7. 小都市給水計画

データ 7.1　82小都市の概要 (1/33)

1　SNNPRS 52 towns (listed by ID number)

S01 Buei		
1.	Town status & population	Woreda Capital／6,961 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	149％（water consumption）
4.	Accessibility	All paved, 30km from Butajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	New completed well to be additional water source in addition to the existing well.
S02　Kela		
1.	Town status & population	Town Administrations／3,519 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	81％（water consumption）
4.	Accessibility	All paved, 21 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is quite required ingenuities.
7.	Others particulars	New completed well to be additional water source in addition to the existing spring.
S03　Tiya		
1.	Town status & population	Municipal、1,937 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	54%
4.	Accessibility	All paved, 47 ㎞ from Bitajira

データ 7.1　82小都市の概要 (2/33)

5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S04	Suten	
1.	Town status & population	Town Administrations／1,298 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	58%（consumption of only water faucets）
4.	Accessibility	All paved, 43 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S06	Koshe	
1.	Town status & population	Woreda Capital／6,858 persons
2.	Water potential (quantity) & Water quality	Feasible / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	94%（water consumption）
4.	Accessibility	All paved, 22 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	New well which is constructed by NGO to be additional water source in addition to the existing well.
S07	Lisana	
1.	Town status & population	Town Administrations／1,711 persons
2.	Water potential (quantity)	Feasible / Good

データ 7.1　82小都市の概要 (3/33)

	& Water quality	
3.	Water coverage(20lpcd)	200％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 22 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S09	Dosha	
1.	Town status & population	Municipal／1,881 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	10%
4.	Accessibility	Paved + Base-course + Sub-grade, 28 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S11	Fonko	
1.	Town status & population	Town Administrations／2,380 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	139％（water consumption）
4.	Accessibility	All paved, 28 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle hills, construction work is not difficult.
7.	Others particulars	
S12	Wada	

データ 7.1　82小都市の概要 (4/33)

1.	Town status & population	Municipal／2,113 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	3%
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 38 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle hills, construction work is not difficult except water sources.
7.	Others particulars	Out of the study area.
S13	Anigacha	
1.	Town status & population	Woreda Capital／6,811 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	88％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 40 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Due to growth and water consumption of residents, including surrouding villages, and frequently damaged pipes (water outage, reducting water faucets), water coverage has been declined. Therefore, it to be expected the rates of water poverty growth rapidly.
S14	Adilo	
1.	Town status & population	Municipal／4,659 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	16％（water consumption）
4.	Accessibility	All paved, 49 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of boths.
6.	Technical specifications& implementation for new water	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small

データ 7.1　82小都市の概要 (5/33)

	supply facilities	town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Water office has and take advantage the drawings of the existing water pipe line, and they are planning new water supply facility.
S15	Daniboya	
1.	Town status & population	Woreda Capital／8,111 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	45%（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 52 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The willing to pay of residents is high.
S16	Leku	
1.	Town status & population	Municipal／11,810 persons
2.	Water potential (quantity) & Water quality	High / Good
3.	Water coverage(20lpcd)	157%（water consumption）
4.	Accessibility	All paved, 22 ㎞ from Awasa
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The existing water supply facility was constructed by NGOon 2008.
S17	Kebado	
1.	Town status & population	Woreda Capital／8,365 persons
2.	Water potential (quantity) & Water quality	High / Good
3.	Water coverage(20lpcd)	30%（water consumption）

データ 7.1　82小都市の概要 (6/33)

4.	Accessibility	Paved + Base-course + Sub-grade, 39 ㎞ from Awasa
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, which is not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.
7.	Others particulars	
S18	Teferi Kela	
1.	Town status & population	Municipal／4,178 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	40％（water consumption）
4.	Accessibility	All paved, 15 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town has 2 wells and 2nd. well was constructed by SNNPRon 2009. However, this well is not under operationg due to there is no plan of other water supply facility.
S19	Gereche	
1.	Town status & population	Woreda Capital／2,986 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	30％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 39 ㎞ from Awasa
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, however, construction work is not difficult.
7.	Others particulars	The distance to the water source, womens and children has become a burden to caeey water.
S20	Manicho	

データ 7.1　82小都市の概要 (7/33)

1.	Town status & population	Town Administrations／4,017 persons
2.	Water potential (quantity) & Water quality	Low / Permissible (except Iron)
3.	Water coverage(20lpcd)	2.5%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 36 ㎞ from Awasa
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. However, it is necessary to consider of simple water treatmentfacility to reduce Iron for improvement water quality. The small town is on the gentle ridge, however, construction work is not difficult.
7.	Others particulars	The existing water supply facility, which constructed on 2004 is not commensurate with design for town population. Hence, it is necessary to construct new facility which to be included facility expansion.
S21	Bokasa	
1.	Town status & population	Municipal／2,039 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	5%（water consumption）, 71% (water product)
4.	Accessibility	Paved + Base-course + Sub-grade, 39 ㎞ from Awasa
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, construction works is required some ingenuity.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S22	Chuko	
1.	Town status & population	Woreda Capital／8,884 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	1,000%（water consumption）
4.	Accessibility	All paved, 24 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.

データ 7.1　82小都市の概要 (8/33)

6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Credibility of above water coverage is consideredlow. This facility has 3 wells which are under operation and in good operating order.
S23	Chuko	
1.	Town status & population	Municipal／14,626 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	58%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 24 ㎞ from Awasa
5.	Existing rights& Disputes	This small town has been sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is more than 14,000 persons in accordance with list of the candidate small towns.
S24	Ela	
1.	Town status & population	Municipal／5,259 persons
2.	Water potential (quantity) & Water quality	Feasible / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	194%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 22 ㎞ from Awasa
5.	Existing rights& Disputes	This small town has been sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, however, construction works is required some ingenuities.
7.	Others particulars	The existing water source (spring) has been convayed by intake facility and conveyance pipes which is consumed less than half of full amount of spring and rest of spring is discharged into the stream. Hence, the capacity of spring water is enough for expansion. This small town is a priority

データ 7.1　82小都市の概要 (9/33)

		of tranquility for public safety.
S27	Fisha Genet	
1.	Town status & population	Municipal／4,189 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	33%（water consumption）
4.	Accessibility	All paved, 45 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.
7.	Others particulars	Water pumping from the existing well is operating by “Mono-pump”. It is not able to operate long periods due to aging, decrepit.
S28	Gedeb	
1.	Town status & population	Municipal／10,021 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	8%（water consumption）
4.	Accessibility	All paved, 62 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.
7.	Others particulars	
S30	Tabela (Humbo)	
1.	Town status & population	Woreda Capital／6,246 persons
2.	Water potential (quantity) & Water quality	Feasible / Permissible
3.	Water coverage(20lpcd)	36%（water consumption）
4.	Accessibility	All paved, 20 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of both.

データ 7.1　82小都市の概要 (10/33)

6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	This town population has been growth due to have a major junction for Awasa, Sod and Arba-Minch.Therefore, beneficiary effect of new water supply facility is high.
S32	Dimtu	
1.	Town status & population	Town Administrations／1,702 persons
2.	Water potential (quantity) & Water quality	Feasible / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	51%
4.	Accessibility	Paved + Base-course + Sub-grade, 42 ㎞ from Sodo
5.	Existing rights& Disputes	This small town has been sporadic conflicts of the existing water right with residents.
6.	Tachnical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns. In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.
S34	Birbir	
1.	Town status & population	Woreda Capital／5,831 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	229％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 48 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle flat terrains, construction work is not difficult.
7.	Others particulars	The new well (2^{nd}.) which was constructed by NGO on 2005 has not yet used for water supply.
S35	Chenicha	

データ 7.1　82小都市の概要 (11/33)

1.	Town status & population	Woreda Capital／10,223 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	33%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 30 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is not difficult.
7.	Others particulars	The new well (2nd.) and water supply facility which were constructed by NGO on 2010 is not contributed the effect of water coverage due to lack of design.
S36	Ezo	
1.	Town status & population	Municipal／1,822 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	0%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 47 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S37	Dorze	
1.	Town status & population	Municipal／1,256 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	1%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 26 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction works is

データ 7.1　82小都市の概要 (12/33)

		required some ingenuities arround water sources.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S38	Kele	
1.	Town status & population	Municipal／8,632 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	89%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 99 ㎞ from Dila
5.	Existing rights& Disputes	This small town has been sporadic conflicts of the existing water right with residents along main road.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities. There are some risks of troubles, conflicts with neighborhoods for development of water sources.
7.	Others particulars	This small town is a priority of tranquility for public safety.
S39	Soyama	
1.	Town status & population	Municipal／6,268 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	1.2%
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 149 ㎞ from Dila
5.	Existing rights& Disputes	This small town has been sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, construction works is required some ingenuity. There are some risks of troubles, conflicts with neighborhoods for development of water sources.
7.	Others particulars	This small town is a priority of tranquility for public safety.
S41	Segen	
1.	Town status & population	Town Administrations／3,626 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	106%（water consumption）

データ 7.1　82小都市の概要 (13/33)

4.	Accessibility	Paved + Base-course + Sub-grade, 65 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	
S42	Gidole	
1.	Town status & population	Municipal／13,176 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	34%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 42 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction works is required some ingenuities arround water sources.
7.	Others particulars	Town population is more than 13,000 persons in accordance with list of the candidate small towns.
S43	Kibat	
1.	Town status & population	Municipal／5,676 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	187%（water consumption）
4.	Accessibility	All paved, 13 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The watersupply facility has been relatively good managed by the Woreda water office and this office collects water fee for public faucets and private water connections. Morale of operators of the pump station is high.
S44	Alkeso	

データ 7.1　82小都市の概要 (14/33)

1.	Town status & population	Town Administrations／1,028 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	672％（water consumption）
4.	Accessibility	All paved, 29 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.
S46	Tora	
1.	Town status & population	Woreda Capital／9,163 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	30％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 58 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	The watersupply facility has been relatively good managed by the Water office and this office collects water fee for public faucets and private water connections. However, acknowredgement of the specifications of the facilityof the sstaff is low.
S47	Mito	
1.	Town status & population	Municipal／3,277 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	310％（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 68 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.

データ 7.1　82小都市の概要 (15/33)

6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	
S48	Dalocha	
1.	Town status & population	Woreda Capital／7,024 persons
2.	Water potential (quantity) & Water quality	Feasible / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	69%（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 48 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the hills, construction works is required some ingenuities arround water sources.
7.	Others particulars	In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.
S49	Alem Gebeya	
1.	Town status & population	Municipal／3,656 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	163%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 46 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources. The existing pipe lines are necessary to repair and maintenance, however, water source and water reservoir tank can be use continiusly.
7.	Others particulars	
S51	Mazoria	
1.	Town status & population	Kebele　Association／2,730 persons

データ 7.1　82小都市の概要 (16/33)

2.	Water potential (quantity) & Water quality	High / Good
3.	Water coverage(20lpcd)	14%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 48 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	
S52	Wilbareg	
1.	Town status & population	Woreda Capital／2,197 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	78%（water consumption）
4.	Accessibility	All paved, 53 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities.
7.	Others particulars	
S53	Hamus Gabeya	
1.	Town status & population	Kebele　Association／4,152 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	22%
4.	Accessibility	Paved + Base-course + Sub-grade, 18 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	

データ 7.1　82小都市の概要 (17/33)

S54	Hirokofofo	
1.	Town status & population	Town Administrations／2,590 persons
2.	Water potential (quantity)	Feasible
3.	Water coverage(20lpcd) & Beneficiary population	12%／＜1,000 psns
4.	Accessibility	Sub-grade + Dry-season-only, 22 ㎞ from Hosaina
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	This small town is a priority of improvement of accessibilityfor operation & maintenance.
S55	Weyira Mazoria	
1.	Town status & population	Town Administrations／8,346 persons
2.	Water potential (quantity) & Water quality	Feasible / Good
3.	Water coverage(20lpcd)	39%（water consumption）
4.	Accessibility	All paved, 44 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The eixisting water supply facility has not been operated sonce 2005 due to decrepit of this facility. Therefore, water supply condition for the residents is serious.
S56	Biloya	
1.	Town status & population	Town Administrations／4,484 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	4%（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 53 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.

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6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The existing water supply facility was constructed by NGOon 1991. This facility has 1 spring as water source which is not staible by seasonal water product. Hence, this facility can not supply enougth amount of water.
S57	Chrso Mazoria	
1.	Town status & population	Municipal／8,500 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	26%（water consumption）
4.	Accessibility	All paved, 59 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is not difficult.
7.	Others particulars	The eixisting water supply facility has three Hand-pumps (2of them are out of order) and 1 spring source (On-spot). Hence, this facility can not supply enougth amount of water for the residents. New water supply faicility have a high beneficial effect.
S58	Shento	
1.	Town status & population	Woreda Capital／5,345 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	13%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade + Dry-season only, 25 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Out of the study area. The eixisting water supply facility has four Hand-pumps (2of them are out of order) and one public faucet which is distributed by pipes from other town. Water amount of these Hand-pumps became low due to low down of gournd water level (1~2hours per day) and Spring facility

データ 7.1　82小都市の概要 (19/33)

		(On-spot) is out of order. Hence, this facility can not supply enougth amount of water for the residents. New water supply faicility have a high beneficial effect.
S59	Dalbo Atowa	
1.	Town status & population	Town Administrations／4,007 persons
2.	Water potential (quantity) & Water quality	High / Permissible
3.	Water coverage(20lpcd)	6%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 9 ㎞ from Sodo
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The eixisting water supply facility is one spring (On-spot) where is located adjacent town and constructed by NGO on 1996. This facility can not supply enougth amount of water for whole residents due to lack of capacity and decrept. Hence, New water supply faicility have a high beneficial effect.
S60	Lanite	
1.	Town status & population	Kebel Association／7,221 persons
2.	Water potential (quantity) & Water quality	Low / Good
3.	Water coverage(20lpcd)	24%（water consumption）
4.	Accessibility	All paved, 23 ㎞ from Arba Minch
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	
S61	Gewada	
1.	Town status & population	Town Administrations／5,967 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	0%（water consumption）

データ 7.1　82小都市の概要 (20/33)

4.	Accessibility	Paved + Sub-grade + Dry-season-only, 118 ㎞ from Arba Minch, Long distance
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.
7.	Others particulars	This small town is a priority of improvement of accessibilityfor operation & maintenance. Collection of water fee from residents is quite difficult in term of their income amount.
S62	Udasa	
1.	Town status & population	Municipal／4,470 persons
2.	Water potential (quantity) & Water quality	Feasible / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	20％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 37 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	
S63	Kawakoto	
1.	Town status & population	Municipal／783 persons
2.	Water potential (quantity) & Water quality	High / Good
3.	Water coverage(20lpcd)	27％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 48 ㎞ from Bitajira
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Town population is less than 2,000 persons in accordance with list of the candidate small towns.

データ 7.1　82小都市の概要 (21/33)

データ 7.1　82小都市の概要 (22/33)

2 Oromia region 30 towns (listed by ID number)

O01	Iteya	
1.	Town status & population	Municipal／14,239 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	137％（water consumption）
4.	Accessibility	All paved, 23 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	Town population is more than 14,000 persons in accordance with list of the candidate small towns. The existing water source is spring. The enterprise of water supply has established the water board with adjacent towns and they are under operating relatively good management.
O02	Ogolcha	
1.	Town status & population	Town Administrations／4,759 persons
2.	Water potential (quantity) & Water quality	Low / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	129％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 23 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	
O03	Gonde	
1.	Town status & population	Town Administration／4,350 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride

データ 7.1　82小都市の概要 (23/33)

3.	Water coverage(20lpcd)	401%（water consumption）
4.	Accessibility	All paved, 12 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	The existing watersource is spring. The enterprise of water supply has established the water board with adjacent towns and they are under operating relatively good management.
O05	Kidame-Digelu	
1.	Town status & population	Town Administrations／1,780 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	535%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 12 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.
7.	Others particulars	The existing water source is spring.
O06	Sague	
1.	Town status & population	Municipal／10,926 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	87%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 25 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The existing water source is spring. Due to the main road along the town to be opened soon, the town population and water demand became growth. Therefore, beneficial effect of

データ 7.1　82小都市の概要 (24/33)

		the new facility is high.
O07	Kersa	
1.	Town status & population	Municipal／9,916 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	251%（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 55 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities.
7.	Others particulars	Existing water source is spring.
O09	Meraro	
1.	Town status & population	Municipal／4,725 persons
2.	Water potential (quantity) & Water quality	Low / Exist area of Fluoride
3.	Water coverage(20lpcd)	17%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 75 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction works is required some ingenuitiesarround water sources.
7.	Others particulars	The existing water source (spring) is not staible by seasonal water product. Therefore, beneficial effect of the new facility is high.
O10	Kofele	
1.	Town status & population	Municipal／14,401 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	38%（water consumption）
4.	Accessibility	All paved, 26 ㎞ from Sheshemane
5.	Existing rights& Disputes	Unidentified of both.

データ 7.1　82小都市の概要 (25/33)

6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuitiesarround water sources.
7.	Others particulars	Current water supply methord is by private connections andpublic faucets are not operated.
O11	Kulumsa	
1.	Town status & population	Town Administration／3,472 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	12%（water consumption）
4.	Accessibility	All paved, 8 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuitiesarround water sources.
7.	Others particulars	Water supply of this town is transmission pipe line from adjacent town which is installed on 1989. Hence, this facility is liited an amount of water and decrepit. The new water supply facility for own of this town to be beneficiary effect.
O12	Boru Jawi	
1.	Town status & population	Town Administration／4,446 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	37%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 20 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The existing water source (spring) is not staible by seasonal water product. It is not enougth to supply.
O20	Abosa	
1.	Town status & population	Town Administration／3,578 persons
2.	Water potential (quantity)	Low / Unfeasible (Fluoride)

データ 7.1　82小都市の概要 (26/33)

	& Water quality	
3.	Water coverage(20lpcd)	31%（water consumption）
4.	Accessibility	All paved, 10 ㎞ from Zway
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.
O22　Adami Tulu		
1.	Town status & population	Municipal／8,166 persons
2.	Water potential (quantity) & Water quality	Low / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	258%（water consumption）
4.	Accessibility	All paved, 8 ㎞ from Zway
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	New implementation will be done by other donors.
O28　Jido		
1.	Town status & population	Town Administrations／2,659 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	148%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 46 ㎞ from Zway
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	

データ 7.1　82小都市の概要 (27/33)

O29	Katar Genet	
1.	Town status & population	Town Administrations／3,953 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	0%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 33 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	The residentof this town, where is executed the Japanese irrigation project around this town, desire the waer supply project by Japanese fund
O30	Lemo Sirba	
1.	Town status & population	Town Administrations／5,590 persons
2.	Water potential (quantity) & Water quality	Feasible / Exist area of Fluoride
3.	Water coverage(20lpcd)	32%（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 45 ㎞ from Asela
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.
7.	Others particulars	The existing water supply facility was constructed by NGO on 1998, which is decrepit at the moment. The existing water source (spring) is not staible by seasonal water product. It is not enougth to supply.
O31	Milami	
1.	Town status & population	Municipal／4,510 persons
2.	Water potential (quantity) & Water quality	Low / Permissible
3.	Water coverage(20lpcd)	29%（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season-only, 284 ㎞ from Dila

データ 7.1　82小都市の概要 (28/33)

5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	It is difficult for operation & maintenance due to long distance from local plincipal cities.
O32	Garaba	
1.	Town status & population	Municipal／7,500 persons
2.	Water potential (quantity) & Water quality	Low / Permissible
3.	Water coverage(20lpcd)	148％（water consumption）
4.	Accessibility	Paved + Base-course + Sub-grade, 89 ㎞ from Dila
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.
7.	Others particulars	
O33	El Woyya	
1.	Town status & population	Town Administrations／4,090 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	7％（water consumption）
4.	Accessibility	Paved + Sub-grade + Dry-season only, 224 ㎞ from Dila long distance
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Out of the study area.
O34	Bura	
1.	Town status & population	Town Administrations／5,112 persons
2.	Water potential (quantity)	Feasible / Permissible

データ 7.1　82小都市の概要 (29/33)

	& Water quality	
3.	Water coverage(20lpcd)	6%
4.	Accessibility	Paved + Base-course + Sub-grade, 20 ㎞ from Awasa
5.	Existing rights& Disputes	This small town has been sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	This small town is a priority of tranquility for public safety.
O35	Awash Mercasa	
1.	Town status & population	Municipal／10,200 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	57%
4.	Accessibility	All paved, 17 ㎞ from Adama
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Out of the study area.
O36	Walanciti	
1.	Town status & population	Municipal／11,260 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	338％（water consumption）
4.	Accessibility	All-paved, 26 ㎞ from Adama
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	Out of the study area.

データ 7.1　82小都市の概要 (30/33)

O37	Doni	
1.	Town status & population	Town Administrations／4,164 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	0%（water consumption）
4.	Accessibility	Paved + Sub-grade, 42 ㎞ from Adama
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.
7.	Others particulars	Out of the study area.
O38	Befa	
1.	Town status & population	Town Administrations／7,040 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	183%（water consumption）
4.	Accessibility	Paved + Sub-grade, 32 ㎞ from Adama
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Out of the study area.
O39	Intaye	
1.	Town status & population	Municipal／8,500 persons
2.	Water potential (quantity) & Water quality	Low / Unfeasible (Fluoride)
3.	Water coverage(20lpcd)	N.D.
4.	Accessibility	Paved + Base-course + Sub-grade, 26 ㎞ from Awasa
5.	Existing rights& Disputes	This small town has been sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the

データ 7.1　82小都市の概要 (31/33)

		generally gentle hills, construction work is not difficult.
7.	Others particulars	This small town is a priority of tranquility for public safety.
O40	Kabate	
1.	Town status & population	Town Administrations／4,146 persons
2.	Water potential (quantity) & Water quality	Feasible / Permissible
3.	Water coverage(20lpcd)	7%
4.	Accessibility	Paved + Base-course + Sub-grade, 35 ㎞ from Sheshemane
5.	Existing rights& Disputes	Unidentified of b oth.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, which is not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	One of two Hand-pump is out of order due to low down of ground water level. Capacities of the existing water supply facilities are insufficient for the population of the town. Hence, Beneficiary of new water supply facility is high.
O41	Awasho Dhanku	
1.	Town status & population	Kebele Association／7,040 persons
2.	Water potential (quantity) & Water quality	Feasible / Permissible
3.	Water coverage(20lpcd)	0%（water consumption）
4.	Accessibility	All paved,6 ㎞ from Sheshemane
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	One well has construted by NGO on 2010. Other water supply facility is pending to design.
O42	Hursa	
1.	Town status & population	Kebele Association／5,700 persons
2.	Water potential (quantity) & Water quality	Feasible / Permissible
3.	Water coverage(20lpcd)	3.5%（water consumption）

データ 7.1　82小都市の概要 (32/33)

4.	Accessibility	All paved, 13 ㎞ from Sheshemane
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	One spring water source is not able to use due to dry up. Other water source (one Hand-pump) is not enougth to cover with whole of residents. Therefore, new water supply facility has high beneficial effect.
O43	Hidi Lola	
1.	Town status & population	Municipal／6,550 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	23%
4.	Accessibility	Paved + Base-course, 340 ㎞ from Dila, Long distance
5.	Existing rights& Disputes	This small town was sporadic conflicts with residents.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	This small town is a priority of improvement of accessibilityfor operation & maintenance. It is long distance to access to the plicipal cities. Out of the study area.
O44	Fincadaa	
1.	Town status & population	Municipal／7,200 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	122%
4.	Accessibility	Paved, 126 ㎞ from Dila, Long distance
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.
7.	Others particulars	Out of the study area.

データ 7.1　82小都市の概要 (33/33)

O45	Adulala	
1.	Town status & population	Town Administrations／3,601 persons
2.	Water potential (quantity) & Water quality	Unidentified due to out of the study area.
3.	Water coverage(20lpcd)	0%（water consumption）
4.	Accessibility	All paved, 9 ㎞ from Adama
5.	Existing rights& Disputes	Unidentified of both.
6.	Technical specifications& implementation for new water supply facilities	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuitiesarround water sources.
7.	Others particulars	Out of the study area. This town has not the existing water supply facility. The residents buy water from water saler who comes from adjacent towns.

データ 7.2　オロミア州の小都市プロファイル

O-01 Iteya

	Oromia Region					1 /30	
	Name of small town	**:**	**Iteya**			**O- 01**	
	Name of Woreda	**:**	**Hitosa**			**OW- 01**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	7,043	7,196	14,239	
	Woreda	male / female / total	by Census 2007	62,445	61,734	124,179	
	percentage of Town in Woreda					11.5%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	525789	898989	2,159	
03	Town Status			Municipally			
04	Water Source						
	04-01 Water source		Type, No.	Spring (17km from Town)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	14.4L/sec.			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1987			
	05-02 Financial of implementation		Donor's name	Water Aid			
	05-03 Name of implementation (Project name)			Hitosa Iteya water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	Not grasped			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	18nos.			
	05-12 Water reserver Capacity		m3	100m3*1no., 50m3*1no., 25m3*17nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	Not grasped			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	15			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped			
	05-21 Number of House Connection (HC)			2,000			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	Not grasped			
	05-23 Number of Business Conection (BC)			Not grasped			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Not grasped			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	Not grasped			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Enterprise			
	06-03 Number of thechnical staff						
	06-04 Principal works of technical staff						
	06-05 Number of the financial staff						
	06-06 Principal works of financial staff						
	06-07 Categories of water tariff		W.Point, House Connection…etc.	4 tariff categorized			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.15birr/20L			
	House connection		Birr/m3	3.25~4.00birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month				
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.				
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc				
	06-12 Method in case of serious repair		by Regional office, Private company …etc				
	06-13 Principal serious repair with 5-10 years						
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.				
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

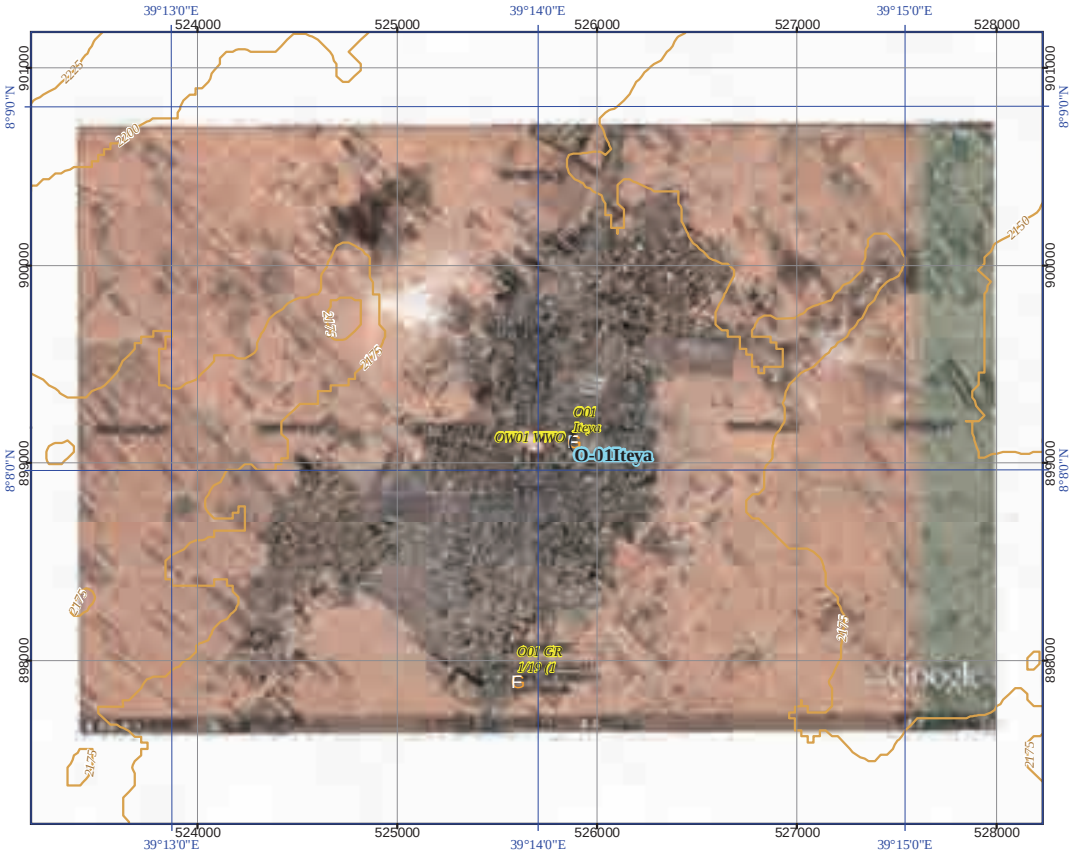
O-01 Iteya

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.		
	Water supply facility	Decrepit, leakage, design failure …etc.		
	07-02 Finalcial			
	Management			
	Rate of water tarrif collection			
	Personnel expenses			
	Shourtage of budget to execute operation & maintenace			
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.		
	Change in industry	increase factory, Trading …etc.		
	Human conflict	Ethnic, Administrative …etc		
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%)			%
	Current Water Coverage (%) (by data of water source product))			437%
	((14.4L)*3600min*24hrs)=1244160L 1244160L/20L=62208 62208/14239=437%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			A / A
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 23km from Asela. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			23
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	Water Aid			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	25	
	-3 Main patients of water born diseases	persons / year	Typhoid 1,000	
			Dysentery 500	
19	Main economic activities		Farming, Waving, Trade	
20	Particular comments :			
	Woreda water borad office in Town. (Boarding towns are Adama, Hitosa, Lobe Hitosa and Dosotsire) which bord is awarded by OWR			
	Town population is more than 14,000 persons in accordance with list of the candidate small towns. The existing water source is spring.			
	The enterprise of water supply has established the water board with adjacent towns and they are under operating relatively good			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-01 Iteya



