

**THE NATIONAL WASH SECTOR  
COORDINATION FORUM -1<sup>ST</sup> /2/17  
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**Findings from the  
hydrogeological studies and  
Consideration for the Future**

# SCOPE OF THE SURVEYS

- Identify zones of High potential for drilling of production wells
- Map the existing water sources by technology and use
- Map the groundwater aquifers and flow direction
- Guide the drilling and well test works leading to the development of production well
- Review the quality and quantity of the drilled/existing wells

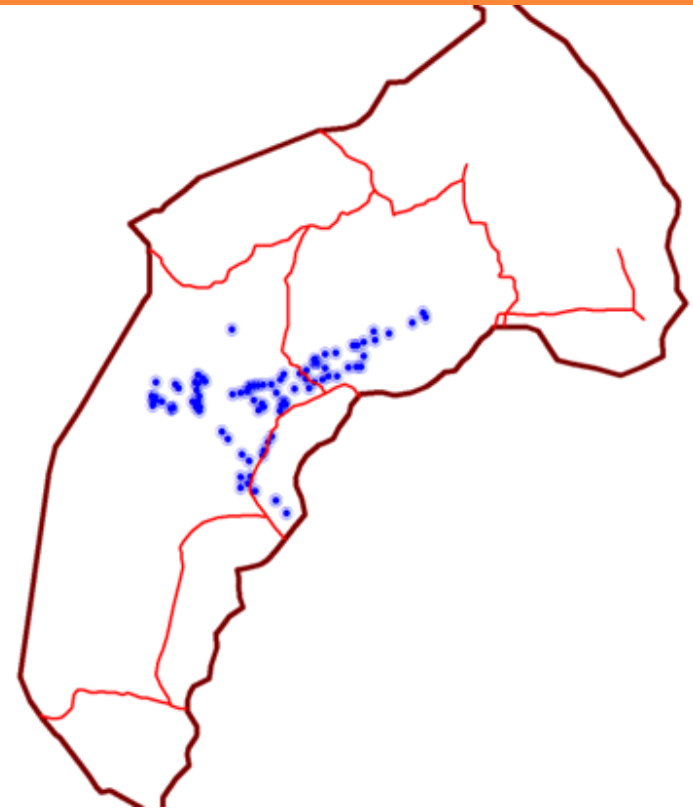


# MAPPING OF SOURCES/ZONES

Settlement mapped and zones created

Areas of high potential identified

Existing water sources mapped and classified based on source type and functionality



# MAPPING OF WATER SOURCES

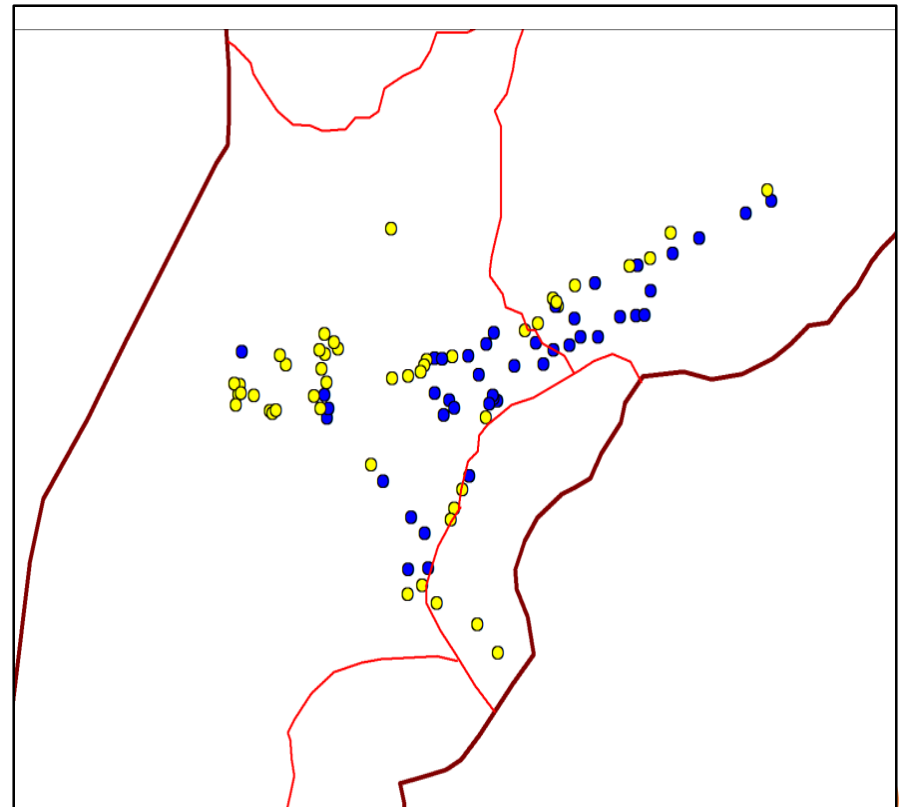
Areas of high groundwater potential identified



