Amhara Region, West Gojjam Zone, Yilmana Densa Woreda Debremawi kebele, Quyo Micro Watershed Water Safety Assessment and Action Plan

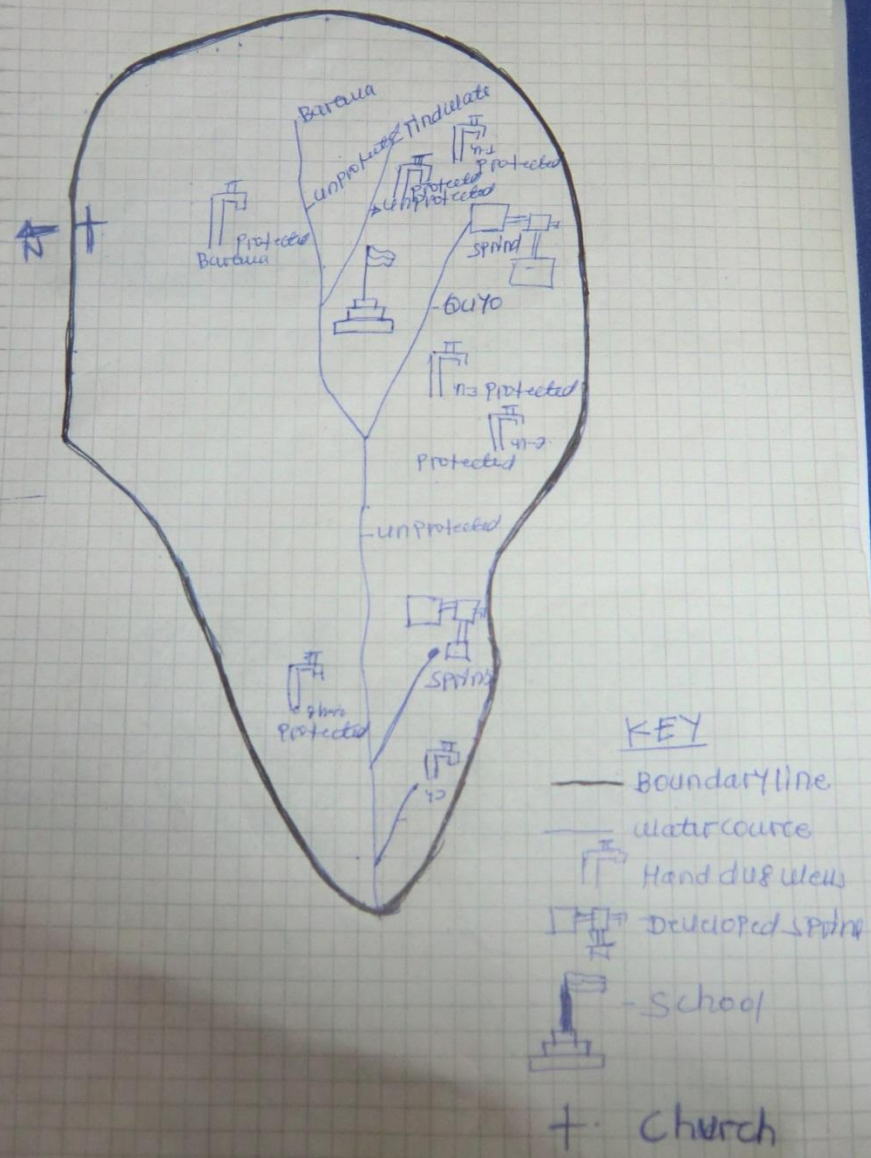
March - 2014

CWSAP assessment report in Yilmana Densa Woreda of Amhara region , Debremawi kebele

General Overview of Quyo Micro Water Shed

Item	Data
Name	***Quyo micro water shed in Demawi Kebele***
Area Identification	***Woreda /District Yilmana Densa ,Keble Debre Mawi***
Population Size (in assessed area)	*Total population 1505 (male 813 female 692)* *364 Households (297 MHH, 67 FHH)* *130 children under five (63 male, 67 female)*
Main Occupation	*Mixed farming /crop production, animal raising & forest planting*
Type of water Supply	*7 Hand dug well with Afridev hand pump* *2 Protected springs* *5 Unprotected springs (1 permanent; 4 seasonal)*
Water coverage % with 15 litres < 1.5 km	*100% access to improved water sources; but insufficient water in dry season*
% population using improved water sources	- *97% use scheme during wet season* - *96% use scheme during dry season* - *4 % use unimproved water throughout the year*
School	1 primary school having 305 students (172 male, 133 female); 1 male& 5 female teachers; 1 improved latrine, no improved water supply , no hand washing facility.