データ 7.2　オロミア州の小都市プロファイル

O-02 Ogolcha

	Oromia Region					2 /30	
	Name of small town	**:**	**Ogolcha**			**O- 02**	
	Name of Woreda	**:**	**Ziway Dugda**			**OW- 02**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,436	2,323	4,759	
	Woreda	male / female / total	by Census 2007	60,431	60,556	120,987	
	percentage of Town in Woreda					3.9%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	501151	888795	1,707	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Well*1no., Shallow well*2 with HP			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-90m, ??", GL-??m, ??L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Morotized pump / Hand pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. , standby generator			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	Not grasped			
	04-07 Water quality		Iron, Fluoride …etc.	EC1,410 other item are good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1998			
	05-02 Financial of implementation		Donor's name	OSHO			
	05-03 Name of implementation (Project name)			Ogolcha water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			3 (1no. deep well, 2nos Shallow wells)			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP. 3", 800m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	GR*1no.			
	05-12 Water reserver Capacity		m3	GR50m3*1no.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	7			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.3m3/day			
	05-21 Number of House Connection (HC)			301			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.32m3/day			
	05-23 Number of Business Conection (BC)			22			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Not grasped			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.48m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town warter supply servise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			7			
	06-06 Principal works of financial staff			Water meter read, Bill, Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.2birr/20L			
	House connection		Birr/m3	3.5birr/m3			
	Business connection		Birr/m3	Not grasped			
	06-09 Average monthly income by water tariff		Birr/month	7,100birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Asela, Meki, Adama			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Pumpmotor burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Region			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-02 Ogolcha

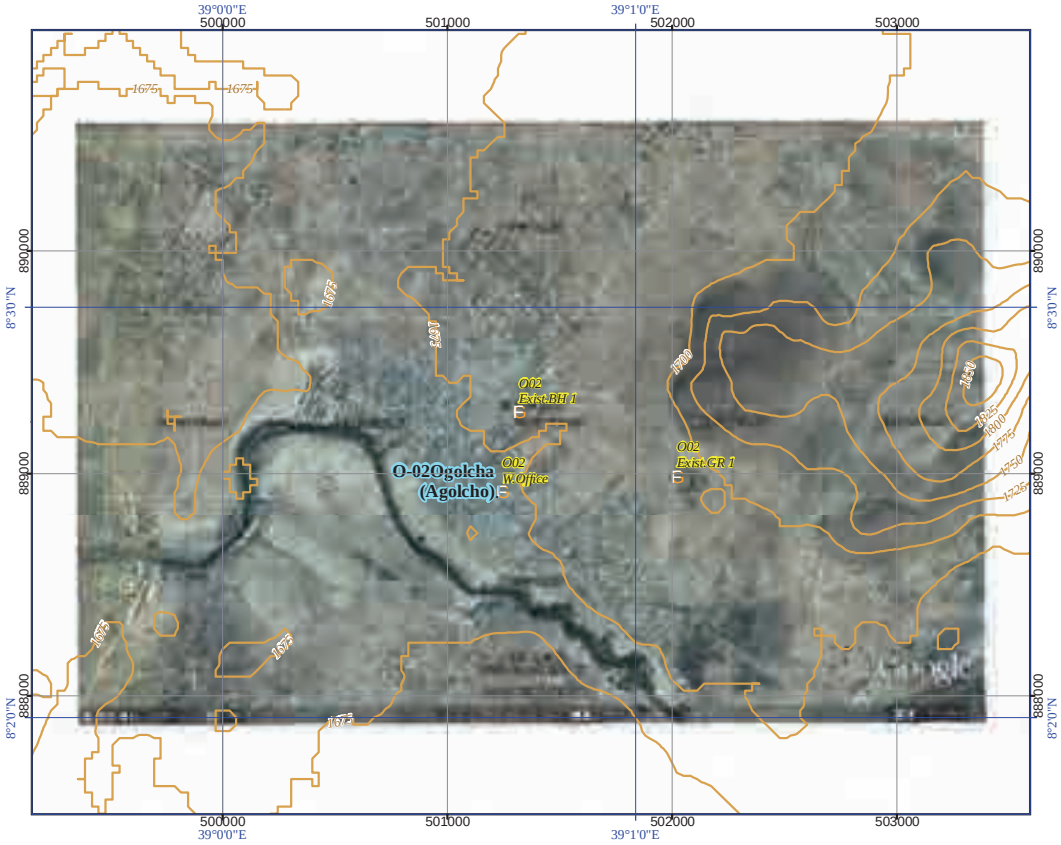
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shorgtage	
	Water supply facility	Decrepit, leakage, design failure …etc.	Pipe line network, Skilled manpower	
	07-02 Finalcial			
	Management		Not skilled personnel	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		129%	
	(2.3m3*7PF+0.32m3*301HC+0.48m3*22BC)=123m3/day 123m3/20Lpcd.= 6,150persons 6,150persons / 4,759 population = 129%			
	Current Water Coverage (%) (by data of water source product))		%	
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Base course 45km from Asela. (=9+36km from Asela)			
13	Manpower Capability of Water Supply Management by Water Office (point)		9	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	OSHO			
17	Main Ethnic Group		Gurage, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	50	
	-3 Main patients of water born diseases	persons / year	Typhoid	1,000
			Malaria	3,000
			Dysentery	150
			others	150
19	Main economic activities		Farming, Trade, Waving	
20	Particular comments :			
21	Remarks :			
		Mr. Negash Gemechu Water Committee Chairman, Mob. 0910769661		
		Mr. Mohammed Sado Water Committee Accountant Mob. 0921106407		

Memo (Town sketch …etc.) :

05-15 Distribution Type		
GIP 3"=1,000m	PVC 1"=315m	
PVC 3/4"=600m	Total L=1,915m	

データ 7.2　オロミア州の小都市プロファイル

O-02 Ogolcha



データ 7.2　オロミア州の小都市プロファイル

O-03 Gonde

	Oromia Region					3 /30	
	Name of small town	**:**	**Gonde**			**O- 03**	
	Name of Woreda	**:**	**Tiyo**			**OW- 03**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,021	2,329	4,350	
	Woreda	male / female / total	by Census 2007	43,443	43,284	86,727	
	percentage of Town in Woreda					5.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	520879	888380	2,258	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring * 4 nos. (fm 42km from Town)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See bolow memo			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1998 (Phase-1) / 1999 (Phase-2)			
	05-02 Financial of implementation		Donor's name	Water Aid			
	05-03 Name of implementation (Project name)			Gonde Iteya water supply project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			4nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	DCIP, 8", 42km			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	GR*15nos.			
	05-12 Water reserver Capacity		m3	GR50m3*2nos., 25m3*13nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	94km (Incl. rural area)			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	5	(Gonde+Iteya=94)		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	5			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.23m3/day			
	05-21 Number of House Connection (HC)			201	(Gonde+Iteya=724)		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	1.66m3/day			
	05-23 Number of Business Conection (BC)			6			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov.*4, Factory*1, Church*1			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.68m3/day (3.3~0.1m3/day)			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town warter supply enterprise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Enterprise			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			Maintenance, Plumbing			
	06-05 Number of the financial staff			15			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	3birr/m3 (Contract system)			!
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	63,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, Pipes&fittings, Vehicle p			
	06-12 Method in case of serious repair		by Regional office, Private company …etc.	Zone			
	06-13 Principal serious repair with 5-10 years			Broken pipe anchor (Thrust block)			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Enterprise			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-03 Gonde

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	Design fairure, expansion pipe lines	
	07-02 Finalcial			
	Management		Not specified	
	Rate of water tarrif collection		Not specified	
	Personnel expenses		Not specified	
	Shourtage of budget to execute operation & maintenace		Not specified	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increase population	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the foot of mountain & flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		401%	!
	(2.23m3*5PF+1.66m3*201HC+0.68*6BC)=348.9m3/day 348.9m3/20Lpcd.= 17,444 persons		17,445persons / 4,350 population = 4	
	Current Water Coverage (%) (by data of water source product))		%	
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt 12km from Asela. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		23	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	Water Aid			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Government clinic, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	11	
	-3 Main patients of water born diseases	persons / year	Typhoid 1,000	
			Dysentery 250	
			others 850	
19	Main economic activities		Trade, Farming, Waving	
20	Particular comments :			
	Pipe line network (Pipe material DIP, SGP, PVC, PE)			!
	Hitosa Water Borad has Award from Oromia Water Bureau on 2002 for efficiency management.			!
21	Remarks :			
	The existing watersource is spring. The enterprise of water supply has established the water board with adjacent towns and they are under operating relatively good management.			
	Mr. Abe Wabe (Chairman of Water Board) 0920-029-948 Mr. Wodo Khadir (Town water head) 0912-0643-354			

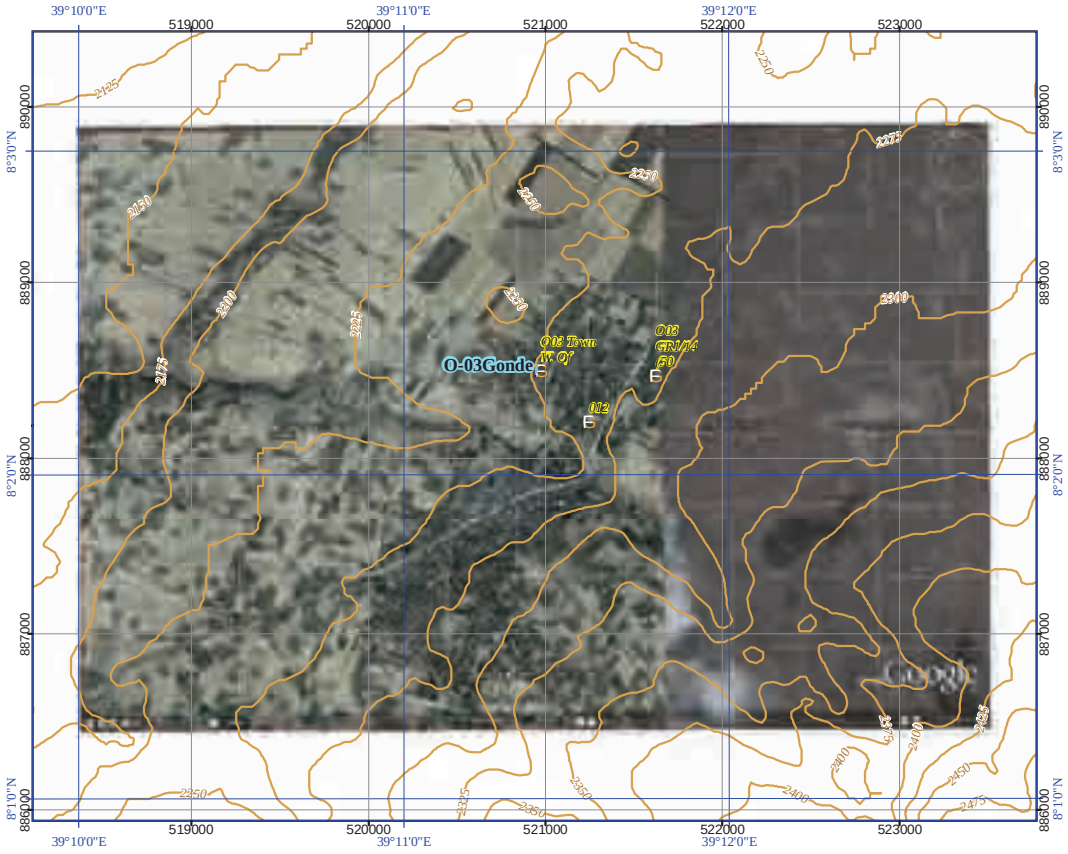
Memo (Town sketch …etc.) :

04-02 Well spec.			
Spring No.1	10L/sec.	Spring No.3	??L/sec.
Spring No.2	9L/sec.	Spring No.4	??L/sec.

06-08 Water tariff rate (Buisiness Connection)	Water Meter Lease	deposit
0~5 m3 =3.25birr/m3	ND-1/2"=5.0birr/month	75.0birr/deposit
5~10 m3 =3.50birr/m3	ND-3/4"=8.0birr/month	100.0birr/deposit
10~20 m3 =3.75birr/m3	ND-1"=10.0birr/month	125.0birr/deposit
20~ m3 =4.00birr/m3	ND-1*1/2"=20.0birr/month	200.0birr/deposit
	ND-2"=30.0birr/month	250.0birr/deposit

データ 7.2　オロミア州の小都市プロファイル

O-03 Gonde



データ 7.2　オロミア州の小都市プロファイル

O-05 Kidame Digelu

	Oromia Region					4 /30	
	Name of small town	**:**	**Kidame Digelu**			**O- 05**	
	Name of Woreda	**:**	**Digaluna Tijo**			**OW- 04**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	809	971	1,780	
	Woreda	male / female / total	by Census 2007	69,471	70,942	140,413	
	percentage of Town in Woreda					1.3%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	527753	858194	2,677	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring * 1no. (3km from Town)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	2.15L/sec.			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2007			
	05-02 Financial of implementation		Donor's name	World Vision			
	05-03 Name of implementation (Project name)			Kidame Digelu water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 4", 3,000m			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	100m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	8			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	5FC*6PF, 2FC*2PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4.0m3/day			
	05-21 Number of House Connection (HC)			119			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	1.3m3/day			
	05-23 Number of Business Conection (BC)			11			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School, Mosque, Hotel, Health center			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.33m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Plumbing			
	06-05 Number of the financial staff			8			
	06-06 Principal works of financial staff			Water meter read, Bill, Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connnection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.05birr/20L			
	House connection		Birr/m3	1.80birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	1,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Asela			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pupes&fittings, Water meter			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-05 Kidame Digelu

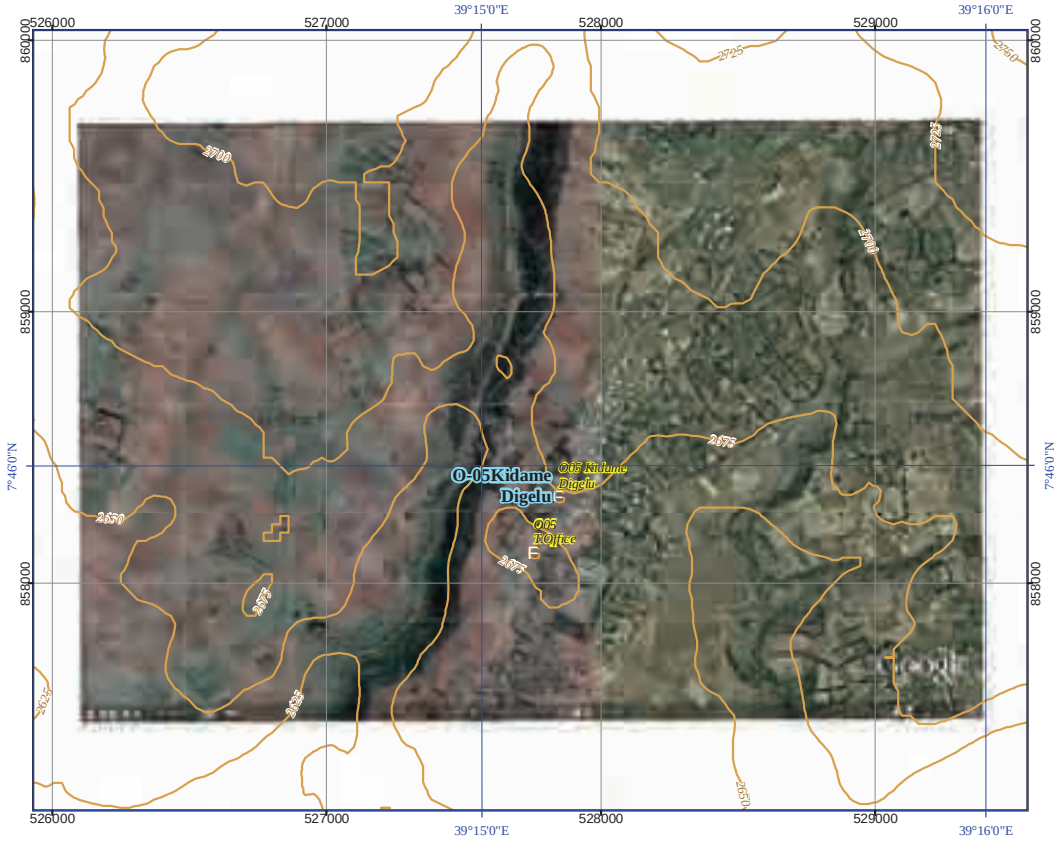
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	nil.	
	Water supply facility	Decrepit, leakage, design failure …etc.	Pipe network limitation	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers, students	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on gently slope on mountain.			
09	Necessary Institution (Facility, Material)			
	Expansion Ground Reservoir			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%)		535%	!
	(4.0m3*8PF+1.3m3*119HC+0.33m3*11BC)=190.3m3/day 190.3m3/20Lpcd.= 9,515persons 9,515persons/1,780population=535%			
	Current Water Coverage (%) (by data of water source product))		522%	
	((2.15L)*3600min*24hrs)=185760L 185760L/20L=9288persons 9288persons/1780population=243%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Sub Grade 15km from Sague. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		12	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	World Vision			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	42	
	-3 Main patients of water born diseases	persons / year	Typhoid 264	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
21	Remarks :			
	Mr. Girma Teshome Former Water committee member and town dewellor Mob. 0912258158			

Memo (Town sketch …etc.) :

05-15 Distribution Type (Spring No.1)			
PVC 4"=500m	PVC 2*1/2"=2,000m		
PVC 3"=1,000m	PVC 2"=2,000m	Total L=5,500m	

データ 7.2　オロミア州の小都市プロファイル

O-05 Kidame Digelu



データ 7.2　オロミア州の小都市プロファイル

O-06 Sague

	Oromia Region					5 /30	
	Name of small town	**:**	**Sague**			**O- 06**	
	Name of Woreda	**:**	**Digaluna Tijo**			**OW- 04**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	5,044	5,882	10,926	
	Woreda	male / female / total	by Census 2007	69,471	70,942	140,413	
	percentage of Town in Woreda					7.8%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	517142	857073	2,521	
03	Town Status			Municipally			
04	Water Source						
	04-01 Water source		Type, No.	Spring*2nos. 22km from Town			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	No.1 8L/sec. / No.2 1L/sec.			
	04-03 Method of water draw		Pump, Gravity	No.1 Pump / No.2 Gravity			
	04-04 Pump Spec.		Type, Yield	No.1 Morotized pump			
	04-05 Power source for motorized pump		Type, Kva	No.1 Commercial Elec. With standby Generator			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	No.1 11hrs. 19:00~08:00 /No.2 24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2004			
	05-02 Financial of implementation		Donor's name	OWRB			
	05-03 Name of implementation (Project name)			Gugesa water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			2nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	No.1 GIP 4" 800m / No.2 PVC 3" 6,000m			
	05-07 Power to convey		Pressure, Gravity	No.1 Pressure / No.2 Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	GR*5nos.			
	05-12 Water reserver Capacity		m3	100m3*2nos. / 50m3*1no. / GR25m2*2nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	see below memo			!
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	25 (Town 9 / Rural 16)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4.3m3./day			
	05-21 Number of House Connection (HC)			834			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.166m3/day			
	05-23 Number of Business Conection (BC)			72			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov. School, Hotel, Hospital			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.166m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town warter supply servise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	OWRB			
	06-03 Number of thechnical staff			5			
	06-04 Principal works of technical staff			Pump Operation, Plumbin			
	06-05 Number of the financial staff			4			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W.Point, House Conection (Incl. B.Connection)			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.05 birr / 20L			
	House connection		Birr/m3	see below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	20,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Asela, Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipe fitting, Water meter, Filters			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone			
	06-13 Principal serious repair with 5-10 years			Generator broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	NGO (Ethio-Italy)			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-06 Sague

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Not be grasped (Specialy water source)	
	Water supply facility	Decrepit, leakage, design failure …etc	Blackout of Elec. Power, Skilled Monpower	
	07-02 Finalcial			
	Management		Not be grasped	
	Rate of water tarrif collection		Not be grasped	
	Personnel expenses		Not be grasped	
	Shourtage of budget to execute operation & maintenace		Not be grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	coming from villages	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		Not be grasped	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			87%
	(4.43m3*9PF+0.166m3*834HC+0.166m3*72BC)=190.3m3/day 190.3m3/20Lpcd.= 9,515persons 9,515persons / 10,926 population = 87%			
	Current Water Coverage (%) (by water product at wells and/or springs)			185%
	(8L.sec.*3600sec.*11hrs)+(1Lsec.*3600sec.*24hrs)=403200L/day=403m3/day 403m3/20Lcd=20160 persos 20160persons/10926population=185%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Base course & detour 25km from Asela where is under construction.			
13	Manpower Capability of Water Supply Management by Water Office (point)			16
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	23	
	-3 Main patients of water born diseases	persons / year	Typhoid 1,500	
			Dysentery 1,000	
			others 500	
19	Main economic activities		Trade, Farming, Waving	
20	Particular comments :			
	Distribution pipe network is insufficient for water coverage in towm at the moment. It shall be expanded.			
	The existing water source is spring. Due to the main road along the town to be opened soon, the town population and water demand became growth. Therefore, beneficial effect of the new facility is high.			
21	Remarks :			
	Elec. fee 8,000birr/month			

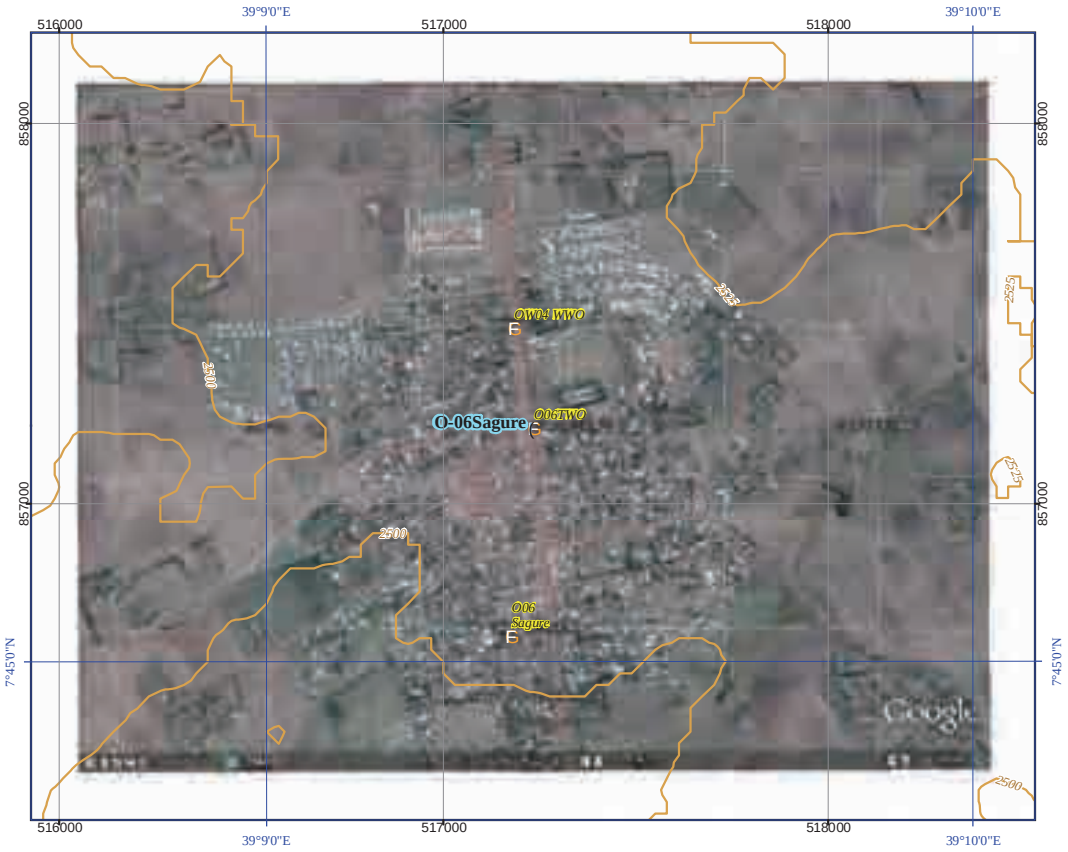
Memo (Town sketch …etc.) :

05-15 Distribution Type (Spring No.1)				
PVC 6"=5,000m	PVC 2*1/2"=9,000m			!
PVC 4"=6,000m	PVC 2*1/2"=5,000m (Rural ara)			
	Total L=20,000m (incl. Rural ara 25,000m)			
05-15 Distribution Type (Spring No.2) PVC 3" 6,000m				

06-08 Water Tariff (House and Business Connection)			
0 ~ 3 m3 = 2.35birr/m3	9 ~ 11 m3 = 3.65birr/m3	Water meter lease ;	
4 ~ 5 m3 = 2.80birr/m3	11m3 ~ = 4.00birr/m3	dia. 1/2"= 5.0birr/month	dia. 1*1/2"= 20.0birr/month
6 ~ 8m3= 3.20birr/m3		dia. 3/4"= 8.0birr/month	dia. 1"= 10.0birr/month

データ 7.2　オロミア州の小都市プロファイル

O-06 Sague



データ 7.2　オロミア州の小都市プロファイル

O-07 Kersa

	Oromia Region					6 /30	
	Name of small town	**:**	**Kersa**			**O- 07**	
	Name of Woreda	**:**	**Munesa**			**OW- 05**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	4,803	5,113	9,916	
	Woreda	male / female / total	by Census 2007	82,497	83,917	166,414	
	percentage of Town in Woreda					6.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	498043	831878	2,728	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no. 6km from Town			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	0.5L/sec.			!
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1990			
	05-02 Financial of implementation		Donor's name	OWRB			
	05-03 Name of implementation (Project name)			Kersa water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP 4" 10,000m (10km)			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	GR*2nos.			
	05-12 Water reserver Capacity		m3	GR100m3*1no., GR25m2*1no.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP 3"~3/4" see below memo 12,500m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	16			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2faucet*7WP/4Faucet*4WP/ 5Faucet*5WP			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	1.9m3/day (57.6m3/month)			
	05-21 Number of House Connection (HC)			1,003			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.41m3/day			
	05-23 Number of Business Conection (BC)			50			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov., School, Hospital, Hotel			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	1.12m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply servise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Zone			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Plumbing, Pipe repair			
	06-05 Number of the financial staff			10			
	06-06 Principal works of financial staff			Water meter count, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House Connecti			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	2.0birr/m3			
	House connection		Birr/m3	see below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	26,000birr/month			!
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Asela, Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipe fiting, Water Meter, ´			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Town Water Office			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-07 Kersa

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.			
	07-02 Finalcial				
	Management		Demand permanent office		
	Rate of water tarrif collection				
	Personnel expenses		Shortage staff number		
	Shourtage of budget to execute operation & maintenace				
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is alomost Flat area with gentle slope				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			251%	!
	(1.9m3*16PF+0.41m3*1003HC+1.12m3*50BC)=497.63m3/day 497.63m3/20Lpcd.= 24,881persons 24,881persons /9,916 population = 251%				
	Current Water Coverage (%) (by water product at wells and/or springs)			22%	
	(0.5L.sec.*3600sec.*24hrs)=43200L/day=43.2m3/day 43200/20Lcd=2160 persos 2160persons/9916population=22%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			C / C	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is Sub grade 55km from Asela / from Adele, Lake Langano (50km)				
13	Manpower Capability of Water Supply Management by Water Office (point)			15	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Oromo		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	57		
	-3 Main patients of water born diseases	persons / year	Diarrhea	1,200	
			Dysentery	607	
			Typhoid	415	
			others	950	
19	Main economic activities		Trade, Farming, Livestock		
20	Particular comments :				
21	Remarks :				
	Access is base cource of asphalt pavement. (Gravel road)				