All Hand pumps

Blue – Functional

Yellow – Non Functional



# INTERVENTION BY AGENCIES

- Cases of high yielding springs and wells encountered on the banks of Kochi River
- Existing Oxfam, MSF, NRC, Welt hunger, Water Missions etc. boreholes
- Several existing solar powered motorized production wells encountered and mapped



## INFRASTRUCTURE STATUS

	Yumbe/Arua Settlement	Moyo Settlement
No. of Existing Boreholes	143/53	91
No. of Functional Boreholes	71/50	43
No. of Motorised Boreholes	10/14	*



# OCCURRENCE OF GROUNDWATER AQUIFERS

	Yumbe/Arua Settlement	Moyo Settlement
Area	-	-
Aquifer systems	<ul style="list-style-type: none"><li>• Overburden</li><li>• Weathered Transition zone</li><li>• Fractured Bedrock</li></ul>	
Drilling Conditions	Favorable, Deep drilling may be explored for higher yields	



# WATER REQUIREMENTS

	Yumbe/Arua Settlement	Moyo Settlement
Population of Settlement (max)	80,000	250,000
Max required volume of water (@20l/c/d). (m <sup>3</sup> /day)	1,600	5,000
Volume required to meet max. demand (8 hr.) (m <sup>3</sup> /hr)	200	625
No. of wells required to meet the demand - 10m <sup>3</sup> /hr threshold	20	63
At success rate of 60%, Required wells	28	88



# INVESTMENT REQUIREMENTS

	Yumbe/Arua Settlement	Moyo Settlement
Water Resource (No. of Production boreholes)	28	88
Design of Water supply master plan for settlement	-	-
Total Reservoir Volume (at 30%) of daily requirement	480	1,500
Pumping Mains	-	-
Distribution Mains	-	-
Energy Costs	-	-
Operation, Maintenance and Sustainability of system – <i>Post Emergency operation</i>	-	-

# THE NEED FOR THE COORDINATION PLATFORM

- In our day-to-day works we are dealing with WASH activities. This calls for
  - Synchronizing synergies and underlying principles
  - Implementing activities in an orderly and organized manner
  - Avoid duplication of efforts
  - Information and experience sharing



# THE NEED FOR THE COORDINATION PLATFORM

- To attain the SDG's, a strong WASH foundation should be built.
- As WASH Sector players the need to have a coordination platform can not be over-emphasised
  - Government (MWE, MoH, OPM, Internal Affairs, Foreign Affairs etc.)
  - Donors (IOM, ADB, Worldbank etc.)
  - UN Agencies – Directly affiliated (UNHCR, UNICEF, etc.)
  - Other UN Agencies (NGO's in the Sector)
  - Other Sector Players



