‘Water in the World We Want’ Workshop

Drinking Water Quality Management Framework

Water Directorate

Date: 23rd February 2017

Presentation Outline

- Introduction (Purpose)
- Findings of Rapid Assessment
- The Framework
- Update on System Development – Water Quality Management
- Next Steps

Introduction (Purpose)

- To address the high Water and Sanitation related disease burden, including cholera outbreaks which forms 70% of OPD cases in Ghana (OECD, 2007)

- Strengthen coordination among institutions responsible for drinking water quality management i.e. roles, mandates and activities

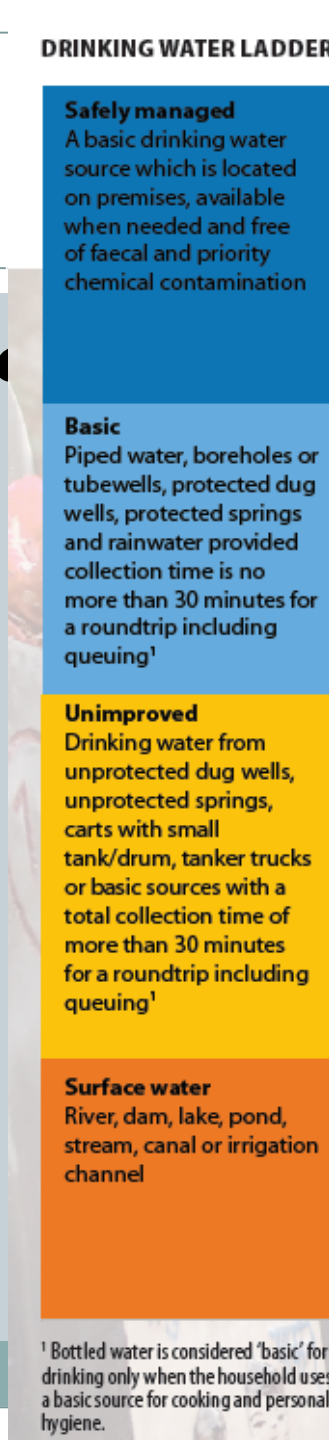
- Prepare Ghana towards the post-MDG agenda, which has strong focus on safe water access (ref. SDG Goal 6.1)

Purpose : Generally to protect public health especially the vulnerable (infants and young children, people who are debilitated and the elderly)

Introduction (Cont'd)

- ***By 2030 achieve universal and equitable Access to safe and affordable drinking Water for all (SDG 6.1)***

- **Proposed Water Indicator:**
- Percentage of population using safely managed drinking water services
- Comprising of 4 elements:
  - a basic drinking water source (MDG 'improved indicator);
  - which is located on premises;
  - available when needed; and
  - **compliant with faecal and priority chemical standards.**



Introduction (cont'd)

- In 2012, UNICEF supported MWRWH to carry out a rapid assessment of the Water Quality Status and its management in Ghana to:
    i. **Identify the challenges and gaps in the existing drinking-water quality management**
    i. **Make Recommendations to address the identified challenges and gaps**
    ii. **Formulate a National Drinking Water Quality Management Framework (based on above recommendations)**
    iii. **Specify capacity needs related to policy, tools, logistics and expertise for effective operationalisation of the Framework**

Introduction (cont'd)

Approach Used:

- Rapid Drinking Water Quality Assessment country-wide - Snap shot of the status of drinking water quality in Ghana through country survey (Ghana Living Standards Survey (GLSS), 2014)
- Desk study to assess the situation
- Field Visits
- Situation Analysis – Status of System for management of DWQ i.e. Roles, Mandates, Structures and Approaches
- Validation workshop on the Assessment report findings
- Framework formulation
- Roll out, including capacity building at relevant levels

Findings of Rapid Assessement

A number of drinking water quality parameters do not conform with standards which is a threat to public health such as;

- Though over 80% of population has access to improved water sources (89% , JMP 2015), there are water Safety /Quality Challenges e.g.
  - Significant deterioration of bacteriological quality from source to point of use (GLSS 2014) – (43.5% to 62.1%, GLSS 2014) – even improved sources
  - Chemical quality in some areas, notably, Fluoride, Iron, Manganese, Arsenic and Salinity of drinking-water doesn't conform to the national standards. (e.g Fluoride data 8 mg/L , HAP 2011)
- Estimated 9% of population practice HWTS (MICS, 2011).
- Institutions carry out their mandates without formalised coordination
- Water quality of self-supplies, vendors and tanker water suppliers are not effectively and consistently monitored.