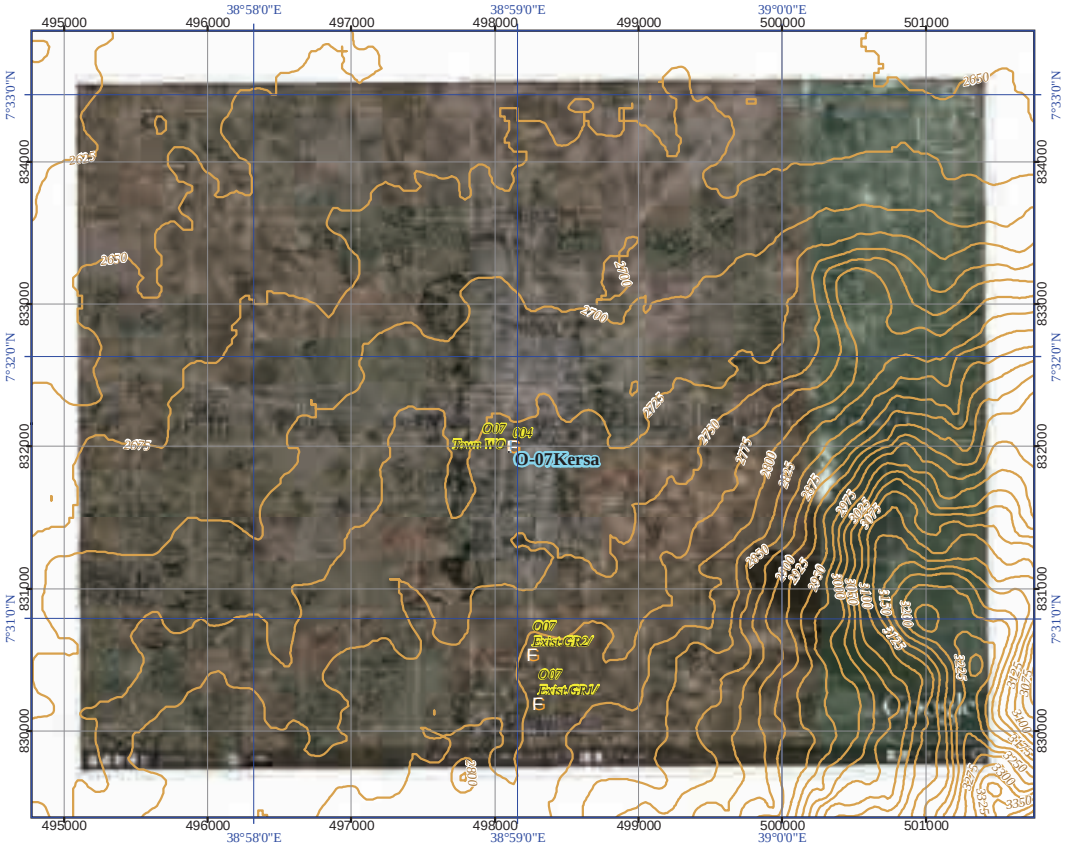
Memo (Town sketch …etc.) :

05-15 Distribution Type (GIP)			
3" = 1,500m	1*1/2"= 2,500m		
2*1/2"= 1,000m	1"= 1,000m		
2"= 3,500m	3/4"=3,000m	Total=12,500m	

06-05 Water tariff		Water meter lease ;
0~3m3 = 3.15birr/m3	8~11m3 = 5.30birr/m3	Dia. 1/2" = 2.0birr/month
3~5m3 = 4.20birr/m3	11m3~ = 5.90birr/m3	Dia. 3/4" = 3.0birr/month
5~8m3 = 4.80birr/m3		Dia. 1" = 5.0birr/month

データ 7.2　オロミア州の小都市プロファイル

O-07 Kersa



データ 7.2　オロミア州の小都市プロファイル

O-09 Merano

	Oromia Region					7 /30	
	Name of small town	**:**	**Merano**			**O- 09**	
	Name of Woreda	**:**	**Limana Bilbilo**			**OW- 20**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,234	2,491	4,725	
	Woreda	male / female / total	by Census 2007	89,853	91,936	181,789	
	percentage of Town in Woreda					2.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	526870	818549	2,979	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Spring * 1no. (During Rainy season)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	07:30-09:00 (1.5hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	food			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1989			
	05-02 Financial of implementation		Donor's name	Not grasped			
	05-03 Name of implementation (Project name)			Merano water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 1,000m			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	25m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	6 (3 function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6FC*5PF, 1FC*2PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.0m3/day			
	05-21 Number of House Connection (HC)			63			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.1m3/day			
	05-23 Number of Business Conection (BC)			8			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Mosque, School, Gov.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.47m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water office			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water meter read, Bill, Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L			
	House connection		Birr/m3	1.5birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	350birr/m3			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes& fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda, Zone			
	06-13 Principal serious repair with 5-10 years			Pipe leakage			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-09 Merano

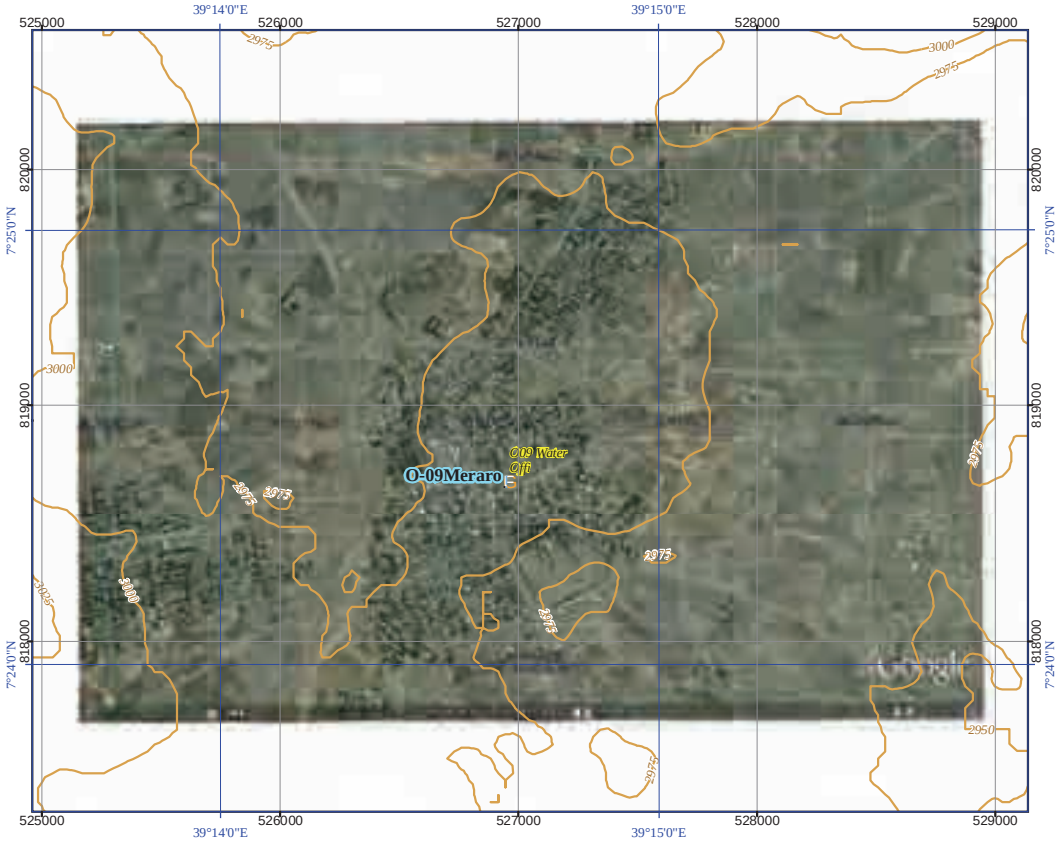
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shortage water		
	Water supply facility	Decrepit, leakage, design failure …etc.	Not supply water arround intake area		
	07-02 Finalcial				
	Management		Shortage budget		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		low		
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from other towns & villagers		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the slope of mountain & flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			17%	!
	(2.0m3*3PF+0.10m3*63HC+0.47m3*8BC)=16.1m3/day 16.1m3/20Lpcd.= 805 persons		805persons / 4,725 population = 17%		
	Current Water Coverage (%) (by data of water source product))				
11	Water Potential (A / B / C / D / E)			C	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / C	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Base cource and Sub grade 75km from Asela				
13	Manpower Capability of Water Supply Management by Water Office (point)			9	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	Refer to the Chapter 6				
16	Other Donors, NGO's				
	Refer to the Chapter 6				
17	Main Ethnic Group		Oromo		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store, Health post		
	-2 Nearest other facilities from Town	km	71		
	-3 Main patients of water born diseases	persons / year	Typhoid	1,500	
			Dysentery	300	
			Diarrhea	17	
			others	1,300	
19	Main economic activities		Trade, Farming, Waving		
20	Particular comments :				
	The existing water source (spring) is not staible by seasonal water product. Therefore, beneficial effect of the new facility is high.				
21	Remarks :				
		Mr. Wondimu Jote Mayor of the town administration Mob. 0912260451			
		Mr. Gebissa Haile Water Committee chairman Mob. 091322392712260451			
		Mr. Challa Dechassa Finance head of water committee 0910831709			

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP 3"=4,000m	GIP 2"=840m		
GIP 2*1/2"=350m	PVC 1*1/2"=1,190m	Total L=6,380m	

データ 7.2　オロミア州の小都市プロファイル

O-09 Merano



データ 7.2　オロミア州の小都市プロファイル

O-10 Kofele

	Oromia Region					8 /30	
	Name of small town	**:**	**Kofele**			**O- 10**	
	Name of Woreda	**:**	**Kofele**			**OW- 08**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	7,340	7,061	14,401	
	Woreda	male / female / total	by Census 2007	90,000	89,508	179,508	
	percentage of Town in Woreda					8.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	476343	782584	2,648	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump 15kw			
	04-05 Power source for motorized pump		Type, Kva	Comercial Elec., Stand by Generator (Brokecn)			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	08:00-12:00, 14:00-22:00 (12hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1975			
	05-02 Financial of implementation		Donor's name	Chilallo Agriculture Development Unit			
	05-03 Name of implementation (Project name)			Kofeletown water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 2,000m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER			
	05-11 Water reserver No.		no.	2nos.			
	05-12 Water reserver Capacity		m3	10m3*2nos. (Roto tanks)			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	3 (not function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			650			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.167m3/day			
	05-23 Number of Business Conection (BC)			Not grasped			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Not grasped			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	Not grasped			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Woreda			
	06-03 Number of thechnical staff			3			
	06-04 Principal works of technical staff			Pump operation, Plumbing&repair			
	06-05 Number of the financial staff			3			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	Not function			
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	7,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Sheshemane			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone, Region			
	06-13 Principal serious repair with 5-10 years			Pumpmotor burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Region, Municipality			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-10 Kofele

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.	Superannuation		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		low		
	Personnel expenses		nil.		
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			38%	
	(0m3*3PF+0.167m3*650HC+0.167*0BC)=108.6m3/day 108.6m3/20Lpcd.= 5,427 persons 5,427persons / 14,401 population = 38%				
	Current Water Coverage (%) (by data of water source product))			%	
	((??L+4.4L)*3600min*8hrs)=???L ???L/20L=???persons ???persons/11260population=???%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is asphalt road 26km from Sheshemane * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			13	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuitiesarround water sources.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Oromo, Gurage		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Health post		
	-2 Nearest other facilities from Town	km	41		
	-3 Main patients of water born diseases	persons / year	Typhoid	1,500	
			Dysentery	300	
			Diarrhea	97	
			others	800	
19	Main economic activities		Trade, farming, Livestock		
20	Particular comments :				
	Current water supply methord is by private connections andpublic faucets are not operated.				
21	Remarks :				
		Mr. Gobena Berati Committee secerary 0916319427,			
		Mr. Yesma Negatu Chaiman of water Committee Mob. 0916055020			
		Mr. Seid Ahemed Casher Mob. 0913525551			

Memo (Town sketch …etc.) :

04-02 Well spec.

Well No.1; Estbsh on 1975 GL-??m / Casing dia.??" / SWL GL-??m ??L/sec.

Well No.2; Estbsh on ???? GL-200m / Casing dia. 8" / SWL GL-115m / 4.4L/sec.

05-15 Distribution Type

GIP 2"=3,000m	PVC 1*1/2"=3,000m	
PVC 1"=2,300m	PVC 2"=400m	Total L=8,700m

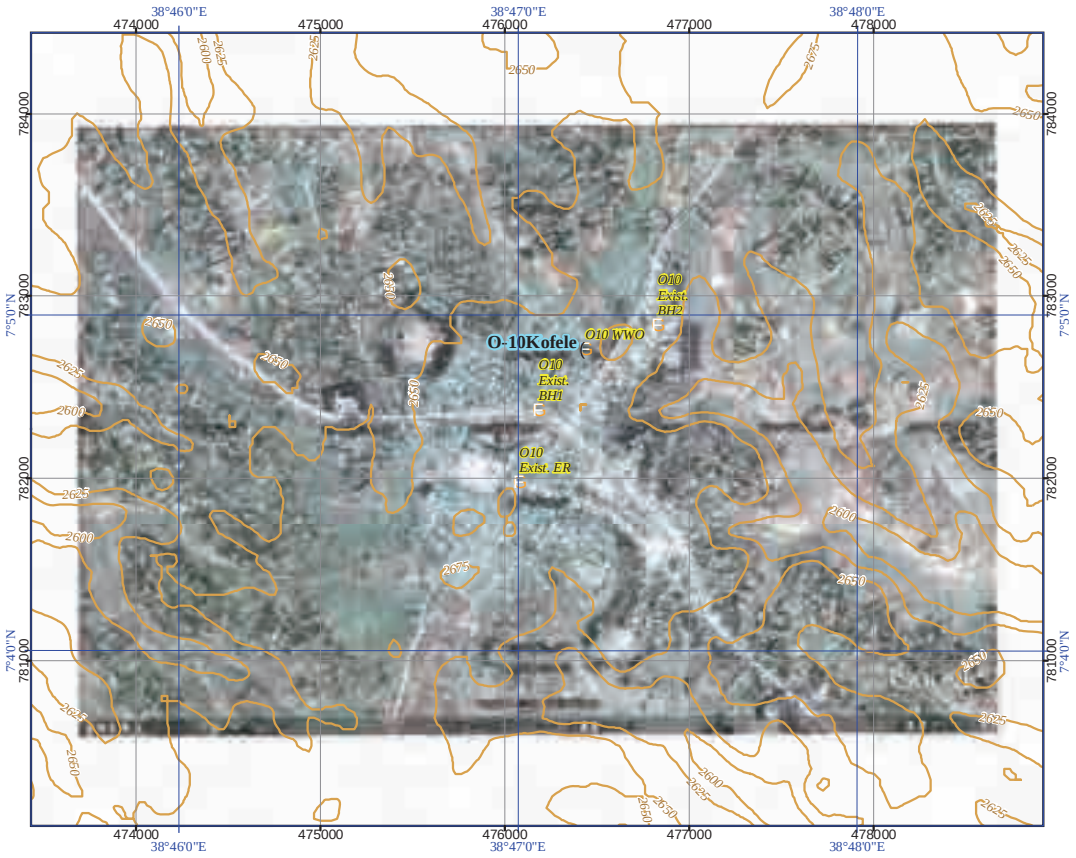
06-08 Water Tariff (House and Business Connection)

0 ~ 5 m3 = 3.50birr/m3 11m3~= 4.50birr/m3

5 ~ 11 m3 = 4.00birr/m3

データ 7.2　オロミア州の小都市プロファイル

O-10 Kofele



データ 7.2　オロミア州の小都市プロファイル

O-11 Kulumsa

	Oromia Region					9 /30	
	Name of small town	**:**	**Kurumusa**			**O- 11**	
	Name of Woreda	**:**	**Tiyo**			**OW- 03**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	1,596	1,876	3,472	
	Woreda	male / female / total	by Census 2007	43,443	43,284	86,727	
	percentage of Town in Woreda					4.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	517670	886130	2,215	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	nil.	Distributed from Asela		!
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	nil.	Town & Gonde Town		
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	12hrs./day			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1989			
	05-02 Financial of implementation		Donor's name	OWRB			
	05-03 Name of implementation (Project name)			Goneda Kulumusa water project			
	05-04 Intake Type			Spring (Goneda spring)			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	Not grasped (from Asela)			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 3"*1,000m, 1"*70m Total 1,070m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Manosonry			
	05-18 Number of water point (Public Faucet, PF)		no.	2			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4.0m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Kulumsa Kebele water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town administration			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	1.0birr/month/household			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	800birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Asela			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Lulumsa agricultural research center			
	06-13 Principal serious repair with 5-10 years			Water Leakage from pipes			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Town administration			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

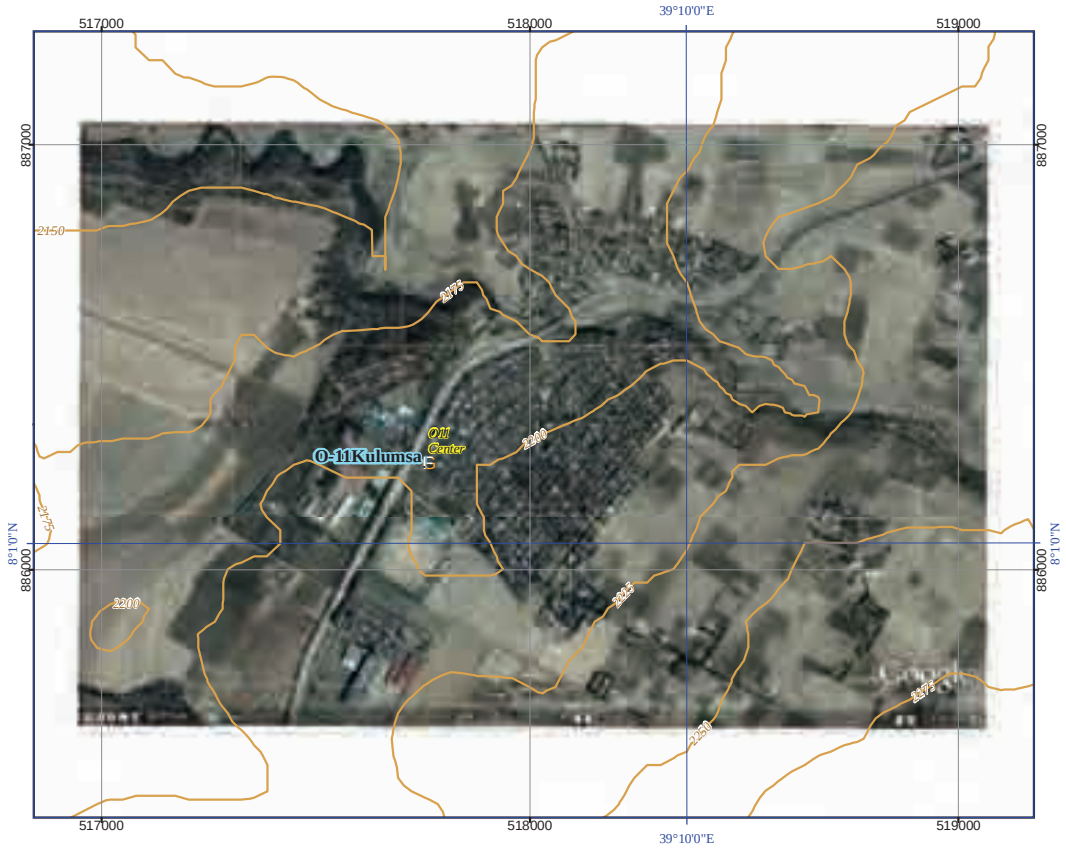
O-11 Kulumsa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	There are not own water supply facility.	!
	07-02 Finalcial			
	Management		low	
	Rate of water tarrif collection		low	
	Personnel expenses		low	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	Factory, Institude center	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%)		12%	!
	(4.0m3*2PF+0m3*0HC+0m3*0BC)=8.0m3/day 8.0m3/20Lpcd.= 400persons 400persons / 3,472 population = 12%			
	Current Water Coverage (%) (by data of water source product))		%	
	((??L)*??min*??hrs)=??L ??L/20L=??persons ??persons/3472population=??%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 8km from Asela. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		8	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic	
	-2 Nearest other facilities from Town	km	7	
	-3 Main patients of water born diseases	persons / year	Typhoid 200	
19	Main economic activities		Waving, Trade	
20	Particular comments :			
	Town has not own water supply facility. Existing water facility (distribution) is supplied from Asela town.			!
	Water supply of this town is transmission pipe line from adjacent town which is installed on 1989. Hence, this facility is liited an amount of water and decrepit. The new water supply facility for own of this town to be beneficiary effect.			
21	Remarks :			
	Mr. Tsegaye Tolla town Resedant Mob. 09200397096 Mr. Girma Bekele o1 Kebele chairman. Mob. 0910418924, 0223314886			
	Mr. Tibesa Tese Kebele Cabine member Mob.0922030568 Mr. Getachew Taffa Water saler 0910427488			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-11 Kulumsa



データ 7.2　オロミア州の小都市プロファイル

O-12 Boru Jawi

	Oromia Region					10 /30	
	Name of small town	**:**	**Boru Jawi**			**O- 12**	
	Name of Woreda	**:**	**Hitosa**			**OW- 01**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,090	2,356	4,446	
	Woreda	male / female / total	by Census 2007	62,445	61,734	124,179	
	percentage of Town in Woreda					3.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	527151	89046	2,370	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	0.6 L/sec. (?)			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1994			
	05-02 Financial of implementation		Donor's name	Water Aid			
	05-03 Name of implementation (Project name)			Hitosa water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	25m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	7			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.0m3/day			
	05-21 Number of House Connection (HC)			37			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.5m3/day			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply servise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town			!
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Plumbing			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water sale, Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1 birr/20L			
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	4,100birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipe&fitting of large dia.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Water Aid (NGO)			
	06-13 Principal serious repair with 5-10 years			Spring source was replaced.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Enterprise			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-12 Boru Jawi

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure (Reservoir…etc.)	
	07-02 Finalcial			
	Management		Not grasped	!
	Rate of water tarrif collection		Not grasped	!
	Personnel expenses		Not grasped	!
	Shourtage of budget to execute operation & maintenace		Not grasped	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Coming from other villages	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the slope of mountain and flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		37%	
	(2m3*7PF+0.5m3*37HC+0m3*0BC)=32.5m3/day 32.5m3/20Lpcd.= 1625persons 1625persons / 4,446 population = 129%			
	Current Water Coverage (%) (by data of water source product))		58%	
	(0.6L.sec.*3600sec.*24hrs)=51840L/day 51840/20Lcd=2592 persos 2592persons/4446population=58%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Base course 20km from Asela. (=16+4km)			
13	Manpower Capability of Water Supply Management by Water Office (point)		12	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Water Aid			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	23	
	-3 Main patients of water born diseases	persons / year	Typhoid 15	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Resident buy water from water saler who caming from Gonde Town (6km from Boni Jawi).			
	The existing water source (spring) is not staible by seasonal water product. It is not enougth to supply.			
21	Remarks :	Mr. Tassew Zeleke Plan & programme head of town Adm. Mob. 0913449188		
		Mr. Musa Geleta Boru Jwwi Town administrator Mob. 0913341786		
		Mr. Husen Mohamed Engineer Mob. 0911013334		
		Mr. Zenebe Abetew Water system technician, Mob. 0912115094		

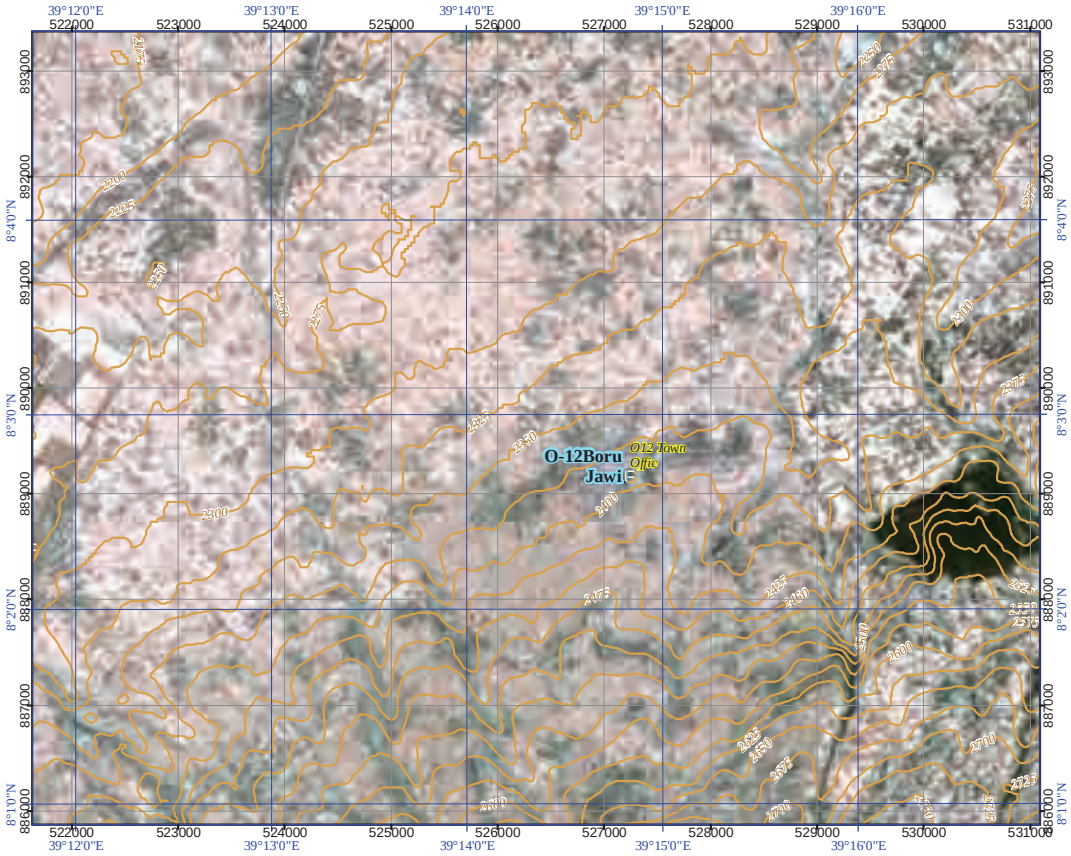
Memo (Town sketch …etc.) :

05-15 Distribution Type (Spring No.1)			
PVC 4"=350m	PVC 1"=1,550m		
PVC 2"=1,550m	PVC 3/4"=100m	Total L=3,050m	

06-05 Water tariff		
0~5m3 = 3.25birr/m3	10m3~ = 5.00birr/m3	
6~10m3 = 3.50birr/m3		

