The National WASH Sector coordination Forum -1st /2/17 robert mutibwa kirya-mowe & richard ochaya-unhcr

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

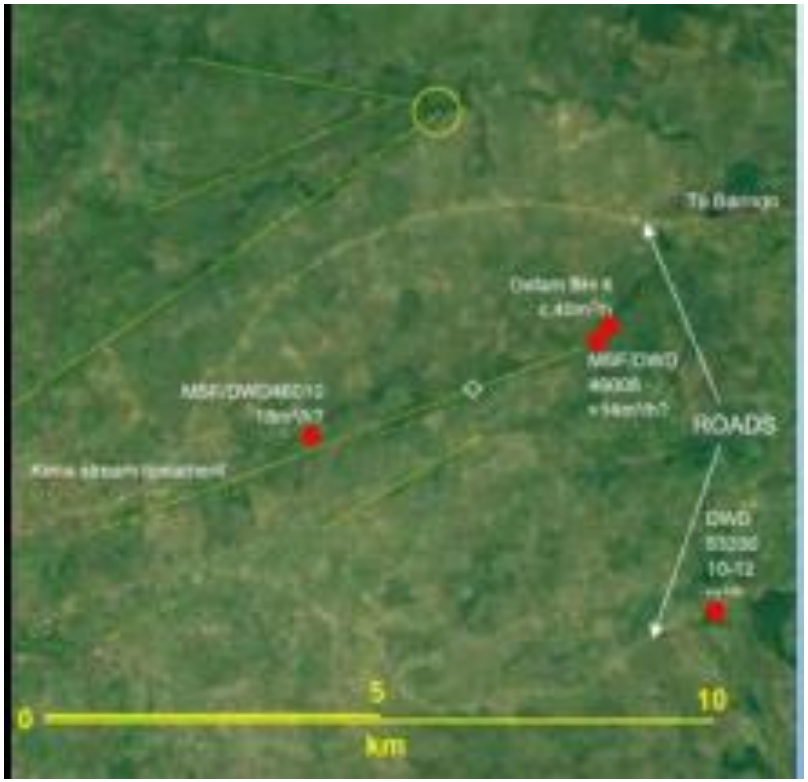
Settlement mapped and zones created

Areas of high potential identified

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

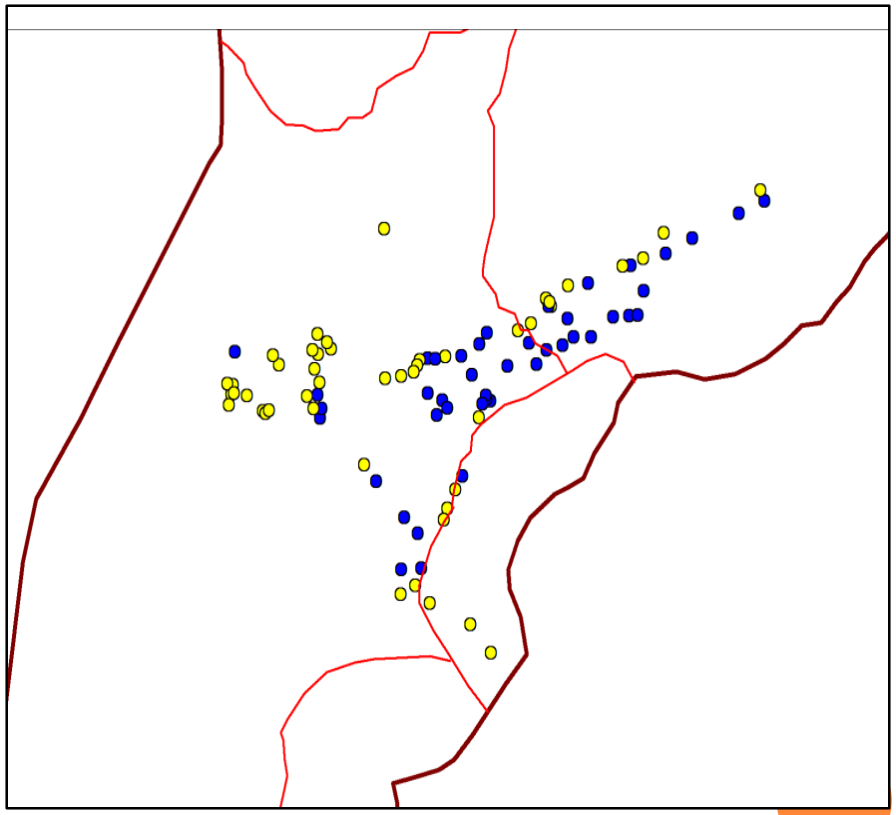
Mapping of Water Sources

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	• Overburden • Weathered Transition zone • Fractured Bedrock	
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^3/day)	1,600	5,000
Volume required to meet max. demand (8 hr.) (m^3/hr)	200	625
No. of wells required to meet the demand - 10m^3/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 – *Post Emergency operation*	-	-

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

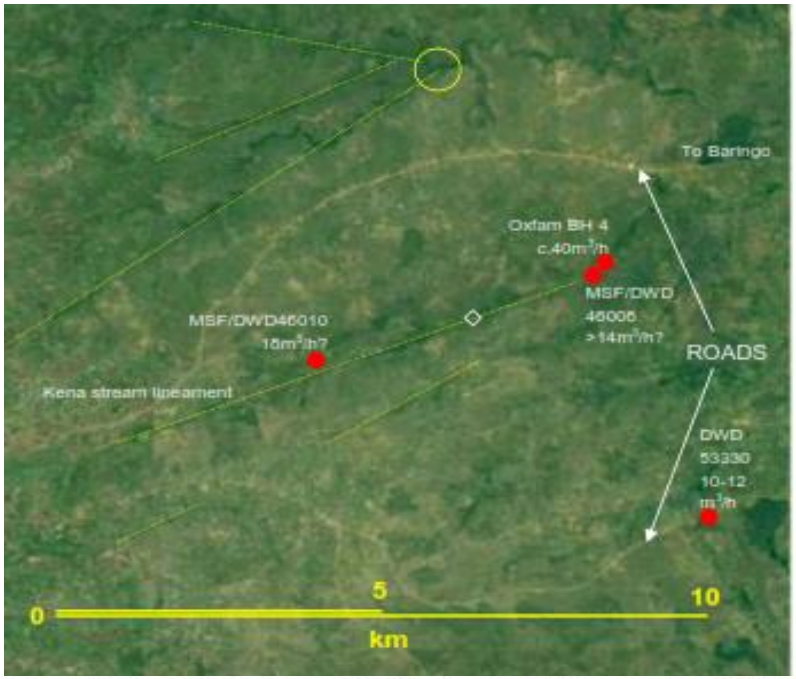
From Emergency to Non Emergency situation: Managing the Transition

