

Incentive Mechanisms in the Context of Water Governance



**Joint WISA 2020 workshop by iWaGSS Project
(c/o IEEM gGmbH), German Embassy and Water
Research Commission**

Sub-theme 4: Govern and regulate the sector

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Summary

South Africa has ambitious water-related development goals (e.g. National Development Plan 2030) which are in line with the Sustainable Development Goals (UN 2015) or even surpass them. The country has established a highly ambitious and worldwide acknowledged body of water legislation, but is struggling with the implementation of national legal regulations and requirements on local level. This governance gap between macro level (legislation/institutional framework) and micro level (local water management institutions and decision makers) results in water crisis, deterioration of resources, collapsing infrastructure, substandard services etc. These problems are amplified by increasing water demand and impacts of climate change.

In certain cases, the implementation gap and non-functional (or missing) institutions lead to informal institutions taking over administrative and management functions to fill some of the gaps (e.g. user forums). These informal institutions act without legal mandate and enforcement capacities and they often lack resources and information.

Based on research projects funded by the German Federal Ministry of Education and Research (BMBF) in the Olifants River Catchment, the workshop presents new ICT tools and economic measures to improve water governance on micro (local) level.

The iWaGSS Realtime Water Management System links different tools and methods (risk assessment, surface water modelling, realtime water quality monitoring and additional data) in a single data management and decision support system to provide reliable information for water managers and stakeholders. The system is part of a research project in the Lower Olifants catchment and currently tested in a pilot zone. Main output, besides management support and planning scenarios, is access to free and reliable data for all stakeholders and increased transparency which will help to hold responsible public servants and managers to account. Public accountability is a key factor to improve resource management and water governance.

To overcome the challenges of aging and collapsing infrastructure and substandard services, accompanying (financial) incentives and economic aspects have to be taken into account. Main goal is to improve water utility management and to increase service coverage. This includes sustainable financing mechanisms (e.g. hybrid finance and results-based financing) and professionalization of services.

These results from research will be discussed with practitioners from the water sector, development funding and financial institutions. The panellists take into account critical actions and requirements to overcome the governance gaps and to reach the SDG and NDP 2030 goals.

Draft Workshop programme, Thursday, 10 December 2020

Virtual Workshop

- 09h15-09h30 *Welcome & Introduction*
Dr. Lisette Andreae / German Embassy
- 09h30-09h45 *Challenges of water governance in South Africa*
John Dini / Water research Commission
- 09h45-10h15 *iWaGSS Realtime Water Management System*
Jens Hilbig / IEEM
Justin Wigget / Ruhr-Universität Bochum
- 10h15-10h30 *Sustainable Financing Mechanisms*
Prof. Dr. mult. Karl-Ulrich Rudolph / IEEM
- 10h30-11h00 Q&A, Panel Discussion & Way Forward
- Prof. Dr. mult. Karl-Ulrich Rudolph
IEEM gGmbH
 - Ms. Faith Lawrence
GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit,
 - John Dini / WRC
Water research Commission
Water Governance Portfolio
- 11h00-11h15 Wrap-Up / Conclusion

Speakers

Dr. Lisette Andreae (confirmed) /German Embassy Pretoria

Lisette Andreae is the Head of Education, Science, Research and Technology at the Embassy of the Federal Republic of Germany in Pretoria. The Federal Ministry of Education and Research where she worked in different areas in the previous years, has seconded her in May 2017 to Pretoria. In her work at the Embassy she focuses on strengthening the research cooperation with Germany in the areas of climate change, land management, water security, bioeconomy, health, technology transfer and women in science. Lisette Andreae did her Master in Political Sciences, History and Public Law in Bonn and Oxford and holds a PhD in Political Sciences.



John Dini (confirmed) / Water Research Commission

John Dini holds a master's degree in governance and public policy, and has 20 years' experience within the South African public sector, working in the water and environment sectors. He is currently a Research Manager at the Water Research Commission, responsible for leadership of the water governance portfolio. This portfolio focuses on research and innovation in priority focal areas that include intergovernmental relations; law reform and institutional arrangements; the science-policy-implementation pathway; and water, social equity and redress. He is responsible for setting a research agenda for the portfolio aligned to national priorities, managing projects within the portfolio,



supporting relevant communities of practice and facilitating the uptake of research outcomes into policy and practice. He is a member of the national Working Group on Sustainable Development Goal 6 (water and sanitation) and leads a task team focusing on the contribution of research and innovation to the achievement of the targets under this goal.

Prior to this he was employed at the South African National Biodiversity Institute and Department of Environmental Affairs where he focused on developing science-based policy tools, implementing pilot projects along the science-policy-practice continuum and supporting policy development in relation to biodiversity and water. He has served as the National Focal Point for the Ramsar Convention on Wetlands and was instrumental in conceptualising, leading and growing a new national programme combining wetland rehabilitation and poverty alleviation, and a national wetland community of practice.

Jens Hilbig (confirmed) / IEEM gGmbH

Jens Hilbig is the COO of the Institute of Environmental engineering and Management at the Witten Herdecke University. He is responsible for the implementation and coordination of international research projects. Jens has international experience in economic administration, project development, coordination & management as well as consulting services in the field of water resources management, environmental economics and capacity development.

Jens Hilbig holds a master's degree in economic history and politics and postgraduate degrees in business administration and environmental sciences.



Faith Lawrence (tbc.) / GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit

GIZ Natural Resources Stewardship Programme

Prof. Dr. mult. Karl-Ulrich Rudolph (confirmed) / IEEM gGmbH

Karl-Ulrich Rudolph is the head of the Institute of Environmental engineering and Management at the Witten Herdecke University. He holds two doctoral degrees in water engineering and environmental economics. In addition, he was awarded an honorary doctoral degree for innovative water management from the Vietnam National University.

With over 35 years of experience in the water & sanitation sector Professor Rudolph has gained exceptional expertise. He managed and participated in more than 150 municipal wastewater projects and over 30 industrial wastewater projects. During that time, he published more than 300 articles and successfully implemented procedures for cost management, financial planning and controls, technical optimisation, private sector participation as well as procurement procedures. As a result of his work, Professor Rudolph has received numerous awards. He was, for instance, the winner of the 2006 Global Competition “Innovations in Water, Sanitation and Energy Services for Poor People” carried out by the World Bank in Washington and awarded with the DIESEL Medal in gold.



Justin Wigget (confirmed) / Ruhr-Universität Bochum

Justin holds a master's degree in Integrated Water Resources Management and is currently working as a hydro-ecological researcher for the University in Bochum, with a focus on hydrological modelling, water quality and risk assessment as well as ICT tools to provide information for future priority implementation measures.



Contact

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