データ 7.2　オロミア州の小都市プロファイル

O-12 Boru Jawi



データ 7.2　オロミア州の小都市プロファイル

O-20 Abosa

	Oromia Region					11 /30	
	Name of small town	**:**	**Abosa**			**O- 20**	
	Name of Woreda	**:**	**\dami Tulu & Jido Kombolch**			**OW- 16**	
	Name of Zone	**:**	**East Shewa**			**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	1,786	1,792	3,578	
	Woreda	male / female / total	by Census 2007	71,883	70,978	142,861	
	percentage of Town in Woreda					2.5%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	469693	886574	1,677	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-45m, ??", ??m, 4.7L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00~, 10:45~, 14:00~, 18:00~ 45min.ea Total 3hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	Fluoride ?			!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1979			
	05-02 Financial of implementation		Donor's name	OWRB			
	05-03 Name of implementation (Project name)			Abosa water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 200m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER			
	05-11 Water reserver No.		no.	2nos.			
	05-12 Water reserver Capacity		m3	6m3, 10m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 2", 400m, PVC 2", 800m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	4			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2FC*3PF, 6FC*1PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4.0m3/day			
	05-21 Number of House Connection (HC)			19			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.317m3/day			
	05-23 Number of Business Conection (BC)			2			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School, Health center			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.317m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation, Plumbing, Water meter read			
	06-05 Number of the financial staff			5			
	06-06 Principal works of financial staff			Water sale, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.20birr/20L			
	House connection		Birr/m3	7.00birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	4,500birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Zone			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Pumpmotor burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water commitiee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-20 Abosa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage, Fluoride	!
	Water supply facility	Decrepit, leakage, design failure …etc.	Pipe network is limited.	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc.	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area. (bordering Lake Zeway in the east at about 200m.)			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		32%	
	(4m3*4PF+0.317m3*19HC+0.317*2BC)=22.7m3/day 22.7m3/20Lpcd.= 1,135 persons 1,135persons / 3,578 population = 32%			
	Current Water Coverage (%) (by data of water source product))		189%	
	((4.7L)*3600min*8hrs)=135360L 135360L/20L=6768persons 6768persons/3578population=185%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is asphalt road 10km from Zway * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		10	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Drug store	
	-2 Nearest other facilities from Town	km	100	
	-3 Main patients of water born diseases	persons / year	Mararia 3,500	
			Typhoid 505	
			Dysentery 260	
			Cholera 50	
			Diarrhea 25	
			others 2,000	
19	Main economic activities		Farming	
20	Particular comments :			
	In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.			
21	Remarks :			
		Mr. Bekele Chaka Water Com. Chairman Mob 0913565610		
		Mr. Abie Gemeda Operator Mob. 0920084475		

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-20 Abosa

データ 7.2　オロミア州の小都市プロファイル

O-22 Adami Tulu

	Oromia Region					12 /30	
	Name of small town	**:**		**Adami Tulu**		**O- 22**	
	Name of Woreda	**:**		**Adami Tulu & Jido Kombolch**		**OW- 16**	
	Name of Zone	**:**		**East Shewa**		**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	4,006	4,160	8,166	
	Woreda	male / female / total	by Census 2007	71,883	70,978	142,861	
	percentage of Town in Woreda					5.7%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	467669	869137	1,665	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well*2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See belo memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	Not grasped			
	04-07 Water quality		Iron, Fluoride …etc.	high Floride Well No.1 8.01mg/l , Well No.2 3.5mg/			!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2008			
	05-02 Financial of implementation		Donor's name	OWRB &LVIA			
	05-03 Name of implementation (Project name)			Adami Tulu water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 1,252m, 2", 500m (Total 1,752m)			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	50m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	11 (1PF is not function)			
	05-19 Number of faucet at a water point (Public Faucet, PF		no.	6			
	05-20 Average of daily water consumption at a water point		m3/day	8.0m3/day			
	05-21 Number of House Connection (HC)			701			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.26m3/day			
	05-23 Number of Business Conection (BC)			13			
	05-24 Type of Business Connection (BC)	Factory, School, Gov. office, Hospital …etc.		Hotel, Chrch, others			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	12m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water office			
	06-02 Type of organization		Regional, Zone, Enterprice…etc	Zone			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			Pump operation, Plumbing			
	06-05 Number of the financial staff			4			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, H. connection, B. Connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.5birr/20L			
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	29,400birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Zway			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair	by Regional office, Private company …etc		Zone, Region			
	06-13 Principal serious repair with 5-10 years			Pump failure			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water supply service			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-22 Adami Tulu

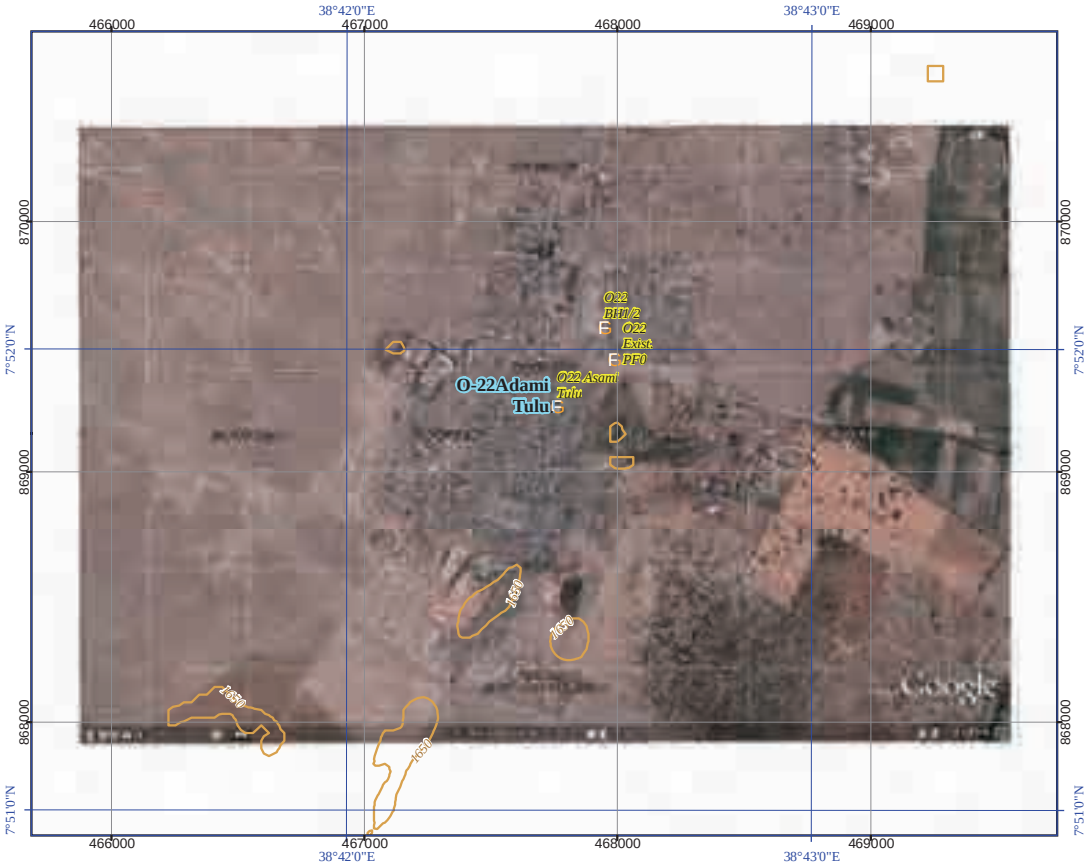
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.	Leakage from pipe lines		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not grasped		
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume wa	coming from other towns, villages …etc.	Coming from other villagers		
	Change in industry	increase factory, Trading …etc.	Increase Flower & Wine farm		
	Human conflict	Ethnic, Administrative …etc.	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)		258%		!
	(8.3m3*10PF+0.26m3*701HC+12.0m3*13BC)=421.3m3/day　421.3m3/20Lpcd.= 21065 persons 21065persons / 8,166 population = 25				
	Current Water Coverage (%) (by data of water source product))		106%		
	((3.5L+2.5L)*3600min*8hrs)=172800L　172800L/20L=8640persons　8640persons/8166population=106%				
11	Water Potential (A / B / C / D / E)		C		
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A		
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is asphalt road 8km from Zway. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)		14		
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
	World bank, LVIA				
17	Main Ethnic Group		Oromo, Gurage		
18	Health conditions				
	-1 Medical facilities in Town		Drug store		
	-2 Nearest other facilities from Town	km	7		
	-3 Main patients of water born diseases	persons / year	Mararia	1,000	
			Dysentery	100	
			Typhoid	80	
			Diarrhea	20	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	New implementationwillbe done by other donors.				
21	Remarks :				
		Mr. Wondimu Jote Mayor of the town administration Mob. 0912260451			
		Mr. Gebissa Haile Water Committee chairman Mob. 091322392712260451			
		Mr. Challa Dechassa Finance head of water committee 0910831709			

Memo (Town sketch …etc.) :

04-02 Well spec.			
Well No.1; Estbsh on ???? GL-86m / Casing dia. 6" / SWL GL-14m / 3.5L/sec. / 7.5kw			
Well No.2; Estbsh on ???? GL-72m / Casing dia. 6" / SWL GL-??m / 2.5L/sec. / 5.5kw			
05-15 Distribution Type (Spring No.1)			
GIP 2*1/2"=100m	GIP 1*1/2"=974m	PE 1"=350m	
GIP 2"=1,600m	PVC 1*1/4"=1,300m	Total L=4,324m	
06-08 Water Tariff (House and Business Connection)			
0 ~ 5 m3 = 3.00birr/m3	11 ~ 30 m3 = 4.00birr/m3	Water meter lease ;	
6 ~ 10 m3 = 3.50birr/m3	31m3 ~ = 5.00birr/m3		

データ 7.2　オロミア州の小都市プロファイル

O-22 Adami Tulu



データ 7.2　オロミア州の小都市プロファイル

O-28 Jido

	Oromia Region					13 /30	
	Name of small town	**:**	**Jido**			**O- 28**	
	Name of Woreda	**:**	**\dami Tulu & Jido Kombolch**			**OW- 16**	
	Name of Zone	**:**	**East Shewa**			**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	1,307	1,352	2,659	
	Woreda	male / female / total	by Census 2007	71,883	70,978	142,861	
	percentage of Town in Woreda					1.9%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	441606	852012	1,642	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-130m, ??", GL-??m, 5.5L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec., Stand by Generator			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	09:00-02:00 (17hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2005			
	05-02 Financial of implementation		Donor's name	Ethiopia Delopment Fund			
	05-03 Name of implementation (Project name)			Leliso denbe water supply project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 5m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER			
	05-11 Water reserver No.		no.	2nos.			
	05-12 Water reserver Capacity		m3	10m3*2nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 3", 2,312m, 2" 20m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	4			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	16m3/day			
	05-21 Number of House Connection (HC)			8			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	1.56m3/day			
	05-23 Number of Business Conection (BC)			3			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Mosque, School, Restrant			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.8m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			2			
	06-04 Principal works of technical staff			Pump operation, Plumbing			
	06-05 Number of the financial staff			7			
	06-06 Principal works of financial staff			Water meter read, Water sale, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L			
	House connection		Birr/m3	see below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	8,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Zway, Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Pumpmotor burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-28 Jido

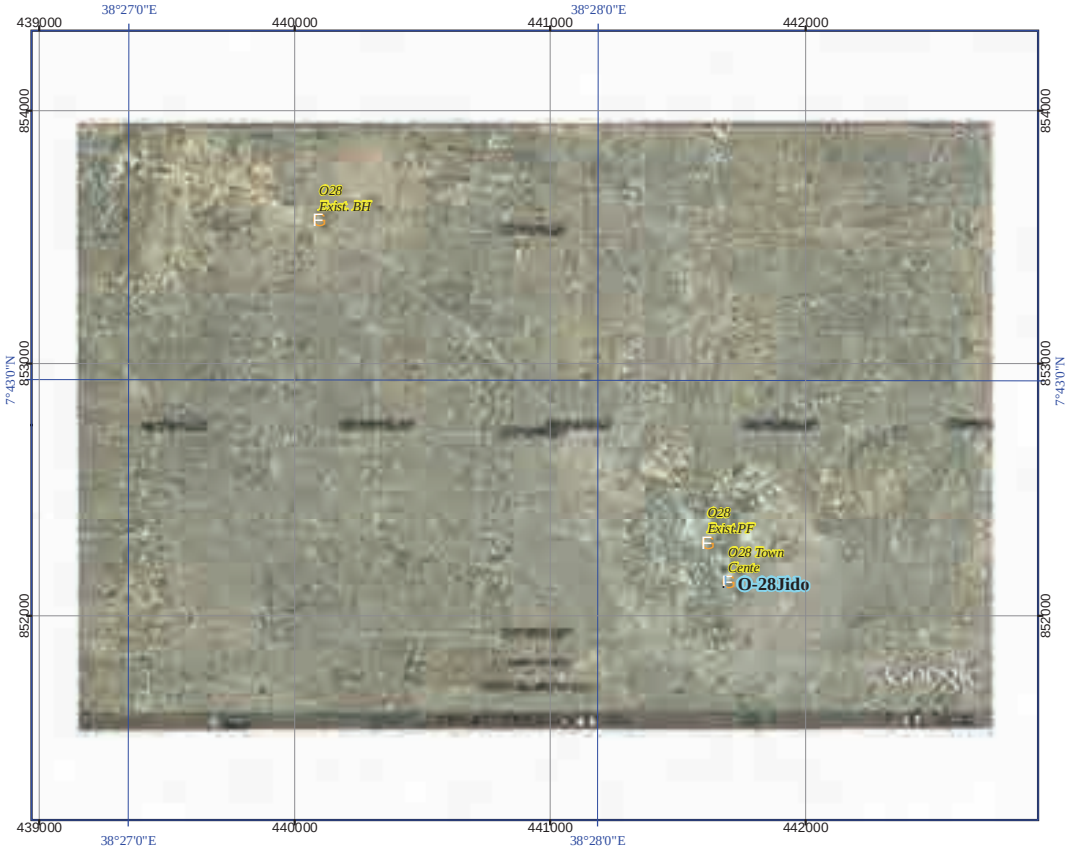
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped		!
	07-02 Finalcial				
	Management		Not grasped		!
	Rate of water tarrif collection		Not grasped		!
	Personnel expenses		Not grasped		!
	Shourtage of budget to execute operation & maintenace		Not grasped		!
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped		!
	Change in industry	increase factory, Trading …etc.	Not grasped		!
	Human conflict	Ethnic, Administrative …etc	Not grasped		!
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%)			148%	!
	(16m3*4PF+1.56m3*8HC+0.8*3BC)=78.9m3/day 78.9/20Lpcd.= 3,945persons 3,945persons / 2,659 population = 148%				
	Current Water Coverage (%) (by data of water source product))			298%	
	((5.5L)*3600min*8hrs)=158400L 158400L/20L=7920persons 7920persons/2659population=298%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access is Sub grade road 46km from Zway. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			13	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Oromo, Silte		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	86		
	-3 Main patients of water born diseases	persons / year	Mararia	5,400	
			Typhoid	500	
			Dysentery	480	
			Cholera	15	
			others	1,500	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	Water fee of cattle trough is 0.15birr/cattle/day. 33,000bir/year				
21	Remarks :				
	Access is un pavement road. (Muddy during rainy season)				

Memo (Town sketch …etc.) :

06-08 Water tariff rate	
0~5m3 = 3.00birr/m3	31m3~ = 5.00birr/m3
6~10m3 = 3.50birr/m3	11m3~ = 5.90birr/m3
11~30m3 = 4.00birr/m3	

データ 7.2　オロミア州の小都市プロファイル

O-28 Jido



データ 7.2　オロミア州の小都市プロファイル

O-29 Katar Genet

	Oromia Region					14 /30	
	Name of small town	**:**	**Katar genet**			**O- 29**	
	Name of Woreda	**:**	**Tiyo**			**OW- 03**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	1,943	2,010	3,953	
	Woreda	male / female / total	by Census 2007	43,443	43,284	86,727	
	percentage of Town in Woreda					4.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	501766	867164	2,195	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	nil. (Stream Water)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	nil.			
	04-03 Method of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	nil.			
	04-07 Water quality		Iron, Fluoride …etc.	nil.			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	nil.			
	05-02 Financial of implementation		Donor's name	nil.			
	05-03 Name of implementation (Project name)			nil.			
	05-04 Intake Type			nil.			
	05-05 Intake No.			nil.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

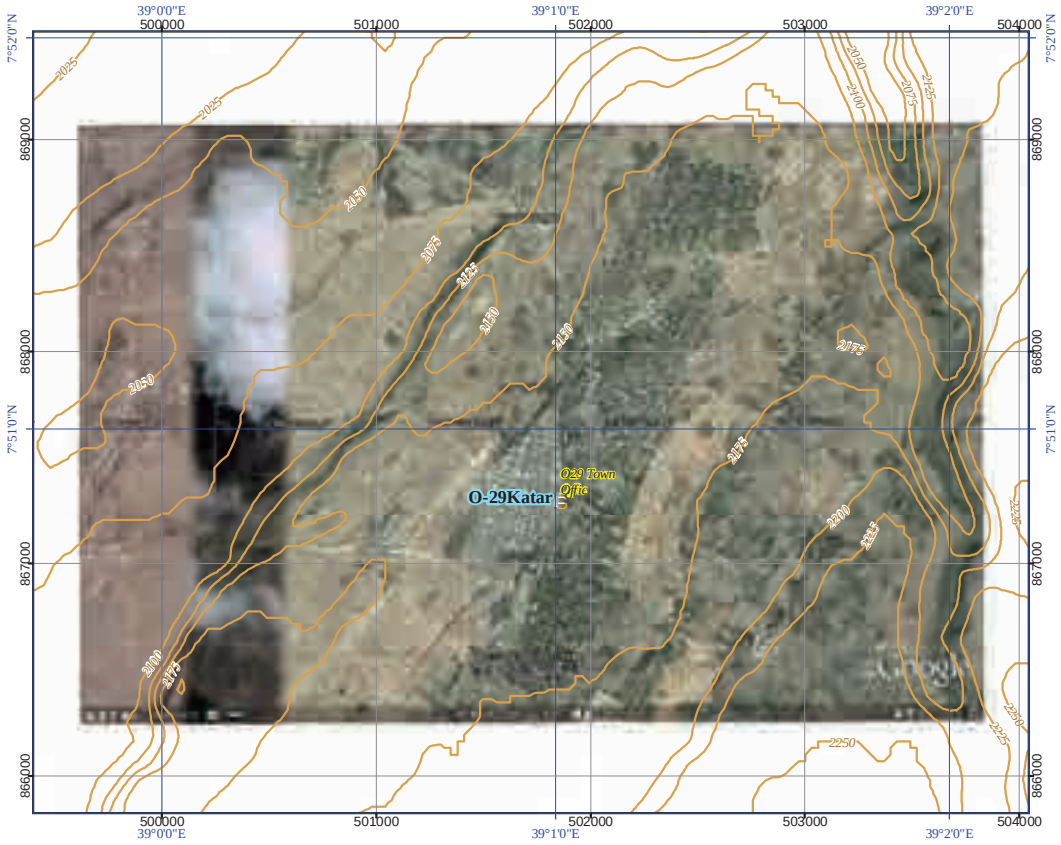
O-29 Katar Genet

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	nil.		
	Water supply facility	Decrepit, leakage, design failure …etc.	nil.		
	07-02 Finalcial				
	Management		nil.		
	Rate of water tarrif collection		nil.		
	Personnel expenses		nil.		
	Shourtage of budget to execute operation & maintenace		nil.		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%)			%	
	Current Water Coverage (%) (by data of water source product))			%	
	((??L)*??min*??hrs)=??L ??L/20L=??persons ??persons/3953population=??%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 33km from Asela. (=13+20km from Asela)				
13	Manpower Capability of Water Supply Management by Water Office (point)			10	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
	Refer to the Chapter 6				
17	Main Ethnic Group		Amhara, Oromo		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	35		
	-3 Main patients of water born diseases	persons / year	Typhoid	8,000	
			Diarrhea	7,200	
			Cholera	600	
			Malaria	50	
			Others	2,900	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	Town is JICA Irrigation project area. Residents are taking drinking water from irrigation canals.				!
	The residentof this town, where is executed the Japanese irrigation project around this town, desire the waer supply project by Japanese fund				
21	Remarks :				
		Mr. Gossa Girma Accountant of town water supply system, Mob. 0920388060			
		Mr. Aubuna Butta Revenu Collected 0913316919			
		Mr. Genesa Negassa Revenu collector Mob. 0910398725			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-29 Katar Genet



データ 7.2　オロミア州の小都市プロファイル

O-30 Lemo Sirba

	Oromia Region					15 /30	
	Name of small town	**:**	**Lemo Sirba**			**O- 30**	
	Name of Woreda	**:**	**Limana Bilbilo**			**OW- 20**	
	Name of Zone	**:**	**Arsi**			**OZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,774	2,816	5,590	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	524802	84006	2,554	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring*2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	0.5L/sec. by 2nos.			
	04-03 Method of water draw		Pump, Gravity	Gravity, On-spot			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hours. (10hrs./day as actual use)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1998			
	05-02 Financial of implementation		Donor's name	Red cross			
	05-03 Name of implementation (Project name)			Lemo sirba water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			2			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	1 place by On-Spot			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	1			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water Committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town			
	06-03 Number of thechnical staff			0			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			1			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	Free			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen			nil.			

データ 7.2　オロミア州の小都市プロファイル

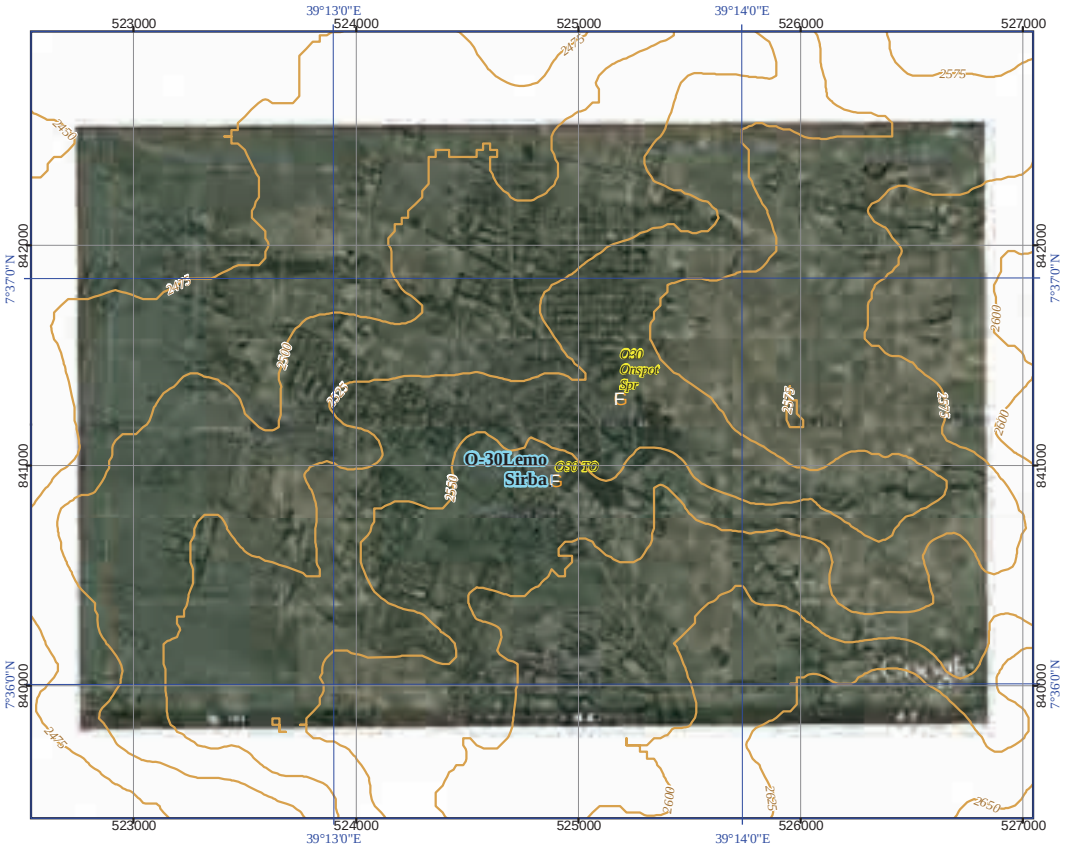
O-30 Lemo Sirba

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	No response		
	Water supply facility	Decrepit, leakage, design failure …etc.	No response		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not grasped		
	Shourtage of budget to execute operation & maintenace		Not grasped		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped		
	Change in industry	increase factory, Trading …etc.	Not grasped		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen		No response		
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Slope on mountain, hill				
09	Necessary Institution (Facility, Material)				
	Water supply facility (pipe line supply)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by data of consumption at faucet)			32%	
	(0.5L.sec.*3600sec.*10hrs)*2=36000L/day 36000/20Lcd=1800persos		1800persons/5590population=32%		
	Current Water Coverage (%) (by water product at wells and/or springs)			77%	
	(0.5L.sec.*3600sec.*24hrs)*2=86400L/day 86400/20Lcd=4320persos		4320persons/5590population=77%		
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Sub grade & Retour road 45km from Asela where is under construction.				
13	Manpower Capability of Water Supply Management by Water Office (point)			10	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to the Chapter 6				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.				
16	Other Donors, NGO's				
	nil.				
17	Main Ethnic Group		Oromo, Amhara		
18	Health conditions				
	-1 Medical facilities in Town		Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	46		
	-3 Main patients of water born diseases	persons / year	Typhoid	250	
			Dysentery	100	
			others	201	
19	Main economic activities		Farming		
20	Particular comments :				
	Town office submitted proposal of a water supply project to Arsi Zone Office with the Project Proposal Document on June 2010.				!
	(Project budget 2,290,000birr / Target beneficiary is 3,100persons. / 15Lcpd. / Spring source /Total Pipe length 4,100m)				
21	Remarks :				
	Town water supply office submitted proposal of new water supply project "				
	The existing water supply facility was constructed by NGO on 1998, which is decrepit at the moment. The existing water source (spring) is not staible by seasonal water product. It is not enougth to supply.				