# FROM EMERGENCY TO NON EMERGENCY SITUATION: MANAGING THE TRANSITION

- In each of the Settlements and or Camps
  - Need to have a defined intervention strategy
    - Emergency situation (in terms of time and interventions)
    - Non Emergency situation (Medium term and long-term plans)
  - All efforts in any of the settlement areas should be geared towards achieving the “agreed plan of action”
    - A coordination center and
    - A quality control center
  - Any humanitarian intervention should take into account the Gov’t long-term plans



# FROM EMERGENCY TO NON EMERGENCY SITUATION: MANAGING THE TRANSITION

- Proper planning of all WASH infrastructure being developed
  - In emergency situations
  - In non emergency situations
- Well Documented designs, reports and “as-built drawings” of the WASH infrastructure being developed
- Well Documented plan of O&M of all the WASH infrastructure that has been developed
- All documents properly archived at a “one-stop center” for **continuity**

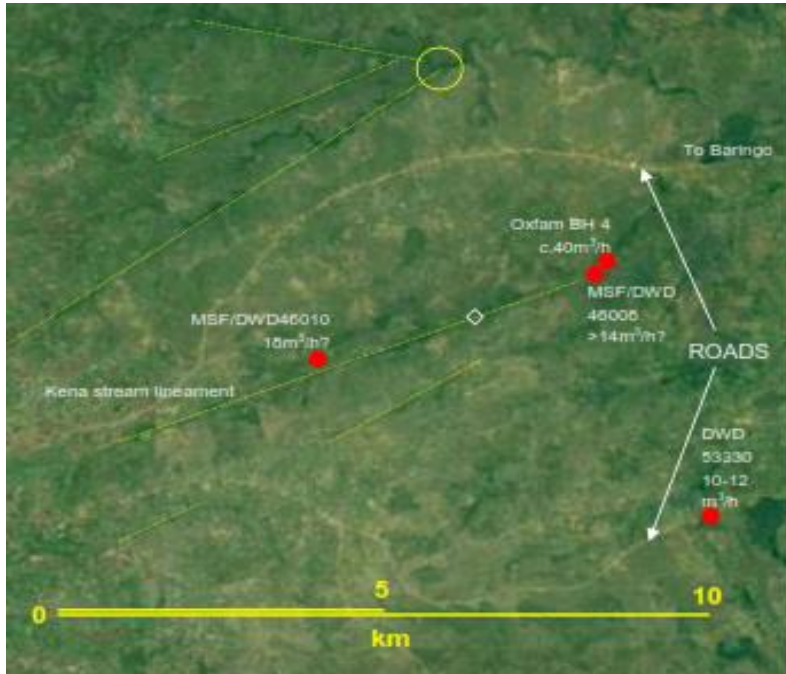


# CASE TO CONSIDER

- For a settlement and or camp or selected project area, the following should be determined
  - Aerial extent (boundaries properly defined and mapped)
  - The Extent/reach of the Host population (ReHOPE)
  - The potential WASH undertakings and interventions and zoning of the various interventions
  - Potential livelihood undertakings (Farm lands, Schools Health Centres etc)
  - The tracking of each of the WASH undertakings
  - The different partners that are involved and in what area/field
  - Periodic documentation of the achievements, challenges and possible recommendations for better implementation

