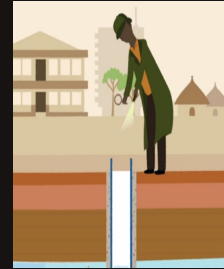


# Professional Drilling Management

## Online Course



### **MODULE 4: LEGAL & INSTITUTIONAL FRAMEWORKS** FOR BOREHOLE DRILLING PROFESSIONALISM

**FIVE AREAS TO EXPLORE**



# FIVE AREAS TO EXPLORE

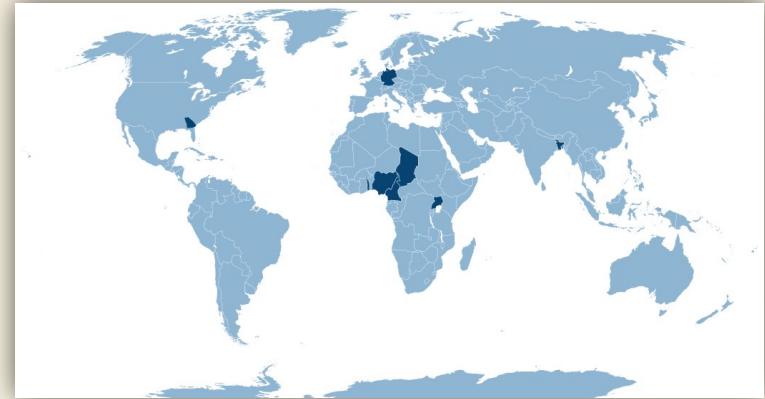
1. Professionalism
2. Laws, codes of practice/conduct and drilling principles
3. Permits to drill a borehole
4. Abstraction licences
5. Country studies on drilling professionalism

**What can you do with respect to the legal and institutional framework for borehole drilling?**



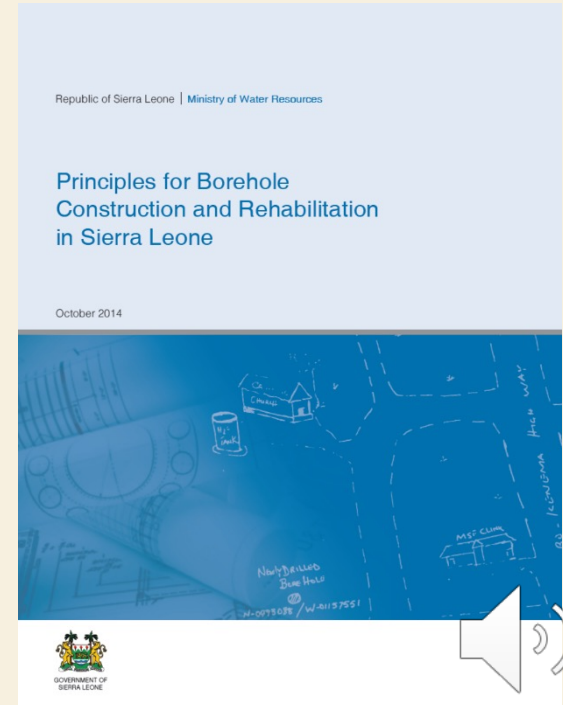
# 1. PROFESSIONALISM

- The construction of boreholes should be by professional enterprises – the same applies to siting and supervision
- Drillers licences
- Consultants licencing
- Associations (representation & self-regulation)
- Professional development including training, mentoring & apprenticeships



# 2. NATIONAL LAWS, CODE OF PRACTICE, CODE OF CONDUCT & DRILLING PRINCIPLES

- **Kenya** - Code of Conduct (in progress)
- **Nigeria** - [Code of Practice](#)
- **Malawi**: [Technical Manual for Water Wells and Groundwater Monitoring Systems and Standard Operating Procedures for Groundwater](#)
- **Sierra Leone** – [Principles for Borehole Construction and Rehabilitation in Sierra Leone](#)
- **Zambia** - [Statutory Instruments for Groundwater](#)



# 3. PERMITS TO DRILL A BOREHOLE

- Should anyone be allowed to drill anywhere?
- When should permits be issued?
- Who should issue them?
- What should be the basis of the cost of the permit?
- Is there political will and capacity to enforce permitting?
- What if there is a lack of trust in the government?



**Example - Proliferation of boreholes in Lagos and Nigeria!**

<https://vimeo.com/107047730>



# 4. ABSTRACTION LICENCES

## EXAMPLES

- Australia
- England & Wales
- Scotland (2006)
- Spain
- USA – New Jersey State

## EXPERIENCE AND ISSUES

- Major concerns over groundwater depletion
- Is groundwater a public or private good?
- Need to monitor and manage the resource
- Licence requirements have evolved over time



# 5. COUNTRY STUDIES ON DRILLING PROFESSIONALISM, COST-EFFECTIVE BOREHOLES

- ▶ Angola
- ▶ Burkina Faso
- ▶ Chad
- ▶ Ethiopia
- ▶ Ghana
- ▶ Kenya
- ▶ Mozambique
- ▶ Niger
- ▶ Nigeria
- ▶ Sierra Leone
- ▶ Sri Lanka
- ▶ Sudan
- ▶ Tanzania
- ▶ Uganda
- ▶ USA
- ▶ Zambia



LINK TO ALL COUNTRY ASSESSMENTS:

[HTTPS://TINYURL.COM/Y9SFMOF](https://tinyurl.com/y9sfmoef)



# WHAT NEXT?

1. Familiarise yourself with the principles in RWSN's [Code of Practice](#)
2. Read the RWSN E-discussion summary of [Groundwater Regulations](#)
3. Read about [regulating groundwater in Zambia](#)
4. Respond to the **forum questions** and discuss.
5. **Explore the areas** that interest you the most
6. Take the **quiz!**