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-30 Lemo Sirba



データ 7.2　オロミア州の小都市プロファイル

O-31 Milami

	Oromia Region					16 /30	
	Name of small town	**:**	**Milami**			**O- 31**	
	Name of Woreda	**:**	**Teltele**			**OW- 09**	
	Name of Zone	**:**	**Borena**			**OZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,220	2,290	4,510	
	Woreda	male / female / total	by Census 2007	35,854	33,845	69,699	
	percentage of Town in Woreda					6.5%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	321466	559600	1,401	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-86m, 4", GL-??m, 4.8L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Mono-pump and Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elc.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00-6:20 (20min/day)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1996			
	05-02 Financial of implementation		Donor's name	OWRB			
	05-03 Name of implementation (Project name)			Milami water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 60m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR, ER			
	05-11 Water reserver No.		no.	GR*1no., ER*1no.			
	05-12 Water reserver Capacity		m3	GR*50m3, ER*10m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	GIP, 2*1/2", 1,200m			
	05-14 Power to transmit		Pressure, Gravity	Pressure			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	5			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4FC*4PF, 2FC*1PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.0m3/day			
	05-21 Number of House Connection (HC)			23			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.7m3/day			
	05-23 Number of Business Conection (BC)			1			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Health center			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	1.3m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			4			
	06-06 Principal works of financial staff			Water meter read, Bill, Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.35birr/20L			
	House connection		Birr/m3	15birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	Not grasped			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Yabello, Dilla, Sheshemane			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Mono-pump parts			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda, Zone			
	06-13 Principal serious repair with 5-10 years			Mono-pump trouble (Mechanical)			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-31 Milami

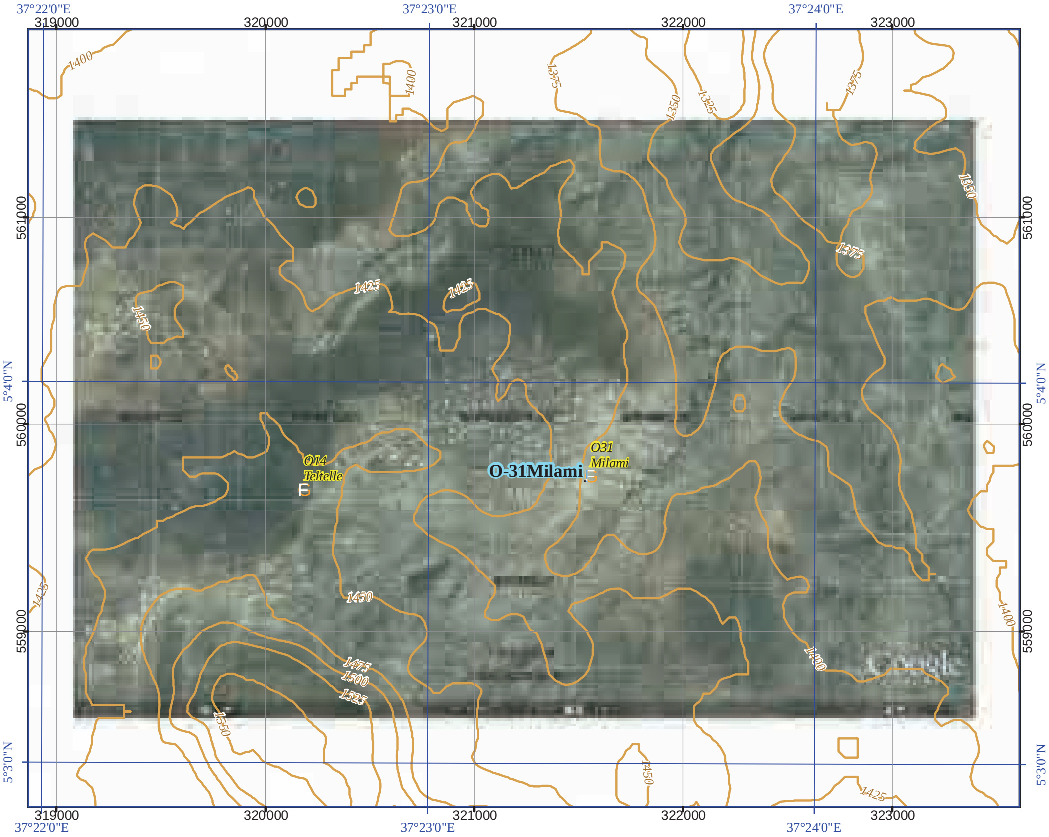
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	See below particular commnents	
	07-02 Finalcial			
	Management		Cash management (no recording)	
	Rate of water tarrif collection		Appropiate	
	Personnel expenses		low	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers (Students)	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			29%
	(2.0m3*5PF+0.7m3*23HC+1.3m3*1BC)=26.1m3/day 26.1m3/20Lpcd.= 1,305 persons 1,305persons / 4,510 population = 29%			
	Current Water Coverage (%) (by data of water source product))			153%
	(4.8L*3600min*8hrs)=138240L 138240L/20L=6912persons 6912persons/4510population=153%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			C / D
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	It is difficult for operation & maintenance due to long distance from local plincipal cities.			
13	Manpower Capability of Water Supply Management by Water Office (point)			9
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	200	
	-3 Main patients of water born diseases	persons / year	Typhoid	6,000
			Dysentery	3,000
			Diarrhea	2,500
			Malaria	10,400
19	Main economic activities		farming, Trade	
20	Particular comments :			
	Collection reservoir is 10m3 where water is boosted to 50m3 reservoir, where the booster pump depelets it within 20minutes			
	Borehole casing dia. Is small for big discharge pumps hence monolift pump is installed and boosted to main reservoir resulted in high cost and less water production			
21	Remarks :			
	Mr. Abdi Mamo head Woreda water office Mob. 0910874999 Off. 0981190273/74			
	Mr. Sultan Burka electrician of Woreda water Office Mob. 0916522725			
	Mr. Hamid Gemechu Water Woreda water office resources engineer Mob. 0912110503			

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP 2*1/2"=900m	GIP 1*1/2"=1,020m	Total L=1,920m	

データ 7.2 オロミア州の小都市プロファイル

O-31 Milami



データ 7.2　オロミア州の小都市プロファイル

O-32 Gerada

	Oromia Region					17 /30	
	Name of small town	**:**	**Gerada**			**O- 32**	
	Name of Woreda	**:**	**Bure Hara**			**OW- 21**	
	Name of Zone	**:**	**Borena**			**OZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	3,725	3,775	7,500	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	419060	638333	2,224	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well*2nos. (1 well is not function)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial elec.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	4hours/day			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen			1/2 New BH Function, 2/2 Old BH Shielded			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	Not grasped			!
	05-02 Financial of implementation		Donor's name	SIDA, OWRB			
	05-03 Name of implementation (Project name)			Gerba water supply project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2nos. (1 well is not function)			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 4"*585m+2*1/2"*95m (Total 680m)			
	05-07 Power to convey		Pressure, Gravity	Pressue			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	100m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			!
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	11			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4FC*4PF, 6FC*6PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	3.0m3/day			
	05-21 Number of House Connection (HC)			210			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.92m3/day			
	05-23 Number of Business Conection (BC)			Not grasped			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Not grasped			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	Not grasped			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town warter supply servise			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Woreda			
	06-03 Number of thechnical staff			3			
	06-04 Principal works of technical staff			Pump operation, Plumbing			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.2 birr / 20L			
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	15,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Hagremariam			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefitting			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Region			
	06-13 Principal serious repair with 5-10 years			Pump motor burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Town water supply servise			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-32 Gerada

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water for business connection	
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		revised	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		Shortage for expansin of pipe line	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		149%	!
	(3m3*10PF+0.92m3*210HC+0m3*0BC)=223.2m3/day 223.2m3/20Lpcd.= 11,160persons 11,160persons / 7,500 population=149%			
	Current Water Coverage (%) (by data of water source product))		161%	
	(8.4L.sec.*3600sec.*8hrs)=241920L/day 241920/20Lcd=12096persos 12096persons/7500population=161%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / C	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is asphalt road 16km from Hagremariam, 89km from Dila.			
13	Manpower Capability of Water Supply Management by Water Office (point)		16	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Oromo, Gedeo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	15	
	-3 Main patients of water born diseases	persons / year	Diarrhea	392
			Typhoid	329
			Malaria	30
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Inside of G. Reservoir has been disinfected occasionally by Town water office.			
	Water demand has been increasing due to establishing school, clinic …etc.			
21	Remarks :			
	Access road is asphalt road.			
		Mr. Legesse Zewedie Water supply service head Mob. 916376167		

Memo (Town sketch …etc.) :

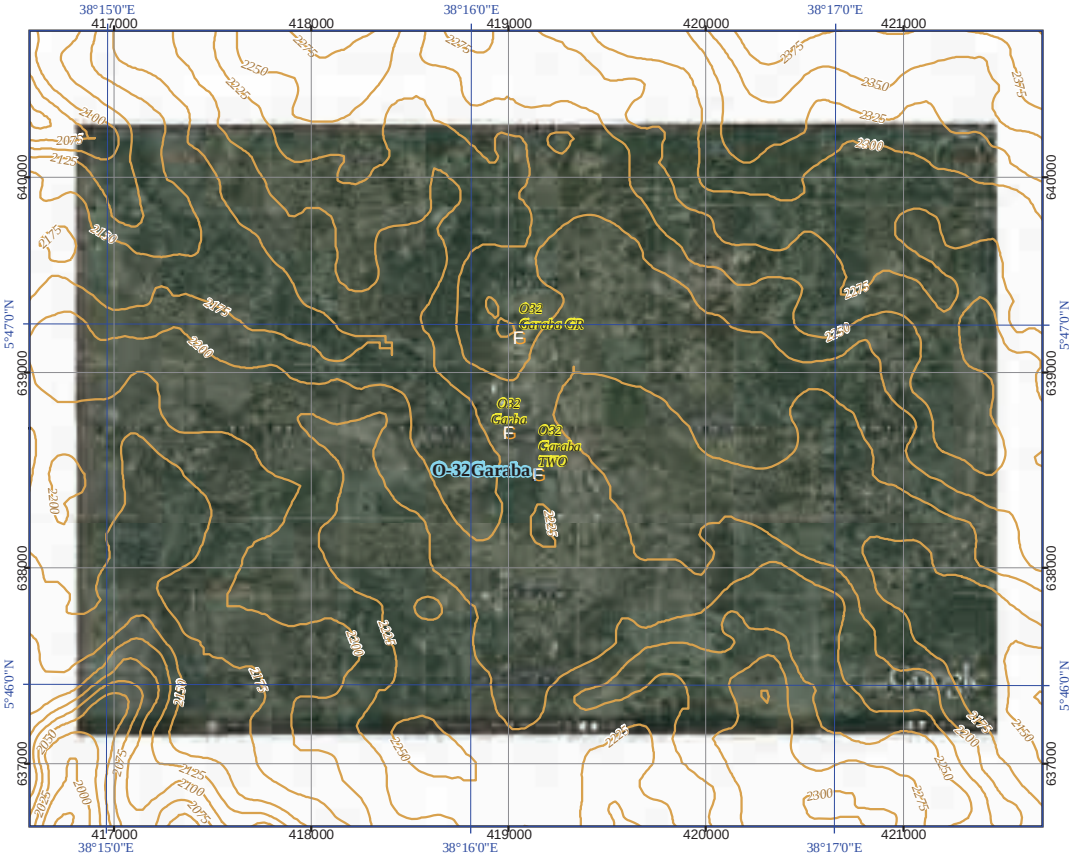
04-02 Well spec.			
Well No.1; Estbsh on ????	GL-??m / ??" / SWL GL-??m / 8.4L/sec.		
Well No.2; Estbsh on ????	GL-??m / ??" / SWL GL-??m / ??L/sec.		

05-15 Distribution Type			
GIP 4"=550m	GIP 1*1/2"=1,058m		
GIP 2*1/2"=1,048m	GIP 1"=275m		
GIP 2"=260m	GIP 3/4"=1,024m	Total L=4,215m	

06-08 Water Tariff (House and Business Connection)	
0 ~ 3 m3 = 2.35birr/m3	11 ~ 15 m3 = 6.00birr/m3
4 ~ 6 m3 = 4.20birr/m3	16m3 ~ 20m3= 7.20birr/m3
7 ~ 10m3= 5.00birr/m3	21m3 ~ = 8.60birr/m3

データ 7.2　オロミア州の小都市プロファイル

O-32 Gerada



データ 7.2　オロミア州の小都市プロファイル

O-33 El Wayya

	Oromia Region					18 /30	
	Name of small town	**:**	**El Woyya**			**O- 33**	
	Name of Woreda	**:**	**Yabelo**			**OW- 10**	
	Name of Zone	**:**	**Borena**			**OZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,015	2,075	4,090	
	Woreda	male / female / total	by Census 2007	51,537	50,848	102,385	
	percentage of Town in Woreda					4.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	376956	548609	1,381	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-180m, 6*5/8", GL-??m, 6.9L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line, Generator			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	02:00-06:00 (4hrs./day)			!
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2006			
	05-02 Financial of implementation		Donor's name	US Aid			
	05-03 Name of implementation (Project name)			El Wayya water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 2,000m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	15m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 2", 600m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	2			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	3.0m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.3birr/20L			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	4,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Yabello			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda, Zone			
	06-13 Principal serious repair with 5-10 years			Generator broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

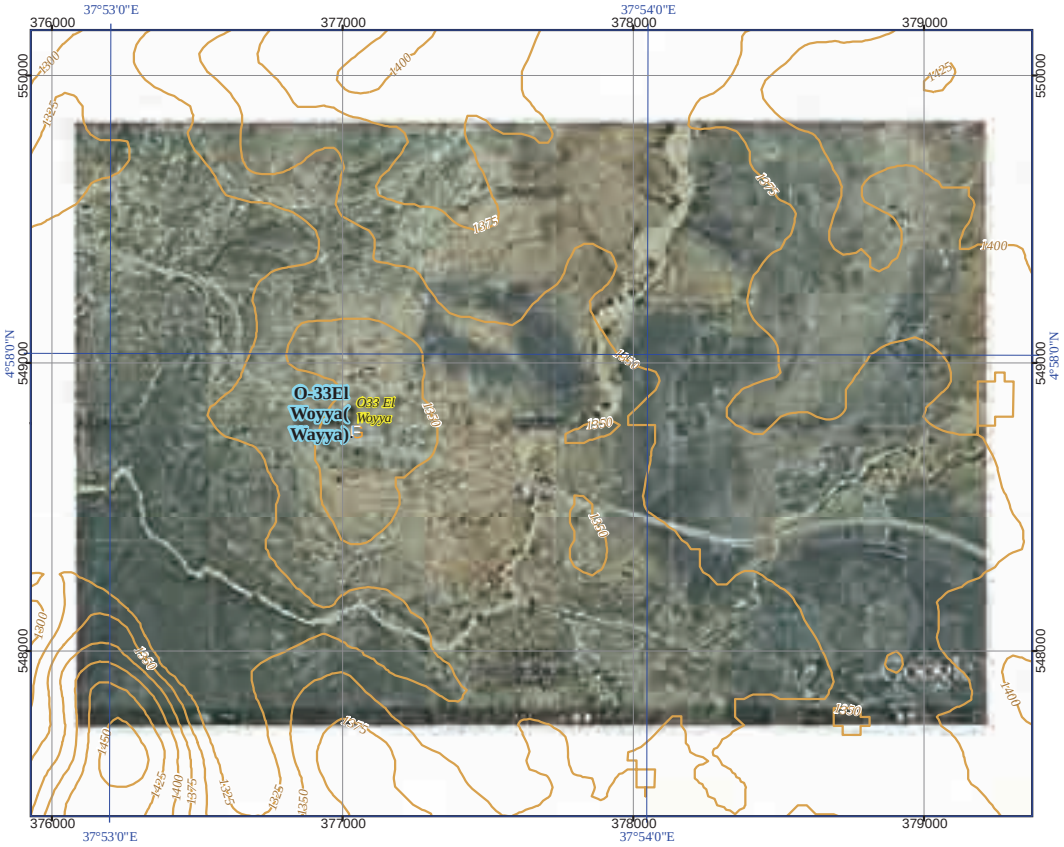
O-33 El Wayya

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage due to operation hours.	
	Water supply facility	Decrepit, leakage, design failure …etc.	Pipe network is limited.	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%)		7%	!
	(3.0m3*2PF+0m3*0HC+0m3*0BC)=6.0m3/day 6.0m3/20Lpcd.= 300persons 300persons / 4,090 population = 7%			
	Current Water Coverage (%) (by data of water source product))		243%	
	((6.9L)*3600min*8hrs)=198720L 198720L/20L=9936persons 9936persons/4090population=243%			
11	Water Potential (A / B / C / D / E)		E	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	E / E	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Sub Grade 30km from Yabelo, 224km from Dila.			
13	Manpower Capability of Water Supply Management by Water Office (point)		6	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Borena	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	130	
	-3 Main patients of water born diseases	persons / year	Mararia 300	
			Dysentery 250	
			Typhoid 50	
19	Main economic activities		Livestock, Farming, Trade	
20	Particular comments :			
	Out of the study area.			
21	Remarks :			
		Mr. Husen Ayano Water committee Audit & inspection head Mob. 0911999227		
		Mr. Hassen Feleke, Town Resedent Mob. 0911092345		

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-33 El Wayya



データ 7.2　オロミア州の小都市プロファイル

O-34 Busa

	Oromia Region					19 /30	
	Name of small town	**:**	**Busa (Bura)**			**O- 34**	
	Name of Woreda	**:**	**Wond**			**OW- 22**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,500	2,612	5,112	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	454170	774515	1,721	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	Well*1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	Hand pump			
	04-04 Pump Spec.		Type, Yield	Manual			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	Not grasped			
	04-07 Water quality		Iron, Fluoride …etc.	Not grasped			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)				
	05-02 Financial of implementation		Donor's name	Goal Ethiopia			
	05-03 Name of implementation (Project name)			Busa water supply project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

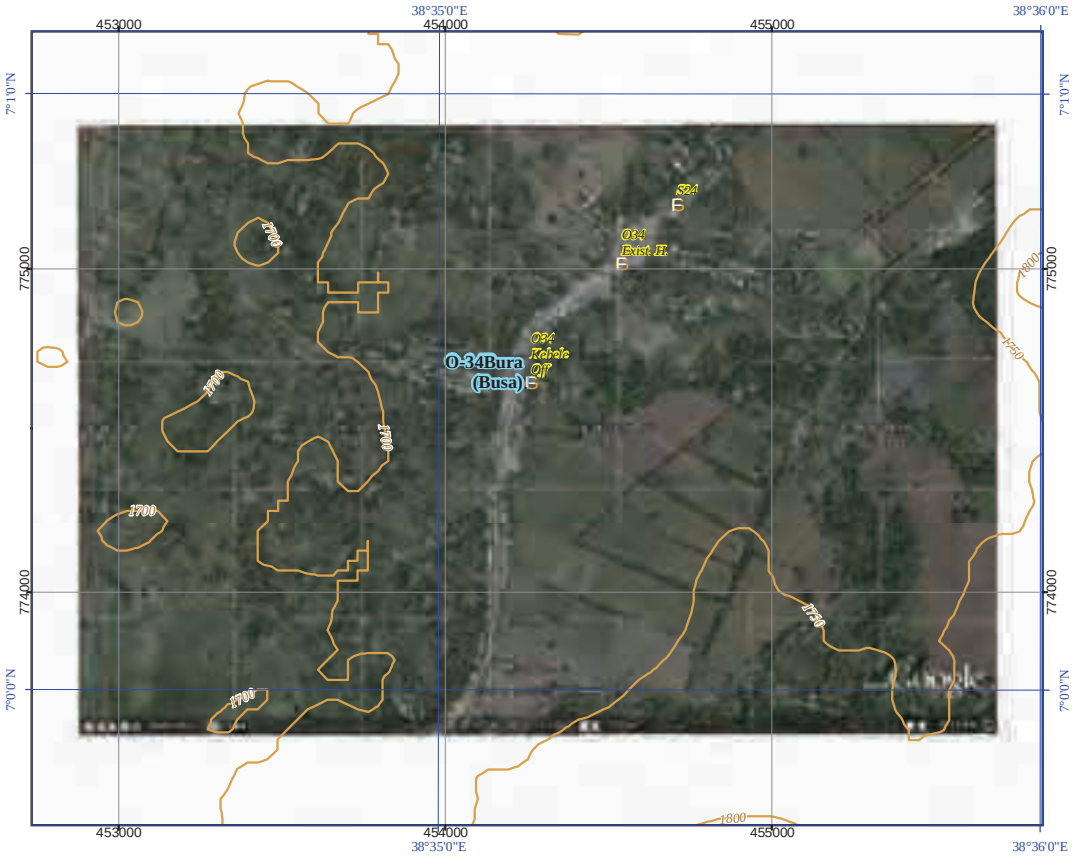
O-34 Busa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Not grasped	
	Water supply facility	Decrepit, leakage, design failure …etc.	nil.	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		nil.	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	Ethnic conflict	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		6 %	
	(6.0m3*1PF+0m3*0HC+0m3*0BC)=6.0m3/day 6.0m3/20Lpcd.= 300persons 300persons / 5,112 population = 6%			
	Current Water Coverage (%) (by data of water source product))		%	
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt and Sub-Grade 20km from Awasa. (=8+12km from Awasa)			
13	Manpower Capability of Water Supply Management by Water Office (point)		2	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store, Health post	
	-2 Nearest other facilities from Town	km	30	
	-3 Main patients of water born diseases	persons / year	Dysentery 4,500	
			Typhoid 3,000	
			Diarrhea 2,200	
			Malaria 1,500	
			Cholera 500	
			others 2,500	
19	Main economic activities		Farming, Trade	
20	Particular comments :			
	Ethnic conflict has Residence house were burned by conflict. Police and military has been			!
	Water is distributed from sheshe town and adminstered by that community.Hence there is no source or facility managed Intaye town.			
	This small town is a priority of tranquility for public safety.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-34 Busa



データ 7.2　オロミア州の小都市プロファイル

O-35 Awash Mercasa

	Oromia Region					20 /30	
	Name of small town	**:**	**Awash Mercasa**			**O- 35**	
	Name of Woreda	**:**	**Adama**			**OW- 19**	
	Name of Zone	**:**	**East Shewa**			**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	5,050	5,150	10,200	
	Woreda	male / female / total	by Census 2007	68,726	69,923	138,649	
	percentage of Town in Woreda					7.4%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	536766	928904	1,554	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 2nos. (1funnction)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump 11kw			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	05:30-12:30, 13:30-20:00 (13.5hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Floride			!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1990			
	05-02 Financial of implementation		Donor's name	World Vision			
	05-03 Name of implementation (Project name)			Awash Mercasa water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2nos. (1 function)			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 500m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER (Steel)			
	05-11 Water reserver No.		no.	ER*2nos.			
	05-12 Water reserver Capacity		m3	23m3*1no., 13m3*1no.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	Not grasped			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	8			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	0.8m3/day			
	05-21 Number of House Connection (HC)			529			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	Not grasped			
	05-23 Number of Business Conection (BC)			17			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Not grasped			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	Not grasped			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Zone			
	06-03 Number of thechnical staff			3			
	06-04 Principal works of technical staff			Pump operation, Plumbing			
	06-05 Number of the financial staff			5			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L			
	House connection		Birr/m3	0~10m3=2.5birr/m3, 10m3~=3.0birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	6,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Adama			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc.	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc.	Zone			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Zone			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-35 Awash Mercasa

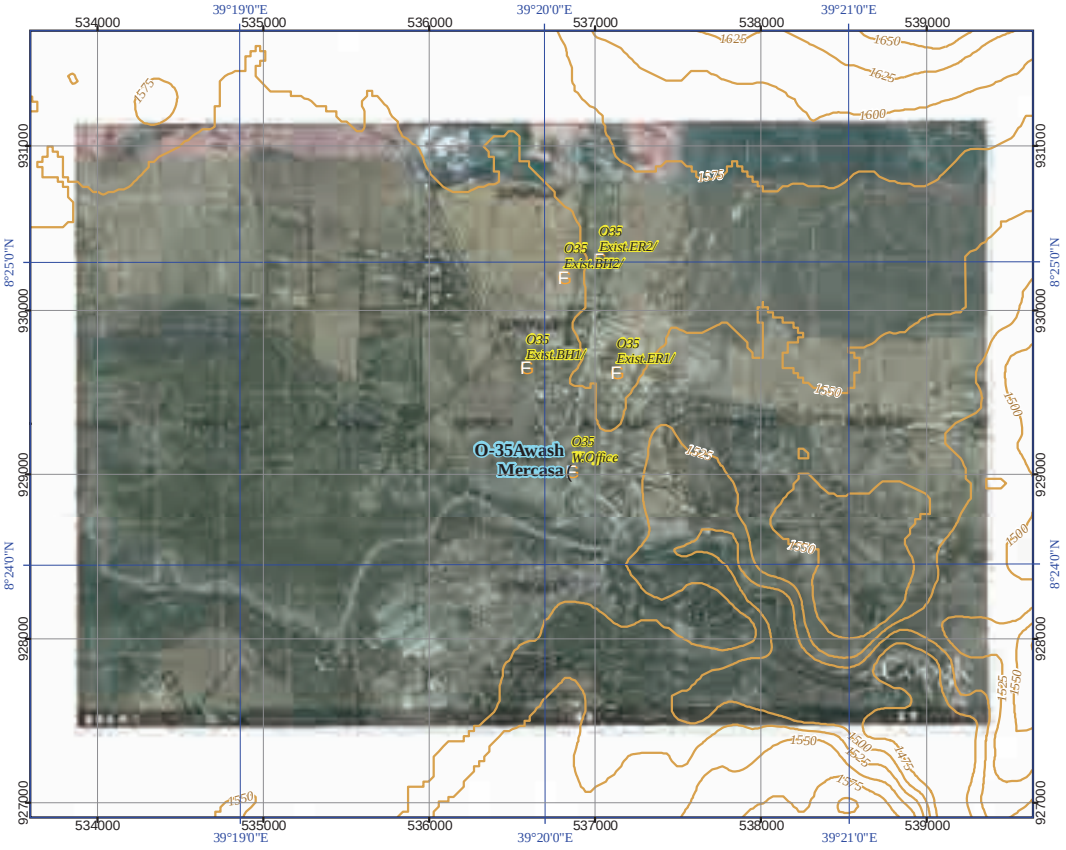
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Floride		!
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (Reservoir etc.)		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		free		
	Shourtage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers		
	Change in industry	increase factory, Trading …etc.	Sugure factory		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			57%	
	((0.8m3*8)+(40L*5pesons*(529+17)))/20/10200				
	Current Water Coverage (%) (by data of water source product))			%	
11	Water Potential (A / B / C / D / E)			E	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		E / E	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 17km from Adama. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			13	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
	World Vision				
17	Main Ethnic Group		Oromo, South		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic		
	-2 Nearest other facilities from Town	km	16		
	-3 Main patients of water born diseases	persons / year	Mararia	720	
			Typhoid	300	
			Diarrhea	5	
19	Main economic activities		Trade, Farming		
20	Particular comments :				
	Elevated reservoir tank has been maintained (cleaned) regularly by the Town water office.				
	There is World vision ofice in Town.				
	Out of the study area.				
21	Remarks :				
	Out of the study area.	Mr. Hailu Heundie Water servics head Mob. 0913264041, 0222250182			
		Mr. Mengistu Bekele Casher Mob. 0912249360			
		Mr. Tewabech Seyoum Bill collector, 0910986577			

Memo (Town sketch …etc.) :

04-02 Well spec.			
Well ; Estbsh on 1999	GL-??m / ??" / SWL GL-??m / ??L/sec.	Not function	
Well ; Estbsh on ??	GL-140m / ??" / SWL GL-??m / ??L/sec.	Operation	

データ 7.2　オロミア州の小都市プロファイル

O-35 Awash Mercasa



データ 7.2　オロミア州の小都市プロファイル

O-36 Walanciti

	Oromia Region					21 /30	
	Name of small town	**:**		**Walanciti**		**O- 36**	
	Name of Woreda	**:**		**Bosat**		**OW- 23**	
	Name of Zone	**:**		**East Shewa**		**OZ- 03**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by OWRB		5,590	5,670	11,260
	Woreda	male / female / total	by Census 2007		not listed	not listed	not listed
	percentage of Town in Woreda						#VALUE!
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		547079	956807	1,470
03	Town Status				Municipally		
04	Water Source						
	04-01 Water source		Type, No.		BH Well * 5nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		See below memo		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		See below memo		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec. Line		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		24hrs.		
	04-07 Water quality		Iron, Fluoride …etc.		Flouride		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1969,1979,1994,1993, 1993,2007		
	05-02 Financial of implementation		Donor's name		ARDU, Kalehiwot church, World Vision		
	05-03 Name of implementation (Project name)				Walanciti water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				6nos.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 4", 500m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		2nos.		
	05-12 Water reserver Capacity		m3		50m3*2nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity, Pressure		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry, Pipe		
	05-18 Number of water point (Public Faucet, PF)		no.		21		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		5FC*4PF, 3FC*6PF, 1FC*11PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		12.0m3/day		
	05-21 Number of House Connection (HC)				1,296		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.34m3/day		
	05-23 Number of Business Conection (BC)				162		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov. office, Hospital, Hotel etc.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.42m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water spply service office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Zone		
	06-03 Number of thechnical staff				6		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				13		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2birr/20L		
	House connection		Birr/m3		See below memo		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		100,000birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Wolenchiti, Adama, Addis Ababa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Elec. Parts		
	06-12 Method in case of serious repair		by Regional office, Private company …etc.		Region		
	06-13 Principal serious repair with 5-10 years				Pump motor burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water office, Region		
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-36 Walanciti

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water (Old BH)	
	Water supply facility	Decrepit, leakage, design failure …etc.	Water leakage, Design failure	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		nil.	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from other villages	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		338%	!
	(12m3*21PF+0.34m3*1296HC+0.42m3*162BC)=760.7m3/day 760.7m3/20Lpcd.= 38,034 persons 38,034persons / 11,260 population = 338%			
	Current Water Coverage (%) (by data of water source product))		275%	
	((2.5L+4.5L+3.5L+2.5L+3.0L+5.5L)*3600min*8hrs)=619200L 619200L/20L=30960persons 30960persons/11260population=275%			
11	Water Potential (A / B / C / D / E)		E	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		E / E	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 26km from Adama. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		22	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	ARDU, Kalehiwot church, World Vision			
17	Main Ethnic Group		Amhara, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	25	
	-3 Main patients of water born diseases	persons / year	Mararia 300	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Town water supply service has 30 persons for operation & maintenace.			!
	100% of water user pay their water fee.			!
	Out of the study area.			
21	Remarks :	Ms. Seble Takele, Mr. Muktor Kalil		
	Out of the study area.	Mr. Negassa Jaleta Personel adminstrator		
		Mr. Teshome Dere H/finance section mob . 091197682581		
		Mr. Mengiste Dachew Technic section head mob. 09102626		

Memo (Town sketch …etc.) :

04-02 Well spec.