- 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**

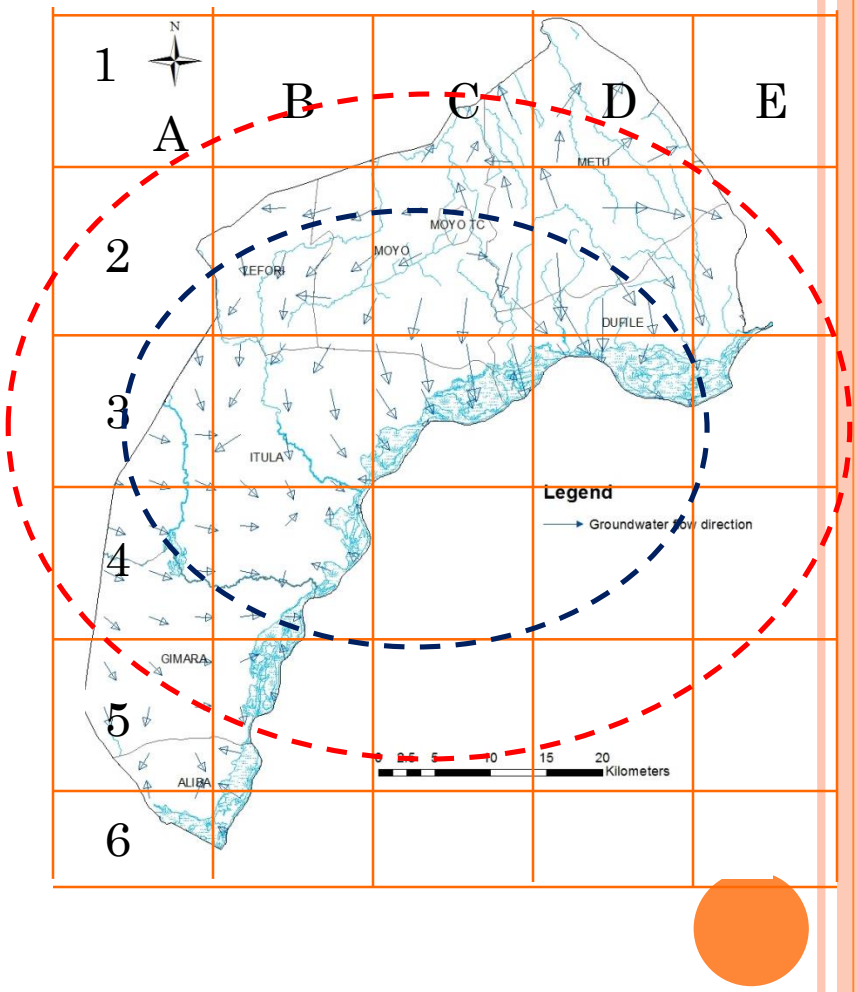
Case to consider

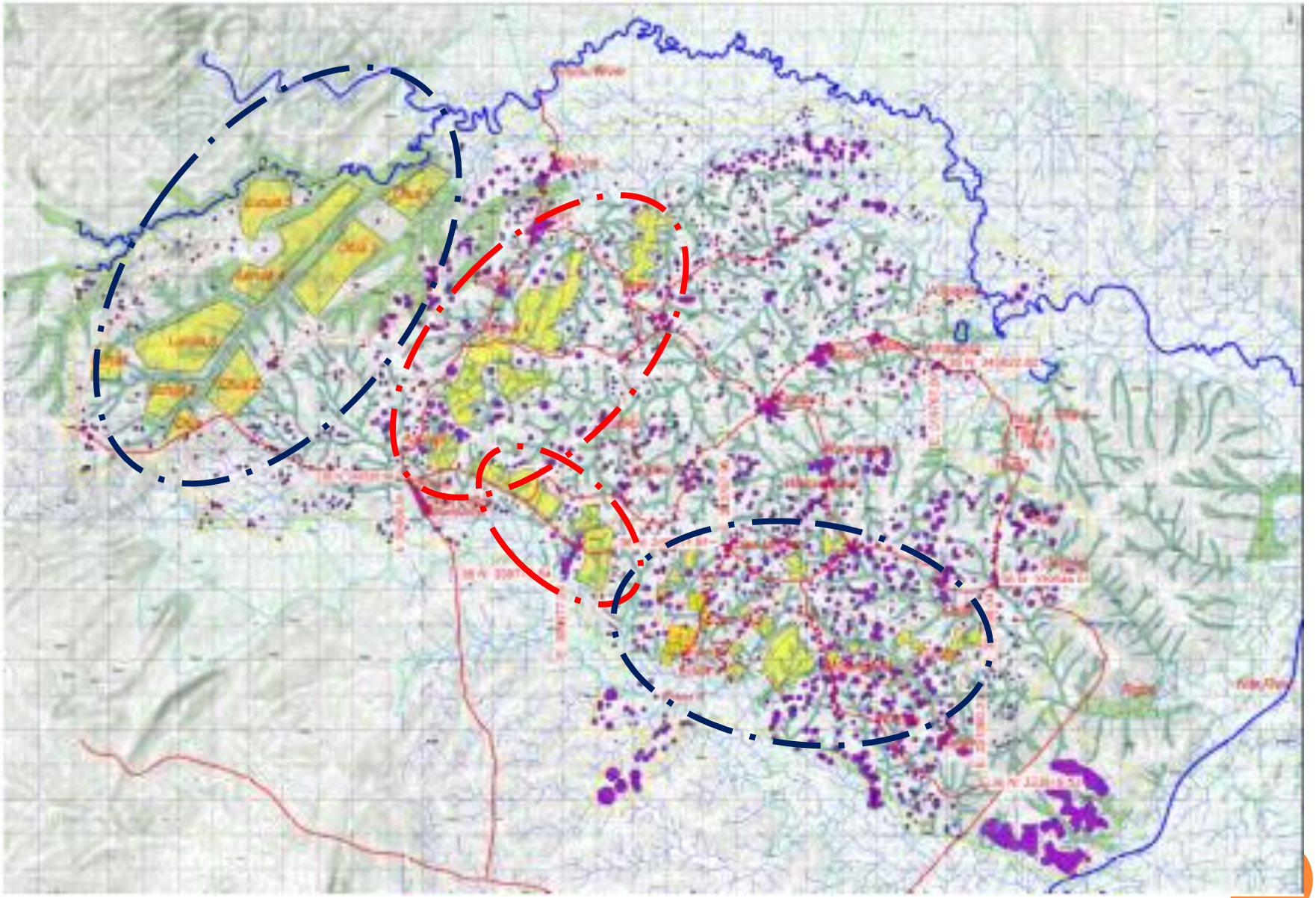
- For a settlement and or camp or selected project area, the following should be determined
  - Aerial extent (boundaries properly defined and mapped)
  - The Extent/reach of the Host population (ReHOPE)
  - The potential WASH undertakings and interventions and zoning of the various interventions
  - 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





