

# **Cost Effective Boreholes**

## **Social responsibility**

### **Khartoum workshop 18-19 Nov 2008**

Marcello GOLETTI, Umberto AMBROSI,  
Jean Nahesi KUTUMBAKANA



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IOM International Organization for Migration  
OIM Organisation Internationale pour les Migrations  
OIM Organización Internacional para las Migraciones

# IOM drilling activities in South SUDAN

1. Scope of IOM activity
2. Water supply in NBEG, Warab, Unity, Western Equatoria, South Kordofan.
3. Community Participatory Approach
4. Contractor's Selection procedures
5. Drilling methods
6. Problems encountered
7. Lessons learned



# Scope of IOM RCS programme

1. Reintegration of refugees and IDP
2. Stabilization of hosting and returnees communities
3. Humanitarian approach (funded projects) in a perspective of sustainable development process (integrated programme)
4. Education (schools), Water supply, Primary Health, Sanitation, Hygiene, Basic infrastructures, Livelihoods.



# Water supply in NBEG, Warab, Unity, Western Equatoria, South Kordofan

IOM records to Dec. 2009

- Small Water Distribution Systems (27)
- Boreholes (266)
- New Hand Dug Wells (104)
- Spare parts and training (57 counties)
- Hygiene campaigns (beneficiaries 28.202)



# Community Participatory Approach

1. Identification of the integrated community (hosting + returnees)
2. Gender balance
3. Community analysis of needs
4. Technical assessment by IOM team
5. Follow-up of the committees
6. Design and implementation
7. Shared evaluation, training and campaign



# Contractor's Selection procedures

1. Tender launch and diffusion
2. Bid evaluation
3. Contract (after negotiation on possible updated design and conditions)
4. Sites joint identification
5. Drilling, tests, completion, pump installation
6. Evaluation



# Drilling methods

1. Percussion
2. Rotary – water direct circulation
3. Rotary – mud direct circulation
4. Down the Hole Hammer – compressed air circulation



# Problems encountered

1. Very low standard of contractors
2. Limited participation to tenders
3. Low quality of material available in NBEG/Warrab and Unity States
4. High difficulties in transportation
5. Difficult communication with contractors
6. Lack of material causing delays



# Lessons learned

1. Selected contractors can perform proper drilling.
2. Local enterprises should be supported in a perspective of sustainable development.
3. Better to supply material (gravel, cement, pipes, pumps, etc.) in a coordinated system, out of the contracted activities
4. Better to concentrate one contractor's drilling in one limited area, with high density of boreholes
5. Better to have specialized team to be supervising restricted area with frequent visit on the works



# Evaluation under a cost effective drilling perspective

- Drilling method to be decided according to the hydro-geological context
- In the States of South Sudan the most relevant element affecting drilling cost can be the **COORDINATION among the international Agencies and INGOs.**



# Where Coordination can produce cost reduction

1. Only one Supervising team for a given area and selected contractor
2. Coordinated stock of material (1 per State)
3. Common tenders and available database on companies and unit prices
4. Shared hydro-geological outputs
5. Common evaluation of contractors and supervisors



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***Thanks for your patient attention***