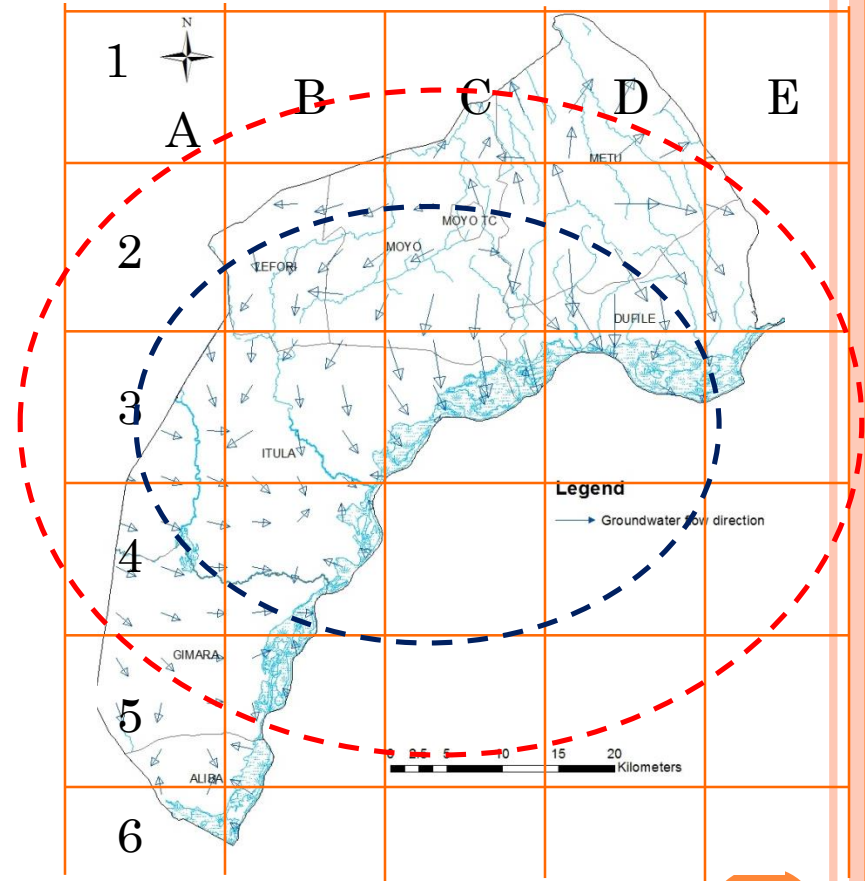
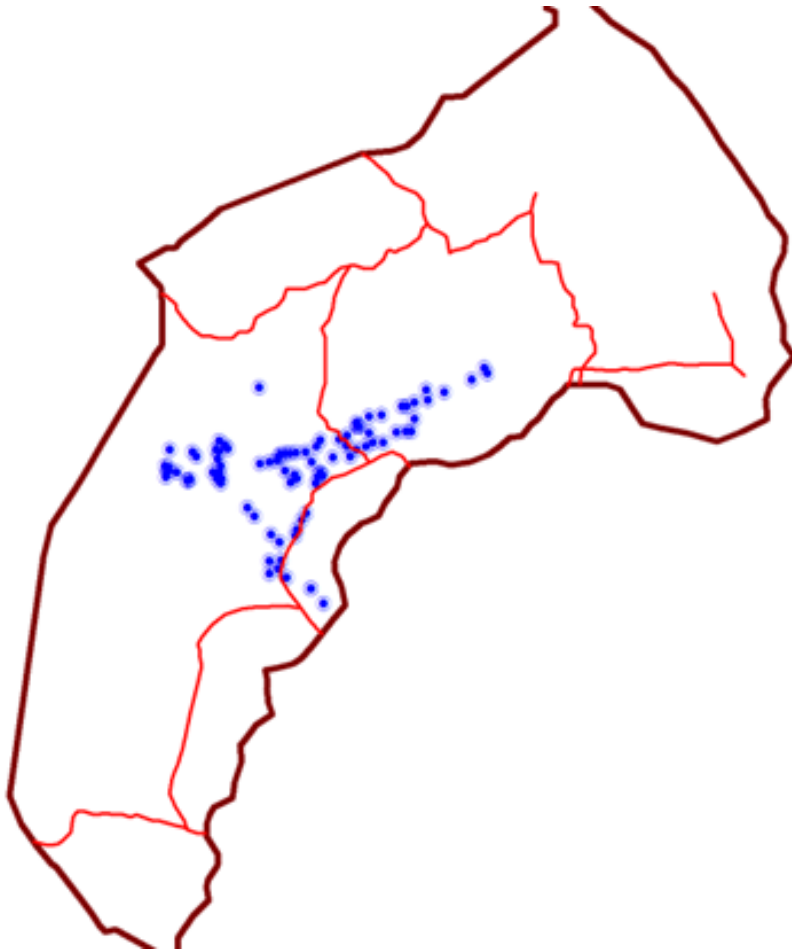