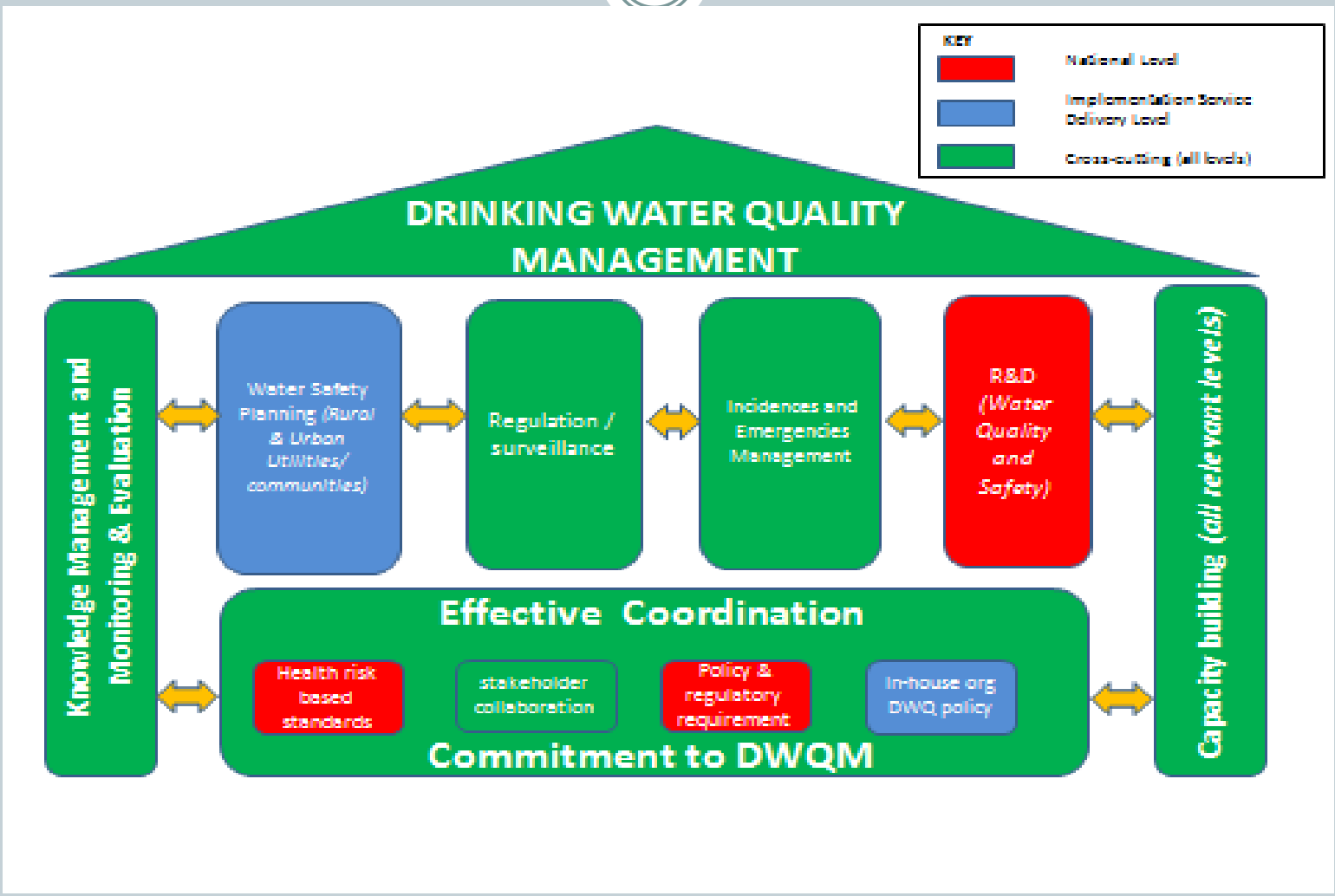
Findings of Rapid Assessment Cont'd

- The national drinking-water quality standards do not provide risk-based approach as requirement for the water supplier.
- The District Assemblies (DAs) are in-charge to ensure water safety with coordination and support from regional and national level relevant organizations
- The DAs lack clear and consistent guidelines for drinking-water quality management and are mostly under resourced, constrained with inadequate staff capacity and characterized by weak collaboration and coordination with other sector organizations