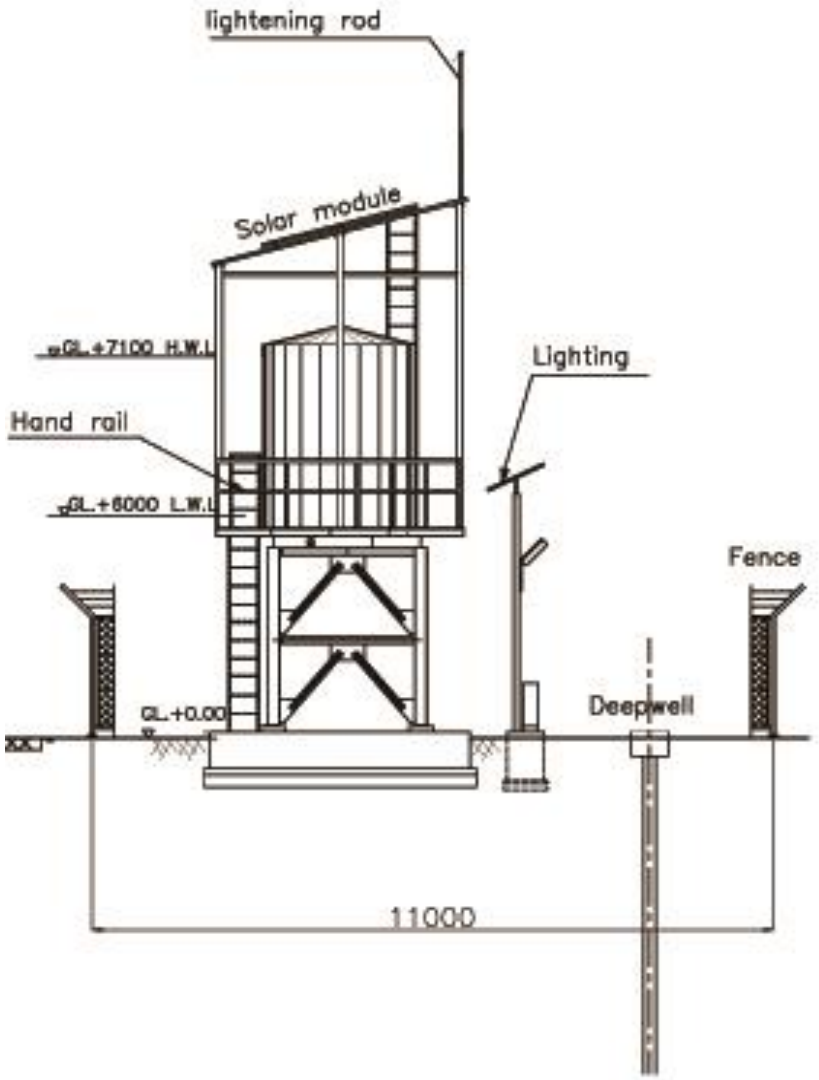
Take Home message - Common Goal

- 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