Well No.1; Estbsh on 1969	GL-180m / 6" / SWL GL-??m / 2.5L/sec. / 11kw	Motorised Pump	
Well No.2; Estbsh on 1979	GL-174m / 6" / SWL GL-??m / 4.5L/sec. / 12.5kw	Motorised Pump	
Well No.3; Estbsh on 1994	GL-174m / 6" / SWL GL-??m / 3.5L/sec. / 15kw	Motorised Pump	
Well No.4; Estbsh on 1993	GL-174m / 6" / SWL GL-??m / 2.5L/sec. / 15kw	Motorised Pump	
Well No.5; Estbsh on 1993	GL-180m / 6" / SWL GL-??m / 3.0L/sec. / 11kw	Motorised Pump	
Well No.6; Estbsh on 2007	GL-184m / 6" / SWL GL-??m / 5.5L/sec. / 18.5kw	Motorised Pump	

05-15 Distribution Type

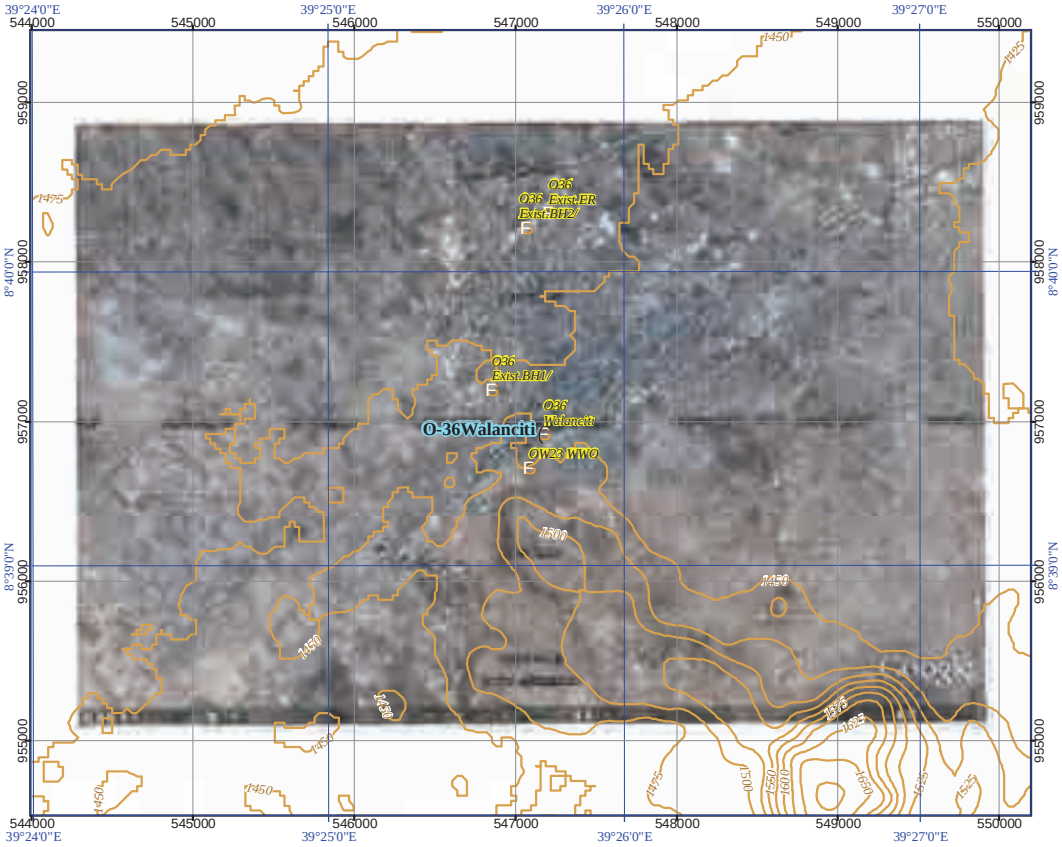
GIP 4"=1,575m	GIP 2"=2,984m	GIP 3/4"=200m
GIP 3"=1,591m	GIP1*1/2"=6,022m	
GIP 2*1/2"=1,584m	GIP1"=1,000m	Total L=14,956m

06-08 Water Tariff (House and Business Connection)

0 ~ 3 m3 = 3.50birr/m3　　7 ~ 10m3= 5.50birr/m3
4 ~ 6 m3 = 4.75birr/m3　　11m3 ~ = 7.00birr/m3

データ 7.2　オロミア州の小都市プロファイル

O-36 Walanciti



データ 7.2　オロミア州の小都市プロファイル

O-37 Doni

	Oromia Region					22 /30	
	Name of small town	**:**		**Doni**		**O- 37**	
	Name of Woreda	**:**		**Bosat**		**OW- 23**	
	Name of Zone	**:**		**East Shewa**		**OZ- 03**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by OWRB		2,014	2,150	4,164
	Woreda	male / female / total	by Census 2007		not listed	not listed	not listed
	percentage of Town in Woreda						#VALUE!
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		56065	940071	1,287
03	Town Status				Town administration		
04	Water Source						
	04-01 Water source		Type, No.		nil.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		nil.		
	04-03 Method of water draw		Pump, Gravity		nil.		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		nil.		
	04-07 Water quality		Iron, Fluoride …etc.		nil.		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		nil.		
	05-02 Financial of implementation		Donor's name		nil.		
	05-03 Name of implementation (Project name)				nil.		
	05-04 Intake Type				nil.		
	05-05 Intake No.				nil.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		nil.		
	05-07 Power to convey		Pressure, Gravity		nil.		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		nil.		
	05-11 Water reserver No.		no.		nil.		
	05-12 Water reserver Capacity		m3		nil.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		nil.		
	05-16 Power to distribute		Pressure, Gravity		nil.		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		nil.		
	05-18 Number of water point (Public Faucet, PF)		no.		nil.		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		nil.		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		nil.		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				nil.		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		nil.		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				nil.		
	06-06 Principal works of financial staff				nil.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		nil.		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		(5birr/20L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		nil.		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		nil.		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		nil.		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		nil.		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		nil.		
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

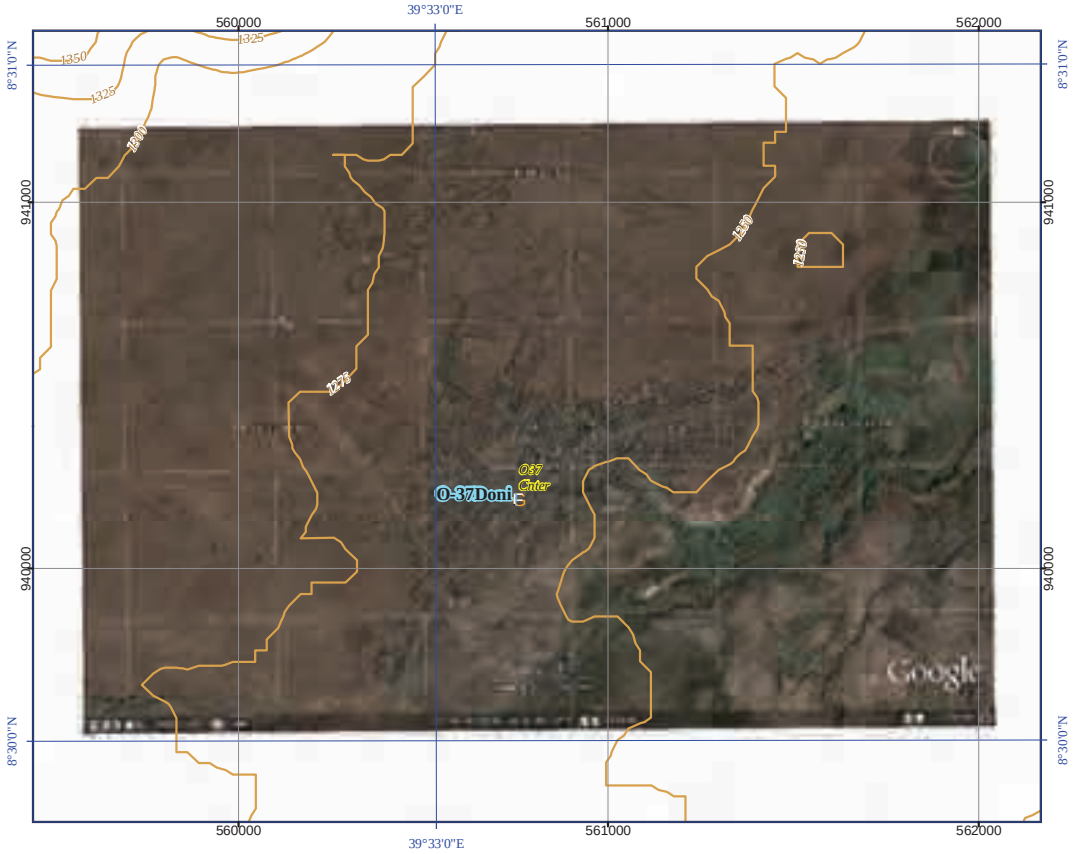
O-37 Doni

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	No water supply facility		
	Water supply facility	Decrepit, leakage, design failure …etc.	nil.		
	07-02 Finalcial				
	Management		nil.		
	Rate of water tarrif collection		nil.		
	Personnel expenses		nil.		
	Shourtage of budget to execute operation & maintenace		nil.		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on flat area with in gently slope at the foot of a hill in the north.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			%	
	No water supply facility (Buy water from Water tanker)				
	Current Water Coverage (%) (by data of water source product))			%	
11	Water Potential (A / B / C / D / E)			E	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is Asphalt & Sub grade 48km from Adama. (=18+30km from Adama)				
13	Manpower Capability of Water Supply Management by Water Office (point)			0	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Oromo, Amhara		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	51		
	-3 Main patients of water born diseases	persons / year	Mararia	720	
			Dysentery	250	
			Typhoid	150	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	Out of the Study Area				!
	Water tanker supply (sale) drinking water.				
21	Remarks :				
	Out of the study area.				
		Mr. Gemechu Edo Dekebo, Minicipality Manager , Mob. 091223766			
		Mr. Eshetu Fekadu Head of Town administration, 0913189332			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-37 Doni



データ 7.2　オロミア州の小都市プロファイル

O-38 Befa

	Oromia Region					23 /30	
	Name of small town	**:**	**Bofa (Befa)**			**O- 38**	
	Name of Woreda	**:**	**Bosat**			**OW- 23**	
	Name of Zone	**:**	**East Shewa**			**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	3,688	3,352	7,040	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	549838	935954	1,423	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	08:00-12:00, 14:00-17:00 (7hrs/day)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1981 / 2003			
	05-02 Financial of implementation		Donor's name	SNNPR / World Vision			
	05-03 Name of implementation (Project name)			Befa water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 5,200m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	3nos.			
	05-12 Water reserver Capacity		m3	50m3*2nos., 25m3*1no.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 2"~1*1/2"~1", 300m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Monsonry			
	05-18 Number of water point (Public Faucet, PF)		no.	7			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6FC*3PF, 4FC*2PF, 3FC*1PF, 2FC*1PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	14m3/day			
	05-21 Number of House Connection (HC)			98			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	1.5m3/day			
	05-23 Number of Business Conection (BC)			8			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov.*7, School*1			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	1.5m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service office			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Zone			
	06-03 Number of thechnical staff			2			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			4			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L, 2.65birr/m3			
	House connection		Birr/m3	see below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	29,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa, Adama			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&fittings, Elec. Panel parts			
	06-12 Method in case of serious repair		by Regional office, Private company …etc.	Zone			
	06-13 Principal serious repair with 5-10 years			Pump burned			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water supply service office			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-38 Befa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (pipe lines)	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		low	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		Shortage of budget due to Elec. cost.	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc.	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			%
	(??m3*7PF+1.5m3*98HC+1.5m3*8BC)=??m3/day ??m3/20Lpcd.=??persons ??persons/7,040population=??%			
	Current Water Coverage (%) (by data of water source product))			%
11	Water Potential (A / B / C / D / E)			E
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 32km from Adama. (=18+14km from Adama)			
13	Manpower Capability of Water Supply Management by Water Office (point)			12
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	World Vision			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	35	
	-3 Main patients of water born diseases	persons / year	Mararia	700
			Dysentery	120
			Typhoid	120
			others	320
19	Main economic activities		Farming, Trade	
20	Particular comments :			
	Out of the study area.			
21	Remarks :			
	Access is sub base course of asphalt pavement. (Gravel road)			
	Out of the study area.			

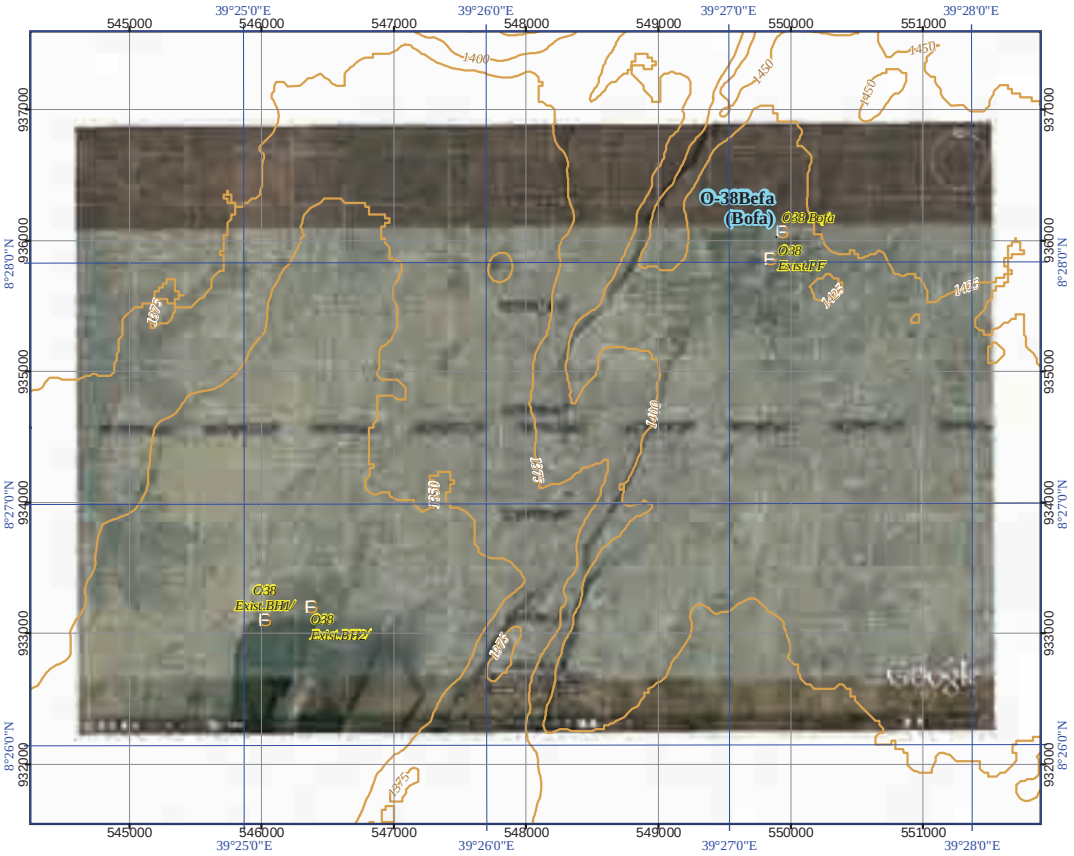
Memo (Town sketch …etc.) :

04-02 Well spec.	
Well No.1; Estbsh on 1981 GL-64m / Casing dia.6" / SWL GL-??m / ??L/sec.	Under operating
Well No.2; Estbsh on 2003 GL-84m / Casing dia.6" / SWL GL-??m / ??L/sec.	Under operating

06-08 Water Tariff (House and Business Connection)
0 ~ 5 m3 = 3.0birr/m3　30 m3~ = 5.00birr/m3
5 ~ 11 m3 = 3.70birr/m3
11 ~ 30m3= 4.50birr/m3

データ 7.2　オロミア州の小都市プロファイル

O-38 Befa



データ 7.2　オロミア州の小都市プロファイル

O-39 Intaye

	Oromia Region					24 /30	
	Name of small town	**:**	**Intaye**			**O- 39**	
	Name of Woreda	**:**	**Wondo**			**OW- 22**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	4,202	4,298	8,500	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	456917	778457	1,743	
03	Town Status			Municipally			
04	Water Source						
	04-01 Water source		Type, No.	nil. (from Sheshe Town)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	nil.			
	04-03 Method of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	nil.			
	04-07 Water quality		Iron, Fluoride …etc.	Not grasped			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	nil.			
	05-02 Financial of implementation		Donor's name	nil.			
	05-03 Name of implementation (Project name)			nil.			
	05-04 Intake Type			nil.			
	05-05 Intake No.			nil.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	Distributed from Sheshe Town			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Pipes (1 faucet)			
	05-18 Number of water point (Public Faucet, PF)		no.	1			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	1			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

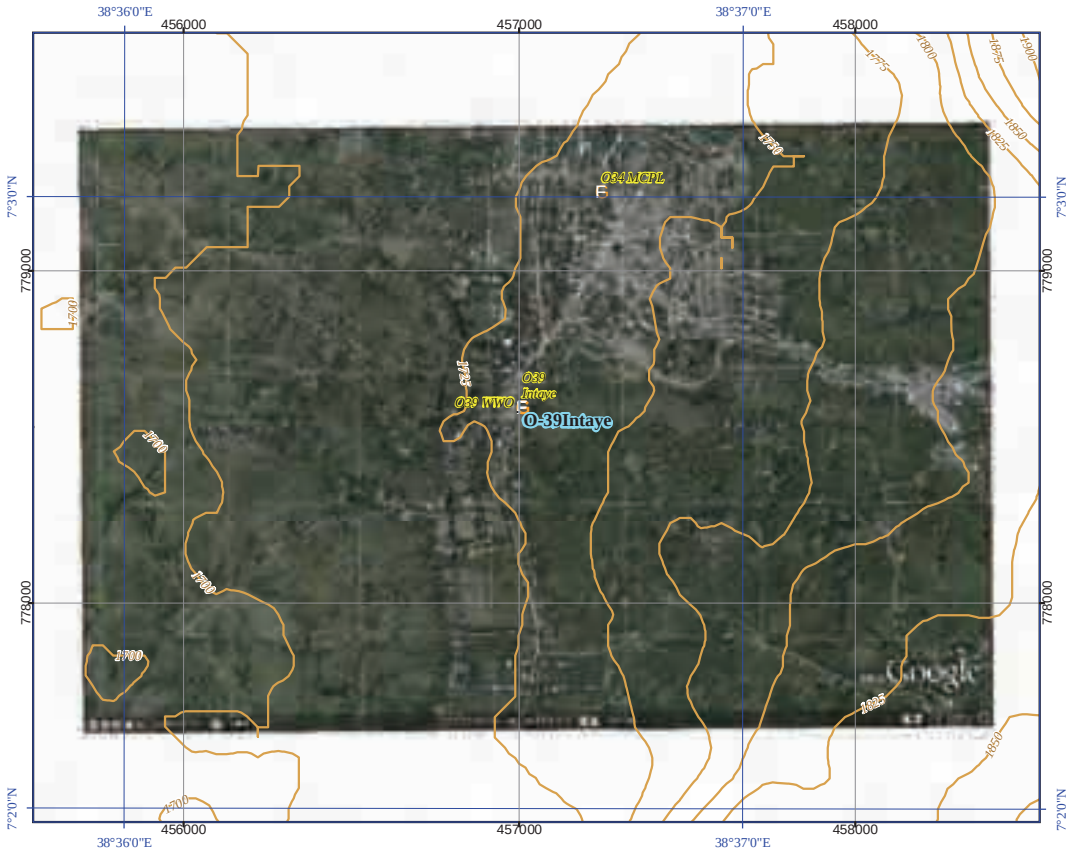
O-39 Intaye

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Not grasped		
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not grasped		
	Shourtage of budget to execute operation & maintenace		No budget		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from towns		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	Often		!
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			%	
	Current Water Coverage (%) (by data of water source product))			%	
11	Water Potential (A / B / C / D / E)			C	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub-grade 26km from Awasa. (=8+18km from Awasa)				
13	Manpower Capability of Water Supply Management by Water Office	(point)		1	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally gentle hills, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Oromo		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Drug store, Health post		
	-2 Nearest other facilities from Town	km	27		
	-3 Main patients of water born diseases	persons / year	Mararia	1,998	
			Dysentery	968	
			Typhoid	500	
			Diarrhea	200	
			Cholera	20	
			others	700	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	Water is distributed from sheshe town and adminstered by that community.Hence there is no source or facility managed Intaye town.				
	This small town is a priority of tranquility for public safety.				
21	Remarks :				
	Access is base cource for asphalt pavement. (Gravel road)				
	Mr. Abdulwahid Gemeda water supply & sanitation Expert Mob. 0913505953				

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-39 Intaye



データ 7.2　オロミア州の小都市プロファイル

O-40 Kabate

	Oromia Region					25 /30	
	Name of small town	**:**	**Kabate**			**O- 40**	
	Name of Woreda	**:**	**Kofele**			**OW- 08**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
				Profile			**!**
01	Population						
	Town	male / female / total	by OWRB	2,042	2,104	4,146	
	Woreda	male / female / total	by Census 2007	90,000	89,508	179,508	
	percentage of Town in Woreda					2.3%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	469466	777475	?	
03	Town Status			Town administration			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 2nos. (1/2 not function)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-6m, ??", ??m, ??L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Hand Pump			
	04-05 Power source for motorized pump		Type, Kva	Manual			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	Not Grasped			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2005			
	05-02 Financial of implementation		Donor's name	Not Grasped			
	05-03 Name of implementation (Project name)			Kabat kebele water supply project			
	05-04 Intake Type			Well (Hand dugwell)			
	05-05 Intake No.			2nos. (1 not function)			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	(Hand Pump 1/2 function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not Grasped			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			O&M			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	Free			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Kofele			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Handpump parts			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Handpump broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

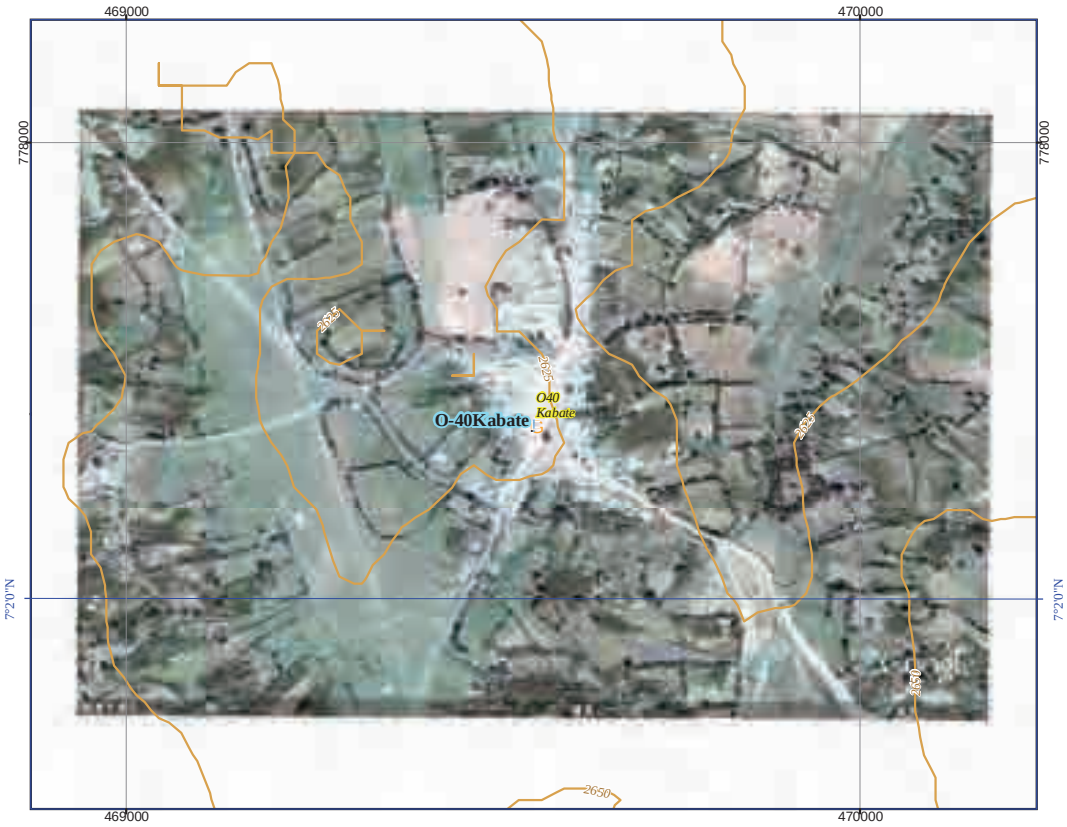
O-40 Kabate

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	It is not covered for whole residence.	
	07-02 Finalcial			
	Management		Not Grasped	
	Rate of water tarrif collection		Not Grasped	
	Personnel expenses		Not Grasped	
	Shourtage of budget to execute operation & maintenace		Not Grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area with in gently slope at the foot of a hill in the north.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		7 %	
	6m3day*1PF(HP)/0.02/4146persons=7.23%			
	Current Water Coverage (%) (by data of water source product))		%	
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Asphalt & Sub grade (Only dry season) 35km from Sheshemane. (=26+9km from Sheshemane)			
13	Manpower Capability of Water Supply Management by Water Office (point)		8	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, which is not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Ethiopian Red Cross			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health post	
	-2 Nearest other facilities from Town	km	50	
	-3 Main patients of water born diseases	persons / year	Dysentery	700
			Diarrhea	500
			Typhoid	432
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	additional 15 Hand dug wells are under construction by Ethiopian Red Cross Shashemene breanch of which 4 dug wells digging to water levele completed and water found. The two existing 2 HDW have no manag`t, no fee collected and water is free for all, wells are located at the market place constructed by Arebs			
21	Remarks :			
	One of two Hand-pump is out of order due to low down of ground water level. Capacities of the existing water supply facilities are insufficient for the population of the town. Hence, Beneficiary of new water supply facility is high.			
	Mr. Feyisa Kebeto Water committee member	Mr. Jemal Hasen Beneficary Mob. 0910435748		

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-40 Kabate



データ 7.2　オロミア州の小都市プロファイル

O-41 Awasho-Dhanku

	Oromia Region					26 /30	
	Name of small town	**:**	**Awasho-Dhanku**			**O- 41**	
	Name of Woreda	**:**	**Sheshemane**			**OW- 14**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	3,488	3,552	7,040	
	Woreda	male / female / total	by Census 2007	123,667	124,355	248,022	
	percentage of Town in Woreda					2.8%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	461770	793962	2,129	
03	Town Status			Kebele Association			
04	Water Source						
	04-01 Water source		Type, No.	BH *1no. (Drilling completion)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-160m / Dia.6" / SWL ???m			
	04-03 Method of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	not operation			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	Nov. 2010 (Only Well construction)			
	05-02 Financial of implementation		Donor's name	NGO (Day Saint Charities)			
	05-03 Name of implementation (Project name)			unknown			
	05-04 Intake Type			Well (BH only)			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	(1no. under Design)			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	(5nos. under Design)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	(0.2birr/20L under Design			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

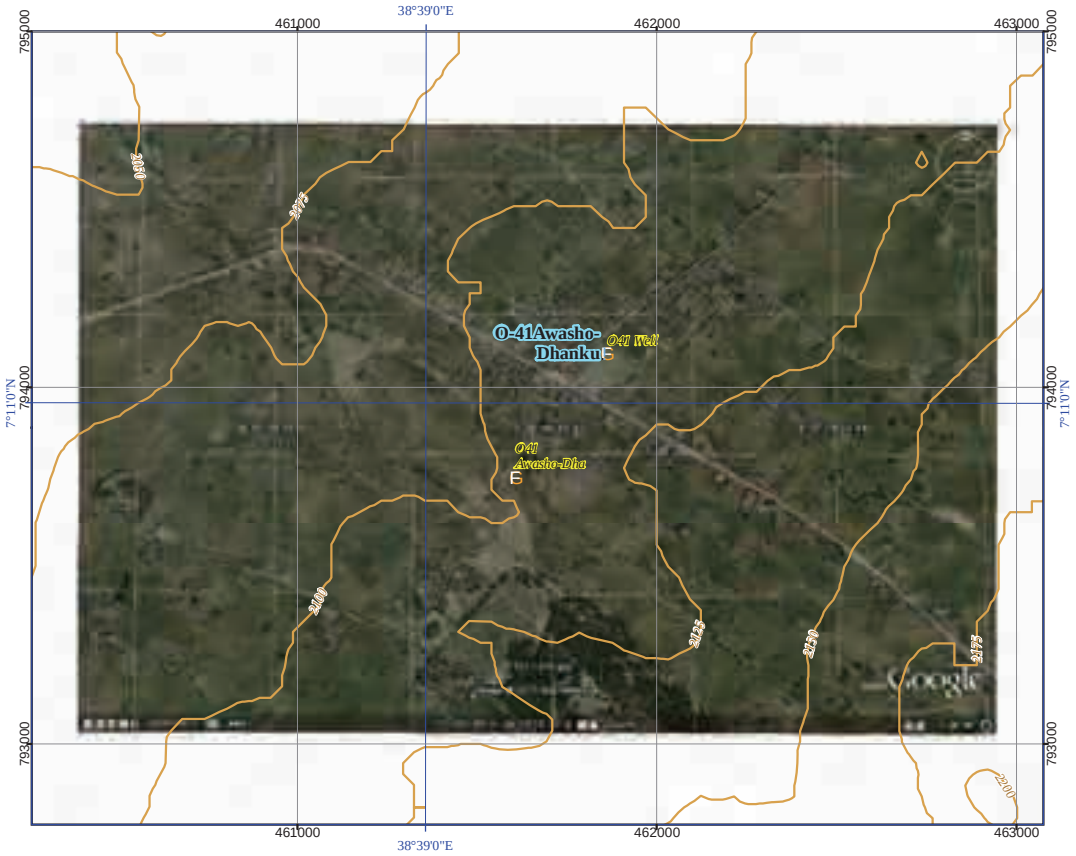
O-41 Awasho-Dhanku

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Not grasped	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shourtage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	coming from other villages	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			%
	Current Water Coverage (%) (by data of water source product))			%
11	Water Potential (A / B / C / D / E)			
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			A / A
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt 6km from Sheshemane. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			9
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	11	
	-3 Main patients of water born diseases	persons / year	Dysentery	801
			Diarrhea	400
			Typhoid	350
			Malaria	150
19	Main economic activities		Farming	
20	Particular comments :			
	Residence has been using river water with alum sulfate and chlorine with water bag which are donated by NGO.			
	One well has construted by NGO on 2010. Other water supply facility is pending to design.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-41 Awasho-Dhanku



