goes to Prof. Dr. habil. DPhil. h.c. (University of Stellenbosch) Walther Ch. Zimmerli, the President; Dr. phil. Monika Rau, Head of the Presidential Department (Präsidentialabteilung) and staff of the Brandenburg University of Technology (BTU) Cottbus, Germany for facilitating the organisation of the Alumni conference. We express our sincere gratitude to the German Academic Exchange Service (DAAD) for magnanimous financing of the conference. Special recognition goes to the Vice-Chancellor of the University of Buea, Professor Vincent P.K. Titanji for permitting the conference to be hosted within the University of Buea facility and the Vice-Chancellor in charge of Research, Cooperation and Relations with the Business World (DVC/RCB) of the University of Buea, Professor Victor Julius Ngoh for hosting and logistical facilitations. In addition, deep appreciation is extended to the conference organising committee led by the Department of Civil Law and Public Law with Reference to the Law of Europe and the Environment at the Brandenburg University of Technology Cottbus, Germany and the DAAD resident representative for Cameroon, Mrs. Katja Buchecker. Our unfeigned gratitude is offered to the 27 contributors drawn from developing and developed countries whose scholarly articles were primordial to the realisation of this book and Mrs. Regina Kirsche for her formatting skills. Additionally, we wish to thank the Buea University community for their active participation providing academic and public scrutiny of the scientific presentations. Finally, our indebtedness to the publishing team is unequivocal.

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