Map of the area with the water sources



System 1	**Dug wells with handpumps (all afridev) (total 7)** **(Summary of the situation seperate sheet available per well)**
Details	4 constructed in 1996 E.C Depth (11.5; 14.5;17; 18m); 1 in 2000 (16.4m); 1 in 2001 (5.5m); 1 in 2003 (12.5m)
Technical quality of system	One in good condition (Tsindewatte 1996); All others have problems with cracks in apron; one has fencing problem; Several pumps have reduced discharge/leaking foot valve (lack preventive maintenance)
Water quantity	On average HHs collect 3 containers of 20 liters for cooking and drinking purposes only. In Tsindewate only two. In dry season other sources dry up and water becomes scares even in four wells
Water quality	Users of all wells complain about bad taste; in 3 cases turbidity is mentioned. Sanitary risks seems low (one system has cracks in well head cover slab, one case with hole made by animals next to well) in all cases risks exist in water collection, transport and use
Continuity	Most open for 8 hours; Considerable waiting time (> 2hrs) In February water avalability reduces in 4 wells
Cost	In 3 systems monthly tariffs are charged (range 1-2 ETB/month) Others WASHCOs collect when money is needed

Risks related to water quality

Main technical problems with HDW with handpumps	
1	Most HDW have technical deficiencies (cracks); one has fencing problem
2	Pumps show lack of preventive maintenance and may also have leaking cup seals and foot valves, but not checked and not clear as handpump are not regularly monitored
3	Some systems lack protection from flood run-off from higher ground
4	Water quality is a problem (bad taste perhaps because of iron) and water in some wells may be bacteriologically polluted as shown by sanitary survey but also because of fertilizer use
5	Four wells reduce considerably in water avalability in dry season; (this includes the two wells with the lowest depth)
6	Catchment areas are showing signs of erosion and other risks that may affect water infiltration and hence may be a long term threat for well discharge particularly in dry season

Main management/financial problems with HDW	
1	WASHCO members not trained as managers (no monitoring of water points and hand pump performance) and do not have active back-up support to deal with their problems
2	Financial management is weak or absent and no reporting to users
3	In two systems there is disagreement among WASHCO members (Enegadie and Yilosi) (! In Yilosi the users already replaced ther WASHCO as a result of the water safety plan process!)
4	Users not aware of hygiene risks involved in the water from the wells and the risks they generate themselves in water collection, transport and storage
5	Catchment protection and management is not organized

We followed the same approach for the springs (not reported here)

Action Plan

Ser. no	ACTION	Responsible	Actors	WHEN
1	Repair pumps and initiate regular Preventive maintenance	WaSHCO	Pump care taker/local artisans/ water office pump attendant	Quarterly
2	Maintenance of HDW	WaSHCO	Woreda water office/ artisans	March 17, 2014
3	Fencing HDW as needed including flood diversion structure	WaSHCO	Community/ water and soil conservation expert	March 17,2014
4	Study the water quality problem and the discharge problem in detail	WaSHCO	Woreda water office	March 17,2014
5	Approach Micro water shed committee and Kebele water shed committee to explore how to enhance water catchment protection	WaSHCO	KWT and water office	March 30,2014

Cont'd Action plan

Ser.no	ACTION	Responsible	Actors	WHEN
7	Provide refresher training/ site level orientation to WaSHCOS	Woreda water office	Woreda water office experts	May 23, 2014
8	Set water tariff and ensure collection	WaSHCO	WaSHCO	March 23,2014
9	Discussion with the community strengthening the existing committee or replace with new one	KWT	Community	March 23,2014
10	Establish regular meeting and financial reporting system	WaSHCO	WaSHCO	Starting from March on monthly basis
11	Awareness creation on safe water management	HEW	Woreda Health Office	March 23,2014

- Thanks