データ 7.2　オロミア州の小都市プロファイル

O-42 Hursa

	Oromia Region					27 /30	
	Name of small town	**:**	**Hursa**			**O- 42**	
	Name of Woreda	**:**	**Sheshemane**			**OW- 14**	
	Name of Zone	**:**	**West Arsi**			**OZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	2,790	2,910	5,700	
	Woreda	male / female / total	by Census 2007	123,667	124,355	248,022	
	percentage of Town in Woreda					2.3%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	467482	789539	2,395	
03	Town Status			Kebele administration			
04	Water Source						
	04-01 Water source		Type, No.	Well*1no. / Spring*1no. (not function)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	seel below memo (well)			
	04-03 Method of water draw		Pump, Gravity	Hand pump / On-spot spring			
	04-04 Pump Spec.		Type, Yield	Manual / Gravity			
	04-05 Power source for motorized pump		Type, Kva	nil. / nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	40L/house Hand pump / not function			
	04-07 Water quality		Iron, Fluoride …etc.	good (well) / abandon			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2008 (Hand pump) / 2001 (Spring)			
	05-02 Financial of implementation		Donor's name	NGO (LVI) with EU / OWRB			
	05-03 Name of implementation (Project name)			Hursa Hand Dug Well Project / unknown			
	05-04 Intake Type			Hand Dug Well / Spring			
	05-05 Intake No.			1 / 1			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4m3/day (20L*200 times) by HP			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen			nil.			
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community base			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Repair of Hand Pump			
	06-05 Number of the financial staff			6			
	06-06 Principal works of financial staff			Money correction			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	1 (Hand Pump)			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	2.0 birr / house / month (for HP)			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	200 birr/month (for HP) / Free (Spring)			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda Water Office			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water Committee			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-42 Hursa

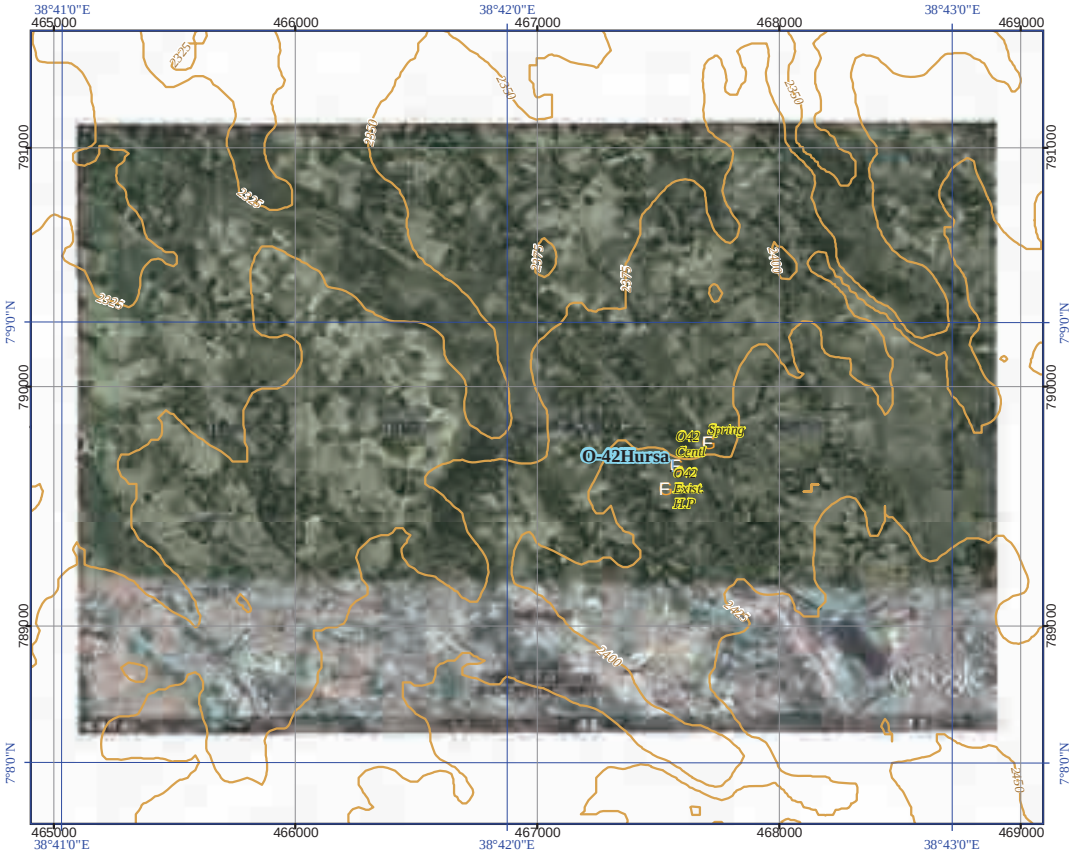
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	
	07-02 Finalcial			
	Management		Lack of skilled manpower	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shourtage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increasing house hold (50 to 100)	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		3.5%	
	(4m3*1PF+0m3*0HC+0m3*0BC)=4m3/day 4m3/20Lpcd.= 200persons 200persons / 5700 population = 3.5%			
	Current Water Coverage (%) (by data of water source product))		3.5%	
	(4m3*1PF+0m3*0HC+0m3*0BC)=4m3/day 4m3/20Lpcd.= 200persons 200persons / 5700 population = 3.5%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	A / A	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Asphalt 13km from Sheshemane. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		10	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store, Health post	
	-2 Nearest other facilities from Town	km	23	
	-3 Main patients of water born diseases	persons / year	Dysentery	2,000
			Diarrhea	500
			Typhoid	500
			others	1,000
19	Main economic activities		Farming	
20	Particular comments :			
	NGO (LVI = Lay Volunteers Internation Association)			
	One spring water source is not able to use due to dry up. Other water source (one Hand-pump) is not enougth to cover with whole of residents. Therefore, new water supply facility has high beneficial effect.			
21	Remarks :			
	Access is asphalt pavement road.			

Memo (Town sketch …etc.) :

04-02 Well spec.		
Well ; Estbsh on 2008	GL-13m / Concrete caisson dia.1,000mm / SWL GL-11.5m /??L/sec.	Hand Pump

データ 7.2　オロミア州の小都市プロファイル

O-42 Hursa



データ 7.2　オロミア州の小都市プロファイル

O-43 Hidi-Lola

	Oromia Region					28 /30	
	Name of small town	**:**	**Hidi-Lola**			**O- 43**	
	Name of Woreda	**:**	**Mijo (Miyo)**			**OW- 22**	
	Name of Zone	**:**	**Borena**			**OZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	3,200	3,350	6,550	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	453259	413542	1,362	
03	Town Status			Municipally			
04	Water Source						
	04-01 Water source		Type, No.	Well, Shallow Well*5nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump, Manual			
	04-05 Power source for motorized pump		Type, Kva	(Generator)			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	(14hrs//day or more)			
	04-07 Water quality		Iron, Fluoride …etc.	Hardness			!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	Not grasped			
	05-02 Financial of implementation		Donor's name	Not grasped			
	05-03 Name of implementation (Project name)			Not grasped (Private)			
	05-04 Intake Type			Well, Shallow Well*5nos.			
	05-05 Intake No.			Well*1no., Handdug wells*5nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2*1/2", 6,000m, Nil (Handbug)			
	05-07 Power to convey		Pressure, Gravity	(Pressure)			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR (Not operation)			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	100m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo (Not operation)			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	5			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	5			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped (Not operation)			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Private			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	ditto			
	06-03 Number of thechnical staff			5			
	06-04 Principal works of technical staff			Well cleaning (Hand dug wells)			
	06-05 Number of the financial staff			5			
	06-06 Principal works of financial staff			Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.5birr/20L			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	Not grasped			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Private			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Private			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-43 Hidi-Lola

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water quality (Hardness)	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not operation due to water quality	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shourtage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increasing Gov. employees	
	Change in industry	increase factory, Trading …etc.	Not grasped	
	Human conflict	Ethnic, Administrative …etc	nil. (at present)	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the slope of mountain & flat area.			
09	Necessary Institution (Facility, Material)			
	New water source (Well) and pipe netwok (replaced pipes)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by data of consumption at faucet)			23 %
	6m3day*5PF(HP)/0.02/6550			
	Current Water Coverage (%) (by water product at wells and/or springs)			%
	(??L.sec.*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/5590population=??%			
11	Water Potential (A / B / C / D / E)			E
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Base course and Sub Grade 145km from Yabello, 340km from Dila.			
13	Manpower Capability of Water Supply Management by Water Office (point)			5
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	90	
	-3 Main patients of water born diseases	persons / year	Mararia 3,000	
			Dysentery 2,400	
19	Main economic activities		Farming, Livestock	
20	Particular comments :			
	Existing facility is not operated by the community's decision due to water quality (hard water)			!
	Pump & Generator of above facility were replaced to other village (Dikicha) for other well (good water quality)			
	Town is located at out of Study area.			
21	Remarks :			
	Mijo (Miyo) woreda has been established on 2007.	W/rt Mare Kere CPP Coordinator Mob. 0913842331		
	Out of the study area.	Ato Wondu Adem electro mechanic 0912125044		
		Ato Mitiku Gemechu irregation expert, Mobile 09100877915		

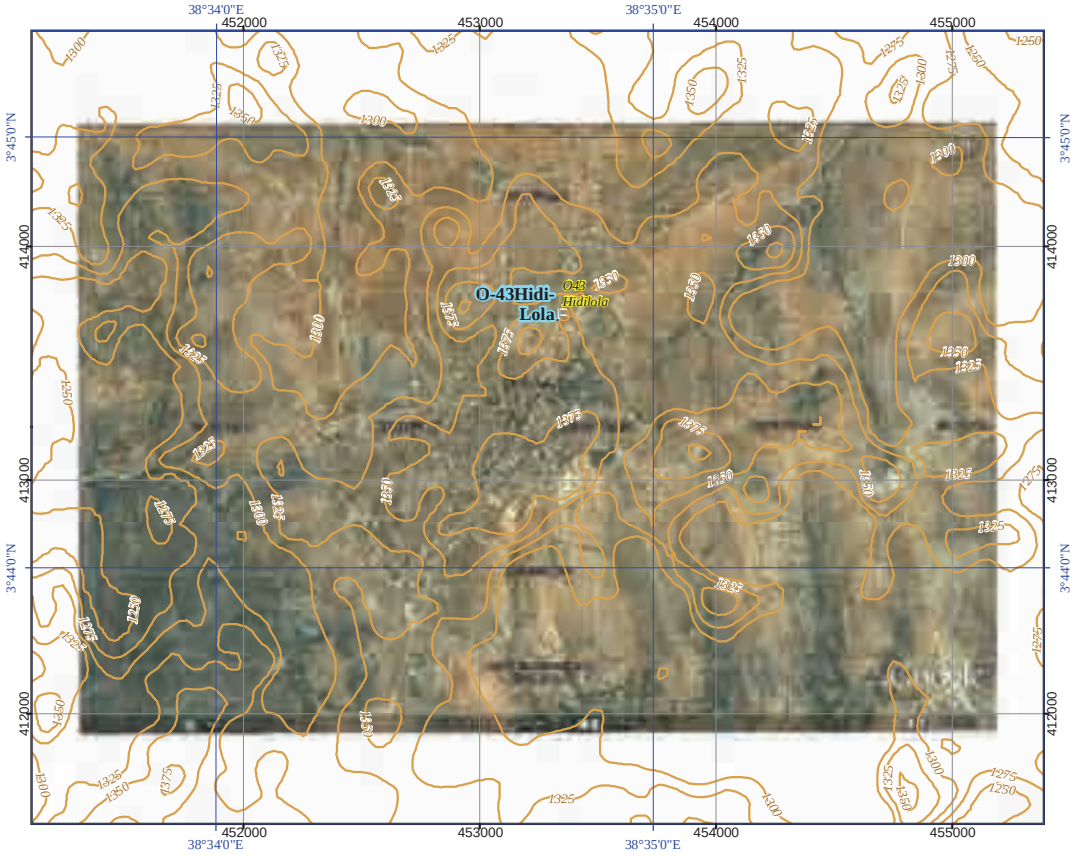
Memo (Town sketch …etc.) :

04-02 Well spec.			
Well ; Estbsh on ??	GL-??m / ??" / SWL GL-??m / ??L/sec.		Motorised Pump
Well ; Estbsh on ??	GL-3~5m / nil. / SWL GL-3~4m / ??L/sec.		Hand Dug

05-15 Distribution Type (GIP)		
2*1/2" = 1,812m	2"= 500m	
1*1/2"= 400m	Total=2,712m	

データ 7.2　オロミア州の小都市プロファイル

O-43 Hidi-Lola



データ 7.2　オロミア州の小都市プロファイル

O-44 Fincadaa

	Oromia Region					29 /30	
	Name of small town	**:**	**Fincadaa**			**O- 44**	
	Name of Woreda	**:**	**Dugda Dawa**			**OW- 13**	
	Name of Zone	**:**	**Borena**			**OZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	3,552	3,648	7,200	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	419588	596399	1,605	
03	Town Status			Municipally			
04	Water Source						
	04-01 Water source		Type, No.	Well * 2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00-^10:00, 16:00-20:00 (8hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1979 / 2000			
	05-02 Financial of implementation		Donor's name	OWRB / VOCA			
	05-03 Name of implementation (Project name)			Fincadaa water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2*1/2", 1,100m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	50m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	12 (10 function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped			
	05-21 Number of House Connection (HC)			100			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	1.1m3/day			
	05-23 Number of Business Conection (BC)			10			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov. Office, Mosque, Church			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.6m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Finchwula Limat			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			3			
	06-04 Principal works of technical staff			Pump operation, Plumbing			
	06-05 Number of the financial staff			7			
	06-06 Principal works of financial staff			Water sale, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	6.0birr/m3			
	House connection		Birr/m3	ditto			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	12,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Hegremariam			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone, Private			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Region			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

O-44 Fincadaa

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water Shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (double well pumping etc.)		
	07-02 Finalcial				
	Management		nil.		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		free		
	Shourtage of budget to execute operation & maintenace		Not grasped		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the flat area slightly sloping towards east.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%)			122 %	
	(6m3*10PF+1.1m3*100HC+0.6m3*10BC)=176m3/day 176m3/20Lpcd.=8800persons 8800persons/7,200population=122%				
	Current Water Coverage (%) (by data of water source product))			%	
	((3.0L+??L)*3600min*8hrs)=???L ???L/20L=???persons ???persons/7200population=???%				
11	Water Potential (A / B / C / D / E)			E	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is Asphalt road 30km from Agremariam, 126km from Dila.				
13	Manpower Capability of Water Supply Management by Water Office (point)			11	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
	Refer to the Chapter 6				
17	Main Ethnic Group		Oromo		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	30		
	-3 Main patients of water born diseases	persons / year	Mararia	4,000	
			Typhoid	2,160	
			Dysentery	720	
			others	7,000	
19	Main economic activities		Trade, Farming, Livestock		
20	Particular comments :				
21	Remarks :				
	Out of the study area.	Mr. Mulunehe Adugna A/Head of woreda water office, Mob. 0916424411			
		Mr. Denbobi Dulecha water supply expert Mob. 0913232315			
		Mr. Dawit Duba plumber Mob. 0916519935			

Memo (Town sketch …etc.) :

04-02 Well spec.		
Well ; Estbsh on 1979	GL-71m / 6*5/8" / SWL GL-??m / ??L/sec.	Motorised pump
Well ; Estbsh on 2000	GL-60m / 6*5/8" / SWL GL-??m / 3.0L/sec.	Moorized pump

05-15 Distribution Type		
GIP 2" = 3,500m	GIP 1*1/2"=7,700m	
GIP 1"=1,650m	Total =12,850m	

データ 7.2　オロミア州の小都市プロファイル

O-44 Fincadaa

データ 7.2　オロミア州の小都市プロファイル

O-45 Adulala

	Oromia Region					30 /30	
	Name of small town	**:**	**Adulala**			**O- 45**	
	Name of Woreda	**:**	**Liben**			**OW- 24**	
	Name of Zone	**:**	**East Showa**			**OZ- 03**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by OWRB	1,787	1,814	3,601	
	Woreda	male / female / total	by Census 2007	not listed	not listed	not listed	
	percentage of Town in Woreda					#VALUE!	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	532071	937668	1,675	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	nil.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	nil.			
	04-03 Method of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	nil.			
	04-07 Water quality		Iron, Fluoride …etc.	nil.			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	nil.			
	05-02 Financial of implementation		Donor's name	nil.			
	05-03 Name of implementation (Project name)			nil.			
	05-04 Intake Type			nil.			
	05-05 Intake No.			nil.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate			nil.			
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.2　オロミア州の小都市プロファイル

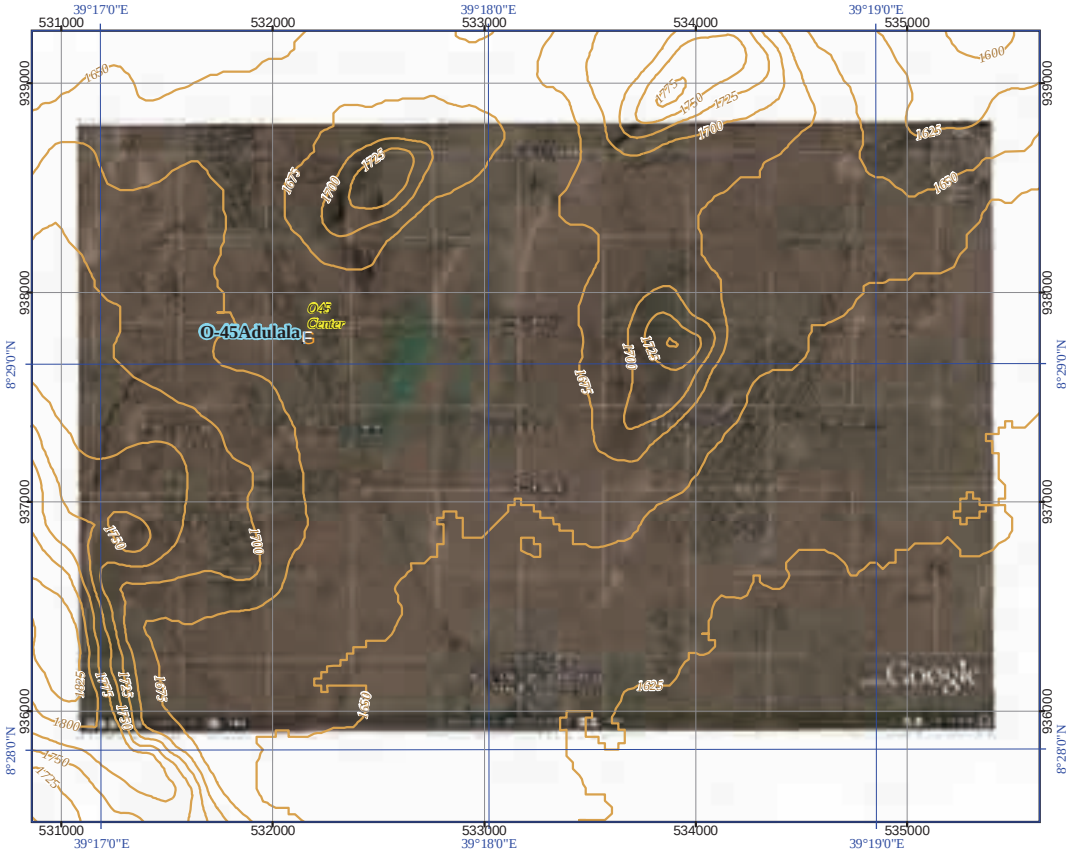
O-45 Adulala

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	nil.	
	Water supply facility	Decrepit, leakage, design failure …etc.	nil.	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shourtage of budget to execute operation & maintenace		nil.	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	Not grasped	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			%
	Current Water Coverage (%) (by data of water source product))			%
11	Water Potential (A / B / C / D / E)			E
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 14km from Adama. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			0
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuitiesarround water sources.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health post	
	-2 Nearest other facilities from Town	km	10	
	-3 Main patients of water born diseases	persons / year	Dysentery	200
			Malaria	82
			Typhoid	50
19	Main economic activities		Farming	
20	Particular comments :			
	Resident buy water from water saler who coming from Adama City			
	This town has not the existing water supply facility. The residents buy water from water saler who comes from adjacent towns.			
21	Remarks :			
	Out of the study area.			

Memo (Town sketch …etc.) :

データ 7.2　オロミア州の小都市プロファイル

O-45 Adulala



データ 7.3　南部諸民族州の小都市プロファイル

S-01 Buei

	SNNPR					1 / 52	
	Name of small town	**:**		**Buei**		**S- 01**	
	Name of Woreda	**:**		**Sodo**		**SW- 01**	
	Name of Zone	**:**		**Gurage**		**SZ- 01**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		3,720	3,241	6,961
	Woreda	male / female / total	by Census 2007		67,110	67,524	134,634
	percentage of Town in Woreda						5.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		450564	919685	2,029
03	Town Status				Wareda Capital		
04	Water Source						
	04-01 Water source		Type, No.		BH Well * 3nos. (1no. Function)		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		see below memo		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Elec. Line and Standby Generator for No.2		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00-12:00, 15:00-24:00 (15hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				nil.		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1st. 1971 / 2nd. 2003		
	05-02 Financial of implementation		Donor's name		1st. SNNPR / 2nd. Unicef		
	05-03 Name of implementation (Project name)				Buei water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				3 (1 under operation)		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		see bellow memo		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		Ground Reservoir		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		100m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		see bellow memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		20 nos.		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4 or 6 nos.		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		0.745m3/day (=447m3/30day/20PF)		
	05-21 Number of House Connection (HC)				938		
	05-22 Average of daily water consumption of House Connection		m3/day		0.19m3/day (5360m3/30day/938)		
	05-23 Number of Business Conection (BC)				25		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov.*16, Hosptl*1, Clinic*1, School*6, Factry*1		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.6m3/day (=18m3/30day)		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Town Water Office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Town		
	06-03 Number of thechnical staff				5		
	06-04 Principal works of technical staff				Operation / Plumbing		
	06-05 Number of the financial staff				9		
	06-06 Principal works of financial staff				Read W. Meter / Bill …etc.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		PF / H. Connection (incl. B. Connection)		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1 birr/20L		
	House connection		Birr/m3		see below memo		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		15,000 birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Addis Ababa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water Meter, Pipes&Fittings, Filter		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		by Regional Office		
	06-13 Principal serious repair with 5-10 years				Pump motor was burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Town Water Office		
	06-15 Other technical specimen				nil.		

データ 7.3　南部諸民族州の小都市プロファイル

S-01 Buei

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	Capacity of W. Reservoir, Volume of Pipe lines	
	07-02 Finalcial			
	Management		Delay of payment of water fee	
	Rate of water tarrif collection		No response	
	Personnel expenses		No response	
	Shortage of budget to execute operation & maintenace		No response	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Unknown	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		No response	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		149%	!
	(0.745m3*20PF+0.19m3*938HC+0.6m3*25BC)=208m3/day 208m3/20Lpdc.= 10,406 persons 10,406persons / 6,961 population = 149%			
	Current Water Coverage (%) (by data of water source product))		331%	
	((3.3L+4.7L+8.0L)*3600sec.*8hrs)=460800L/day 460800/20Lcd=23040persos 23040persons/6961population=331%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / B	
	A=all paved, B=Paved + Base Couse + Sub-grade, C=Paved+Sub-grade+Dry season only, D=Sub-grade+Dry season only, E=Out of the stud			
	* Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		14	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Kestane Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	30	
	-3 Main patients of water born diseases	persons / year	Mararia	9,715
			Dysentery	3,931
19	Main economic activities		Trade	
20	Particular comments :			
	New completed well to be additional water source in addition to the existing well.			
21	Remarks :			
			Interviewee : Ato Alemayehu H/Water supply Service	

Memo (Town sketch …etc.) :

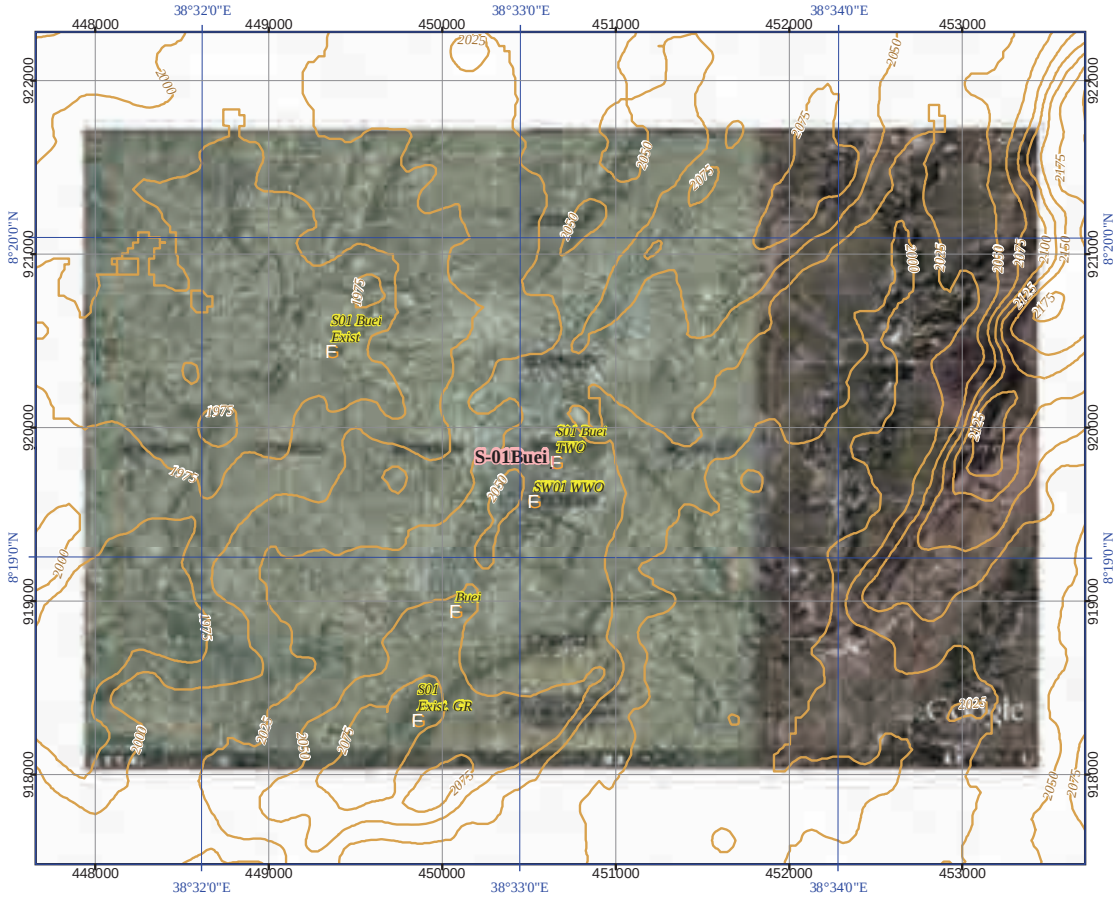
04-02 Well spec.		
Well No.1; Estbsh on 1971 GL-87m / Casing dia.8" / SWL GL-??m / 3.3L/sec.		Abandon
Well No.2; Estbsh on 1999 GL-120m / Casing dia.8" / SWL GL-??m / 4.7L/sec. / St-By Generator		Unter operating
Well No.3; Estbsh on 2010 GL-158m / Casing dia.8" / SWL GL-??m / 8.0L/sec.		BH completed (Not yet use)
05-06 Conveyance Type (Water source ~ Reservoir)		
Well No.1; GIP / ND-2" / L=1,350m		
Well No.2; GIP / ND-3" / L=2,015m		
Well No.3; nil. (not installed pump)		Total= 3,365m
05-15 Distribution Type		
ND-4"=200m	ND-2"=2,660m	ND-1"=197m
ND-3"=1,050m	ND-1*1/2"=2,339m	
ND-2*1/2=1,740m	ND-1*1/4"=102m	Total= 8,288m