# CASE TO CONSIDER - BIDIBIDI

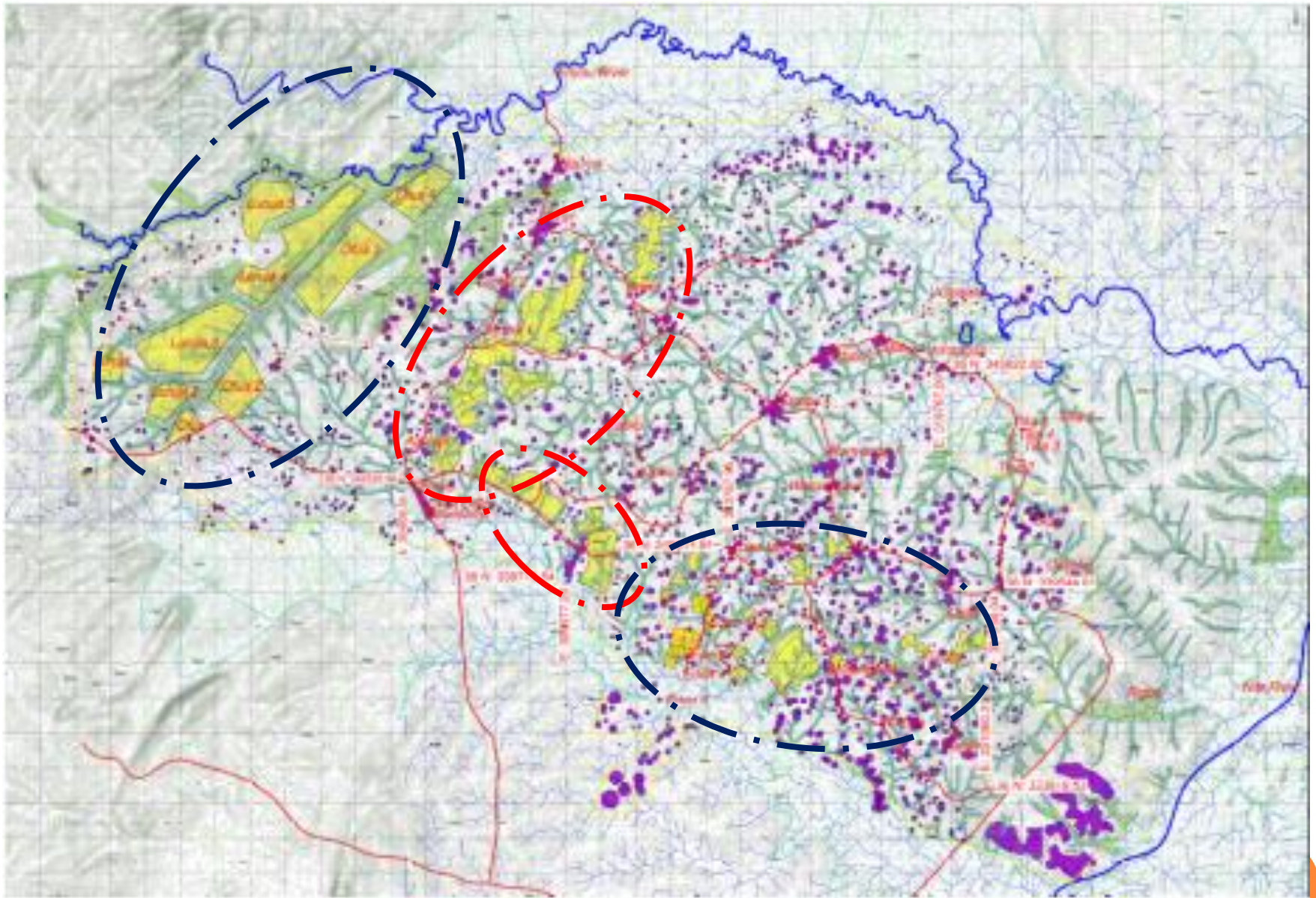




# CASE TO CONSIDER - PALORINYA







## TAKE HOME MESSAGE - COMMON GOAL

- For the various stakeholders to achieve their goals, they can not work in isolation but rather as **ONE**
  - Both the refugee population and the Host Population will share the basic social infrastructure irrespective of which partner has provided them
- Therefore a coordinated approach is required for sustainable Infrastructure development.