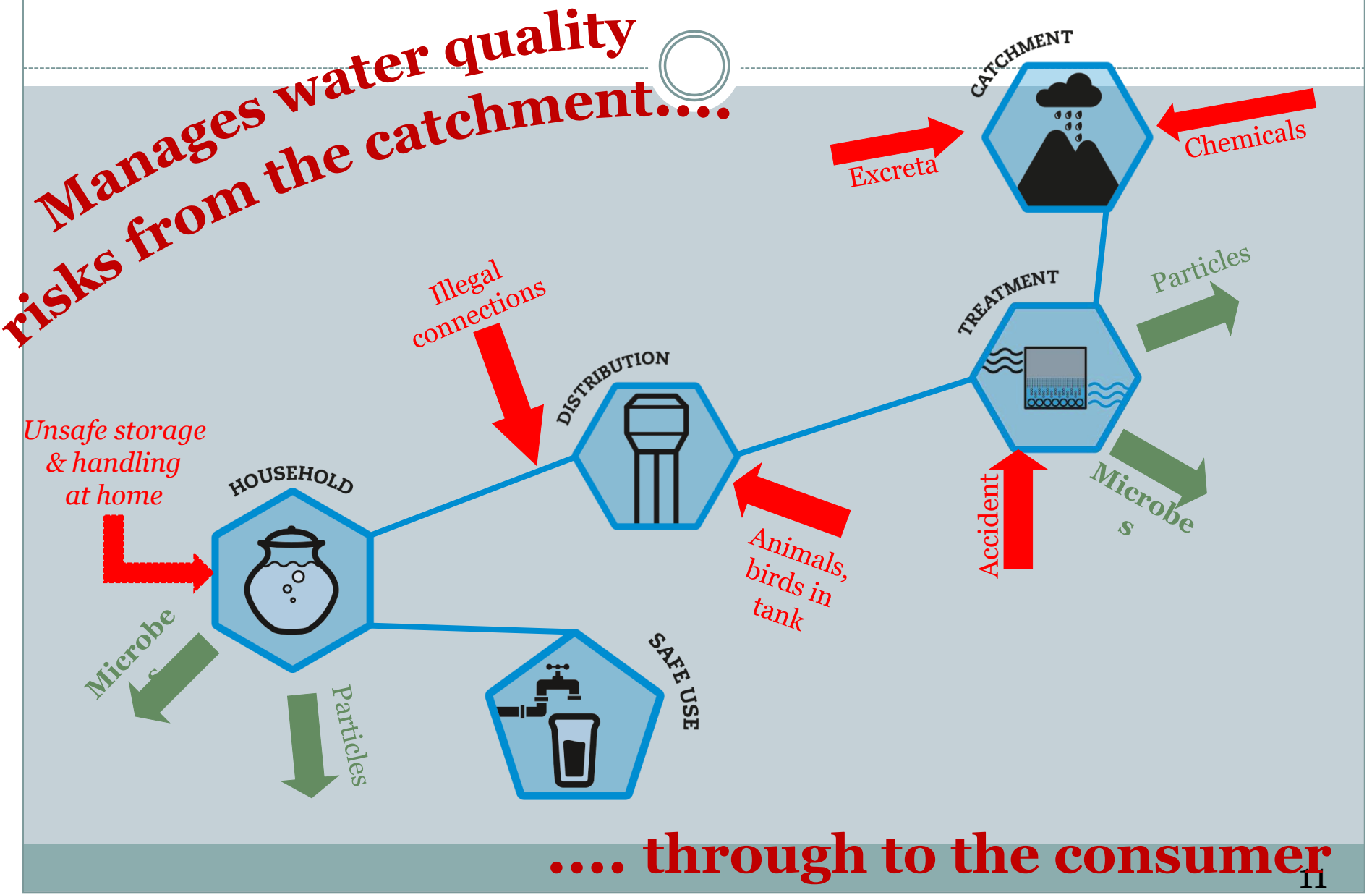
Findings of Rapid Assessment Cont'd

- Independent water quality check is not practiced, except few spontaneous checks by PURC that is limited to water supply by GWCL in urban areas.
- The Disaster Management Plans at district level are not regularly updated and also most DAs don't have the necessary emergency supplies in place.
- The overall drinking-water quality management follows traditional reactive approach (not risk based) where action is taken based on the results of water quality tests. A major limitation of this traditional approach is that water quality results are only available after exposure has taken place.

NATIONAL DRINKING WATER QUALITY MANAGEMENT FRAMEWORK (Structure)



Water Safety Plan- Key WASH Tool



Benefits

- Promotes public health by ensuring safer drinking-water for consumers
- Stresses prevention of risks from hazards and places water testing in an appropriate verification role
- Enables an in-depth systematic evaluation of water systems, the identification of hazards and assessment of risks and promotes a holistic approach to management of drinking-water quality
- Introduces a consistent approach of applying water safety plans that minimize the chances of failure through oversight management lapse.

Update on System Development – Water Quality Management

- An MoU establishing a National Coordinating Committee for the Management of Drinking water quality has been signed
- Inauguration of Coordinating Committee
- NDWQMF Published
- Indicators for monitoring finalised and submitted to the NDPC
- Orientation on WSP for NCC and CWSA
- Water Safety Plan incorporated into GSA's GS 786 (Reommended Code of Hgyiene Practice for the collection, processing, and marketing of potable water.). Yet to be published and gazeted.

Next Steps

- Indicators for monitoring to be incorporated into SIS
- Dissemination of Framework across the Country
- A plan for capacity building for implementation of Framework to be developed informed by a capacity assessment
  - Water Safety Planning – First key capacity issue
- MoUs to be signed between stakeholder institutions to improve collaboration

Drinking Water Quality Management Framework to be found on the following sites:

www.gwcl.com.gh
www.wrc-gh.org/documents/Reports
www.lgs.gov.gh

Thank you!