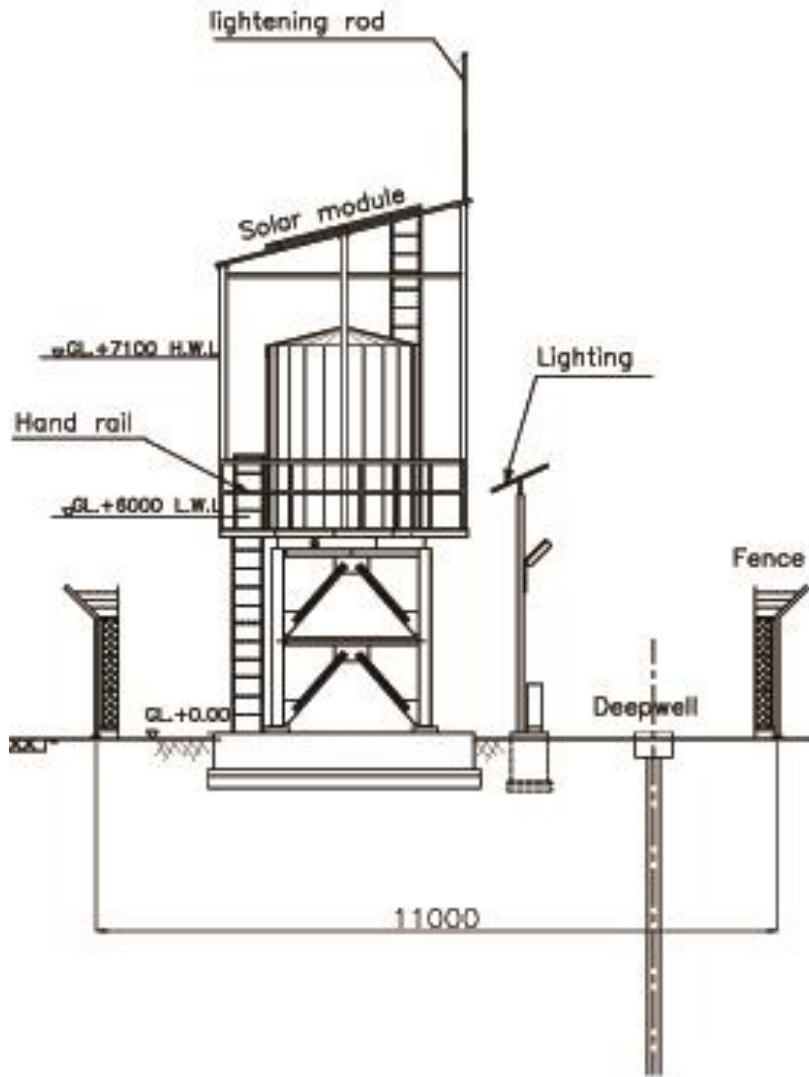
## TAKE HOME MESSAGE - COMMON GOAL

- A “one-stop” information centre should be set-up and supported to receive, archive, process and share information on ongoing WASH activities
  - MIS (with GIS) - Continuous and periodic update of all on-going WASH activities
  - Mandatory provision of information by all WASH actors/players
  - Archived information shared among all partners
- MIS Centre to be managed/hosted in the “Host Ministry”



# FUTURE WATER SUPPLY

## Point Source Water Supply System





# FUTURE WATER SUPPLY