06-08 Water tariff rate (Buisiness Connection)

0~5 m3 =3.25birr/m3	31~ m3 =4.00birr/m3	Water Meter Lease	ND-1/2"=3.0birr/month
6~10 m3 =3.50birr/m3			ND-3/4"=4.0birr/month
11~30 m3 =3.75birr/m3			ND-1"=5.0birr/month

データ 7.3　南部諸民族州の小都市プロファイル

S-01 Buei



データ 7.3　南部諸民族州の小都市プロファイル

S-02 Kela

	SNNPR					2 / 52	
	Name of small town	**:**	**Kela**			**S- 02**	
	Name of Woreda	**:**	**Sodo**			**SW- 01**	
	Name of Zone	**:**	**Gurage**			**SZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	1,644	1,875	3,519	
	Woreda	male / female / total	by Census 2007	67,110	67,524	134,634	
	percentage of Town in Woreda					2.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	44689	912633	1,927	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no. (+New BH)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped (New BH GL-60m, 6", GL-??m, ??L/sec.)			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Gravity			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs.			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2007			
	05-02 Financial of implementation		Donor's name	Ethiopian Orthodox Chrch (EOCA)			
	05-03 Name of implementation (Project name)			Kela town water supply & sanitation pr			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 5", 3,000m			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR, ER			
	05-11 Water reserver No.		no.	GR*1no., ER *2nos.			
	05-12 Water reserver Capacity		m3	GR 10m3 * 1no., ER 4m3*2			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 3"~ 1" L=???m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Monsonry			
	05-18 Number of water point (Public Faucet, PF)		no.	13 (8 fonction)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6FC*2PF, 4FC*11PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	2.23m3/day			
	05-21 Number of House Connection (HC)			290			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.1m3/day			
	05-23 Number of Business Conection (BC)			15			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Hotel, School, Factory, Farm			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.7m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply service			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town administration			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			Plumbing, Water meter read			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L			
	House connection		Birr/m3	3.5birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	4,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Butajira			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&Fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	SNNPR			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

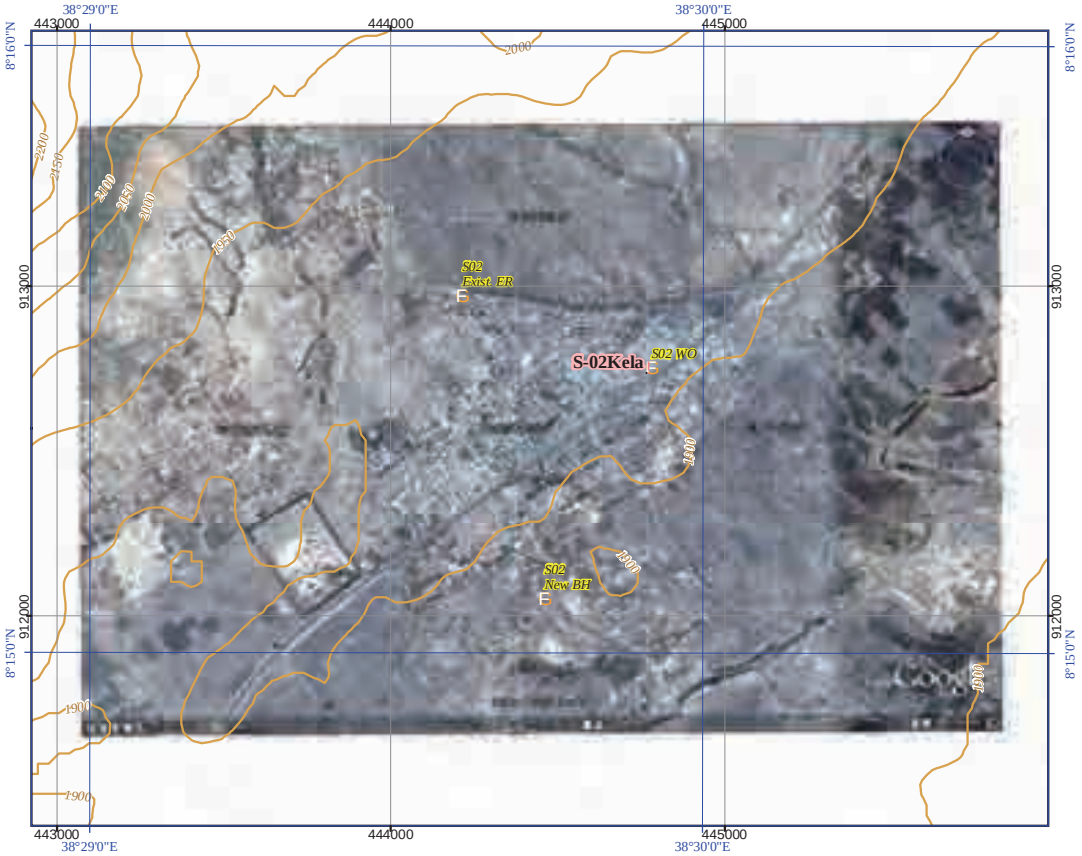
S-02 Kela

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	New BH was dryed.	
	Water supply facility	Decrepit, leakage, design failure …etc.	Reservoir tank are not enough capacity	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped	
	Change in industry	increase factory, Trading …etc.	Increase factory (Line factory)	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town is on foot of mountain			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		81%	
	(2.23m3*8PF+0.1m3*290HC+0.7m3*15BC)=57.34m3/day 57.34m3/20Lpcd.= 2,867persons 2,867persons / 3,519 population = 81%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L+??L+??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/3519population=??%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	A / A	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	* Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		12	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is quite required ingenuities.			
16	Other Donors, NGO's			
	World vision			
17	Main Ethnic Group		Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	21	
	-3 Main patients of water born diseases	persons / year	Mararia	4,974
			Typhoid	918
			Dysentery	888
19	Main economic activities		Waving, Farming, Trade	
20	Particular comments :			
	New completed well to be additional water source in addition to the existing spring.			
21	Remarks :			
		Mr. Abebe Dese Head WS Service	0916-298-785	
		Mr. abayeneh Ferew Operator		

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-02 Kela



データ 7.3　南部諸民族州の小都市プロファイル

S-03 Tiya

	SNNPR					3 / 52	
	Name of small town	**:**	**Tiya**			**S- 03**	
	Name of Woreda	**:**	**Sodo**			**SW- 01**	
	Name of Zone	**:**	**Gurage**			**SZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	906	1,031	1,937	
	Woreda	male / female / total	by Census 2007	67,110	67,524	134,634	
	percentage of Town in Woreda					1.4%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	456768	932196	2,320	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well * 2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-185m, ??", GL-85m, 1.5L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line (Generator broken)			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00-13:30 (6.5hrs/day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2007			
	05-02 Financial of implementation		Donor's name	World vision			
	05-03 Name of implementation (Project name)			Tiya water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, ??", 600m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER			
	05-11 Water reserver No.		no.	2nos.			
	05-12 Water reserver Capacity		m3	12m3*2nos			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, ??", 400m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	5 (3function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town administration			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			1			
	06-06 Principal works of financial staff			Water sale at W. Point			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.25birr/20L			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Zone			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Pipes&fittings			
	06-13 Principal serious repair with 5-10 years			Generator broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	SNNPR			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

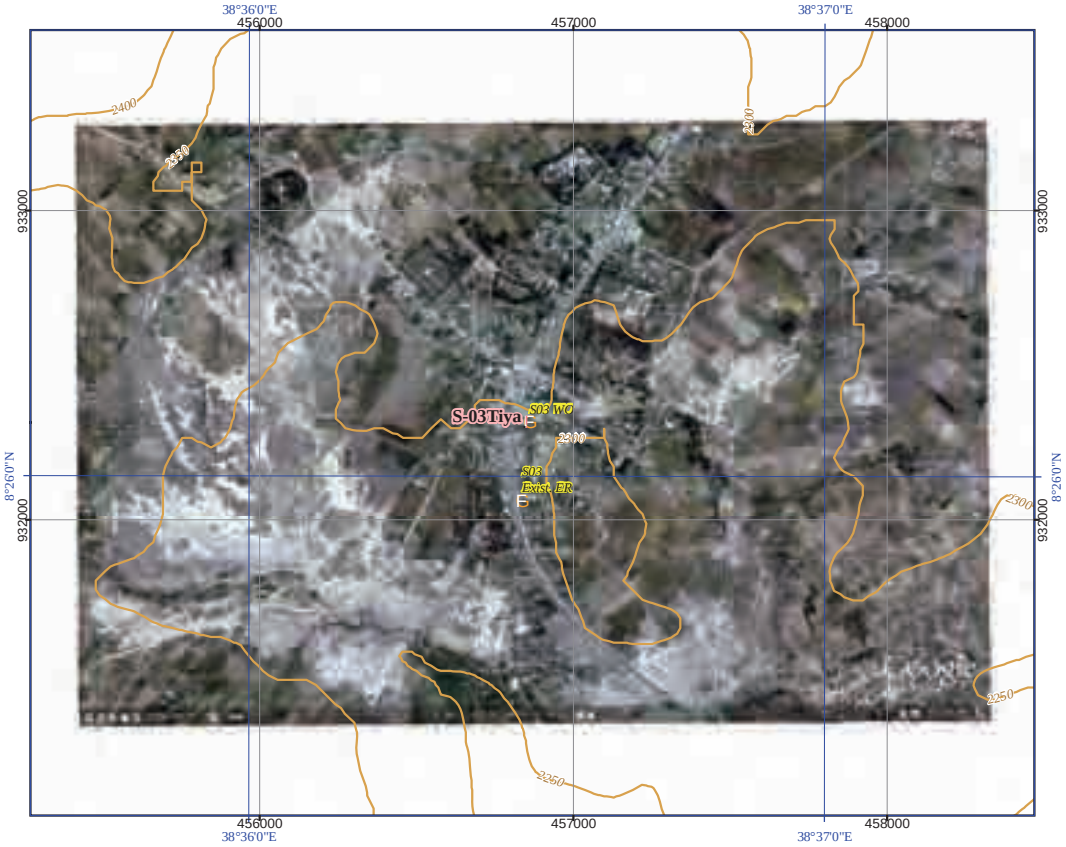
S-03 Tiya

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure of pipe lines	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Shall consider	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped	
	Change in industry	increase factory, Trading …etc.	Increase trading	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town is on flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		??	
	(??m3*??PF+0m3*0HC+0m3*0BC)=??m3/day ??m3/20Lpcd.=??persons ??persons/1,937population=??%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((1.5L+??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/1937population=??%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	* Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		6	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	World vision			
17	Main Ethnic Group		Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	50	
	-3 Main patients of water born diseases	persons / year	Dysentery	165
			Mararia	76
			Typhoid	41
			others	182
19	Main economic activities		Trade, Waving, Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-03 Tiya



データ 7.3　南部諸民族州の小都市プロファイル

S-04 Suten

	SNNPR					4 / 52	
	Name of small town	**:**	**Suten**			**S- 04**	
	Name of Woreda	**:**	**Sodo**			**SW- 01**	
	Name of Zone	**:**	**Gurage**			**SZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	623	675	1,298	
	Woreda	male / female / total	by Census 2007	67,110	67,524	134,634	
	percentage of Town in Woreda					1.0%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	457353	928959	2,289	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-186m, 6*5/8", GL-??m, / ??L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	07:00-12:00, 15:00-18:00 (8hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1992			
	05-02 Financial of implementation		Donor's name	SNNPR, Unicef			
	05-03 Name of implementation (Project name)			Suten water project, Irish Embassy			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2*1/2", 5,000m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	50m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 2*1/2"=150m, 2"=3,436m (Total=3,586m)			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	5			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6FC*4PF, 3FC*1PF (Function*3PF)			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	5.0m3/day			
	05-21 Number of House Connection (HC)			50 (Not function)			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	Not grasped			!
	05-23 Number of Business Conection (BC)			Not grasped			!
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School, Health center			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	Not grasped			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			Not grasped			!
	06-06 Principal works of financial staff			Water maeter read, Bill, Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.5birr/20L			
	House connection		Birr/m3	1.6birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	2,500birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Butajira			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefitting			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda, NGO			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

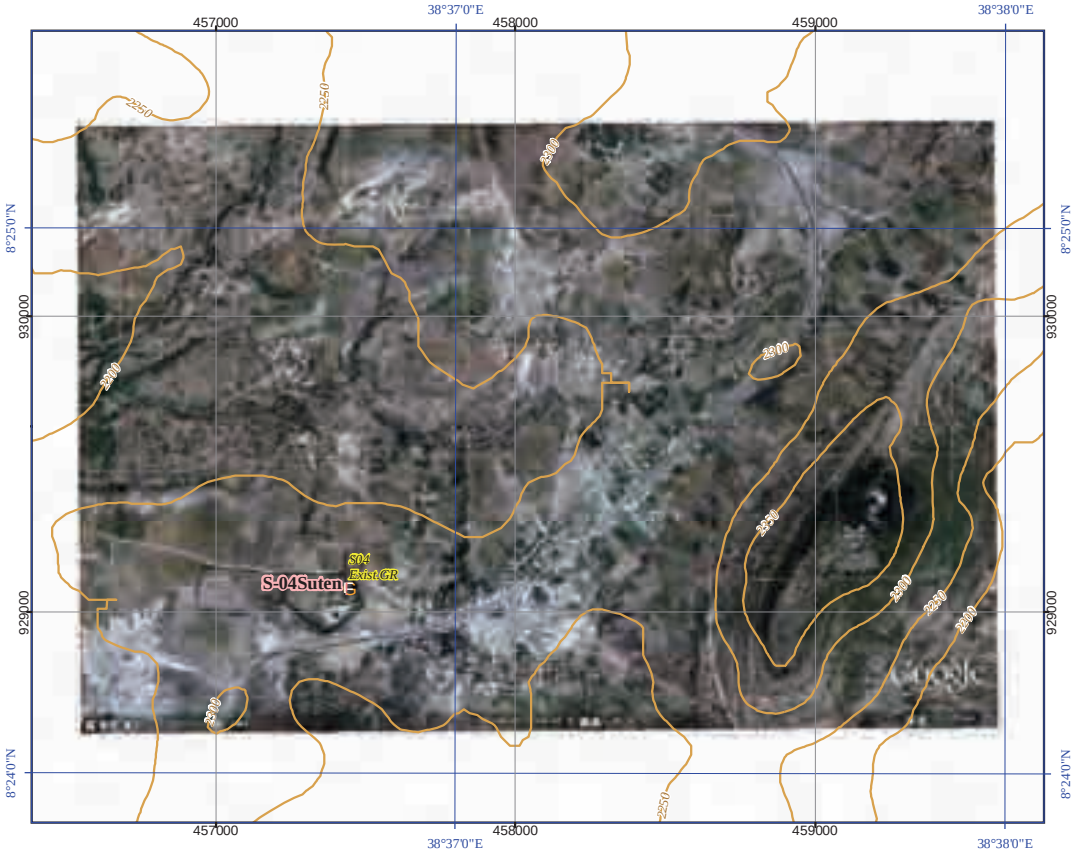
S-04 Suten

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	!
	07-02 Finalcial			
	Management		Not grasped	!
	Rate of water tarrif collection		Not grasped	!
	Personnel expenses		Not grasped	!
	Shortage of budget to execute operation & maintenace		Not grasped	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil	
	Change in industry	increase factory, Trading …etc.	nil	
	Human conflict	Ethnic, Administrative …etc.	nil	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Towns is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		58%	
	(5.0m3*3PF+0m3*50HC+0m3*3BC)=15m3/day 15m3/20Lpcd.=750persons 750persons/1,298population=??%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/1,298population=??%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	* Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		9	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	45	
	-3 Main patients of water born diseases	persons / year	Mararia 1,000	
			Typhoid 300	
			Dysentery 208	
			others 700	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
	Mr. shiferaw Arsi committee member mob. 0916248695			
	Mr. Mulatu Fekadu watr committee member			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-04 Suten



データ 7.3　南部諸民族州の小都市プロファイル

S-06 Koshe

	SNNPR					5 / 52	
	Name of small town	**:**	**Koshe**			**S- 06**	
	Name of Woreda	**:**	**Marego**			**SW- 02**	
	Name of Zone	**:**	**Gurage**			**SZ- 01**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by JICA Study Survey	4,192	3,610	7,802	
	Woreda	male / female / total	by Census 2007	32,195	31,241	63,436	
	percentage of Town in Woreda					12.3%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	448175	885173	1,891	
03	Town Status			Woreda Capital			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 2nos.			
	04-02 Well spec.		Denth., Casing Dia., S.W.L	see below memo			
	04-03 Methor of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source		Type, Kva	Commercial Elec.			
	04-06 Durartion of water draw		daily hours, time	see below memo			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen			nil.			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1969 / 2010			
	05-02 Financial of implementation		Donor's name	US Aid & Resque Committee on 2010			
	05-03 Name of implementation			Koshe water supply project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2"&4", 6m+3,000m see below memo			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR, ER Steel Tank (On-spot) see below memo			
	05-11 Water reserver No.		no.	GR*1no., ER*1no.			
	05-12 Water reserver Capacity		m3	GR*100m3, ER*4m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	-			
	05-14 Power to transmit		Pressure, Gravity	-			
	05-15 Distribution Type		Pipe material, length	GIP&PVC/ 4"~1*1/2"/ 2,850m See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry / Pipe			
	05-18 Number of water point (Public Faucet, PF)		no.	11			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	6m3/day			
	05-21 Number of House Connection (HC)			151			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.53m3/day			
	05-23 Number of Business Conection (BC)			11			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School*2, Gov.*9			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	2.2m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Koshe water supply center			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community Based Organization (CBO)			
	06-03 Number of thechnical staff			2			
	06-04 Principal works of technical staff			plumbing, operator			
	06-05 Number of the financial staff			13			
	06-06 Principal works of financial staff			Water meter count., Billing			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House Connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.15birr/25L			
	House connection		Birr/m3	5.0birr/m3, 2.0birr/water meter monthly ease			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	14,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, pipe fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Technical advosing by SNNPR			
	06-13 Principal serious repair with 5-10 years			Well pump repair			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Koshe water supply center			
	06-15 Other technical specimen			nil.			

データ 7.3　南部諸民族州の小都市プロファイル

S-06 Koshe

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water quantity	!
	Water supply facility	Decrepit, leakage, design failure …etc	Elec. Power supply (need stand by GE)	
	07-02 Finalcial			
	Management		Delay of payment from Customers	
	Rate of water tarrif collection		No response	
	Personnel expenses		No response	
	Shortage of budget to execute operation & maintenace		No response	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Incresing population	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen		nil.	
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			94%
	(6m3*11PF+0.53m3*151HC)=146m3/day 146m3/20Lpdc.= 7,300 persons 7,300persons / 7,802 populati			
	Current Water Coverage (%) (by data of water source product))			203%
	((3.0+8.0L)*3600sec.*8hrs)=316800L/day 316800/20Lcd=15840persos 15840persons/7802population=203%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A
	700m (Approx.) from Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road from Butajira 22km is asphalt paved.* Refer to Chapter 5 "Table 5-7: Categories of accessibilit			
13	Manpower Capability of Water Supply Management by Water Office (point)			11
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's	US Aid, Rescue Committee		
17	Main Ethnic Group		Marego, Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	25	
	-3 Main patients of water born diseases	persons / year	Mararia 4,000	
			Dysentery 2,000	
19	Main economic activities		Farming	
20	Particular comments :			
			Interviewee : Fasika Seyfu H/Minicipality 0912082868	
			Afework Gatiso Chairman 0916280407	
			Samuel Kebede Secretary 0916346277	
21	Remarks :			
	The Water Committee does not even have own office, no written documents, they do not even know when the Committee was established. One Committee Member has in his head all the information about the pipeline (the diameters seem contradictory). And another Committee Member has in his head all the information on water consumption, tariff, income.			

Memo (Town sketch …etc.) :

04-02 Well spec.

Well No.1; Established on 1969 / Depth GL-208m / casing dia. 6"/ SWL GL-??m / 3.0L/sec.

Well No.2; Established on 2010 by USAid&Rescue Committee / Depth GL-84m / casing dia. 8"/ SWL GL-??m / 8.0L/sec.

04-06 Duration of water draw (Pump operation hours)

Well No.1; 08:00~14:00, 15:00~18:00 (Total 9.0hrs/day)

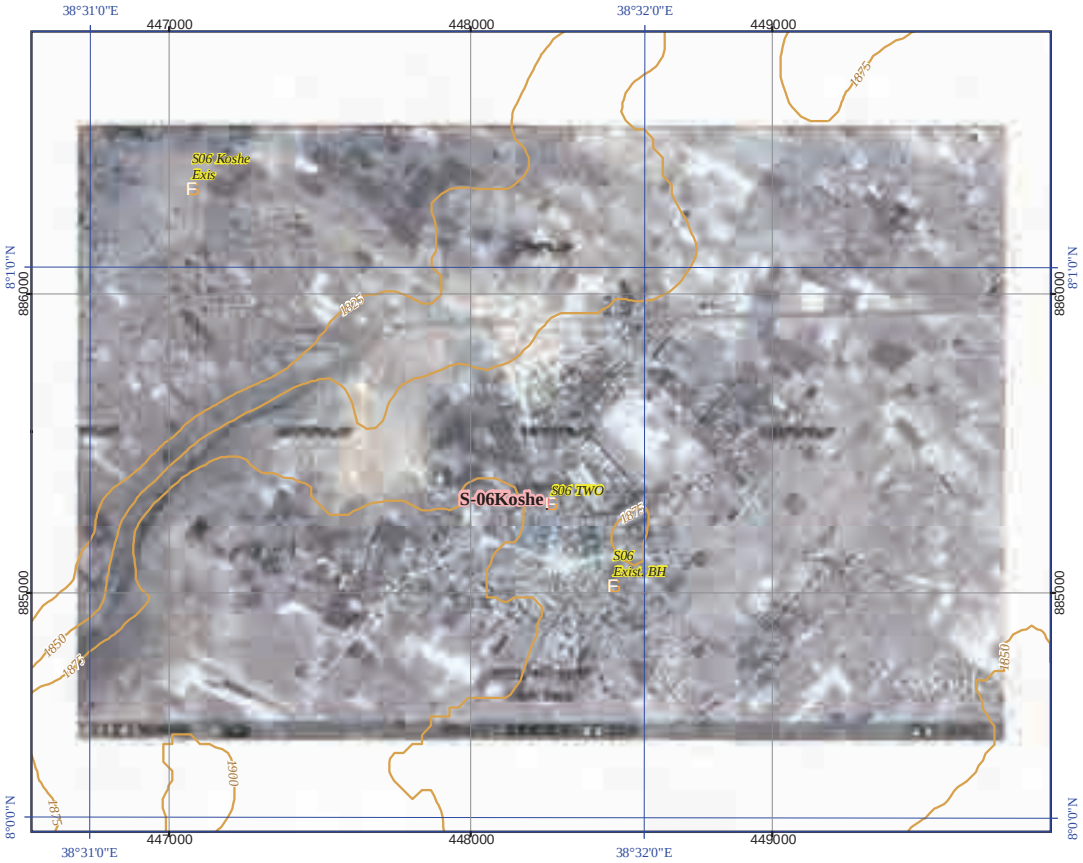
Well No.2; 08:00~14:00, 15:00~18:00, 20:00~22:00 (Total 11.0hrs/day)

05-06 / 10 / 15 Convayance / Water Reservoir / Distribution

Conveyance pipe line	Well No. 1 GIP dia.2" L=6.0m (On-Spot) / Well No.2 GIP dia.4" L=3,000m
Water reservoir	Well No.1 Elevated Reservoir V=4.0m3*1 / Well No.2 Ground Reservoir V=100m3*1
Distribution pipe line	Well No. 1 nil. (On-Spot) / Well No.2 GIP&PVC dia.1*1/2" ~ 4" L=2,850m
	(Well No.2 = GIP 4"*500m +PVC 3"*1,950m+ GIP 1*1/2"*400m Total 2,850m)

データ 7.3　南部諸民族州の小都市プロファイル

S-06 Koshe



データ 7.3　南部諸民族州の小都市プロファイル

S-07 Lisana

	SNNPR					6 / 52	
	Name of small town	**:**	**Lisana**			**S- 07**	
	Name of Woreda	**:**	**Lemmo**			**SW- 04**	
	Name of Zone	**:**	**Hadiya**			**SZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	890	821	1,711	
	Woreda	male / female / total	by Census 2007	58,663	59,915	118,578	
	percentage of Town in Woreda					1.4%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	382047	830873	2,157	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-157m, 6*5/8", GL-89.21m, 6L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. Line			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	07:00-12:00 & 15:00-18:00 (8hrs/day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1999			
	05-02 Financial of implementation		Donor's name	SNNPR			
	05-03 Name of implementation (Project name)			Liasa water project, SNNPR			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2*1/2", 2,500m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	E.R (Roto Tank)			
	05-11 Water reserver No.		no.	2nos.			
	05-12 Water reserver Capacity		m3	10m3 * 2nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	6			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	16m3/day			
	05-21 Number of House Connection (HC)			1			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.3m3/day			
	05-23 Number of Business Conection (BC)			2			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School*1, Health Center*1			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.3m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Lisana area water suply system			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			5			
	06-06 Principal works of financial staff			Water sale, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.3birr/20L			
	House connection		Birr/m3	8birr/m3			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	6,500birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Hosana			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipefittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Pipefittings line broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Community			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-07 Lisana

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage, Elec. Blackout	!
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (water leakage)	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villagers	
	Change in industry	increase factory, Trading …etc.	Increase grain production	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town is on flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		283%	!
	(16m3*6PF+0.3m3*1HC+0.3m3*2BC)=96.9m3/day 96.9m3/20Lpcd.= 4,845persons 4,845persons / 1,711 population = 283%			
	Current Water Coverage (%) (by data of water source product))		505%	
	((6.0L)*3600sec.*8hrs)=172800L/day 172800/20Lcd=8640persos 8640persons/1711population=505%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Sub grade road at 7km approx from Hosaina * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		13	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Hadiya, Amhara	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store, Health pos	
	-2 Nearest other facilities from Town	km	15	
	-3 Main patients of water born diseases	persons / year	Mararia 1,000	
			Dysentery 1,000	
			Typhoid 1,000	
			Diarrhea 50	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			

Memo (Town sketch …etc.) :

05-15 Distribution Type	
GIP&PVC 2*1/2"=3,000m PVC 1/2"=120m	Total L=3,120m

データ 7.3　南部諸民族州の小都市プロファイル

S-07 Lisana

データ 7.3　南部諸民族州の小都市プロファイル

S-09 Dosha

	SNNPR					7 / 52	
	Name of small town	**:**	**Dosha**			**S- 09**	
	Name of Woreda	**:**	**Shashago**			**SW- 05**	
	Name of Zone	**:**	**Hadiya**			**SZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	920	961	1,881	
	Woreda	male / female / total	by Census 2007	51,777	50,687	102,464	
	percentage of Town in Woreda					1.8%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	397071	839228	1,930	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	BH Well * 3nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See belo memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Handpump			
	04-05 Power source for motorized pump		Type, Kva	Manual			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	Not grasped			
	04-07 Water quality		Iron, Fluoride …etc.	Not grasped			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1987 / 2007			
	05-02 Financial of implementation		Donor's name	Kakehiwot / Unicef&NCA			
	05-03 Name of implementation (Project name)			Dosha water project,			
	05-04 Intake Type			Well (Shallow well)			
	05-05 Intake No.			3nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	3.6m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			3			
	06-06 Principal works of financial staff			Water sale			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. point (Handpump)			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.05birr/20L			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	2,700birr.month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Bonosya			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Parts of handpump			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee, SNNPR			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-09 Dosha

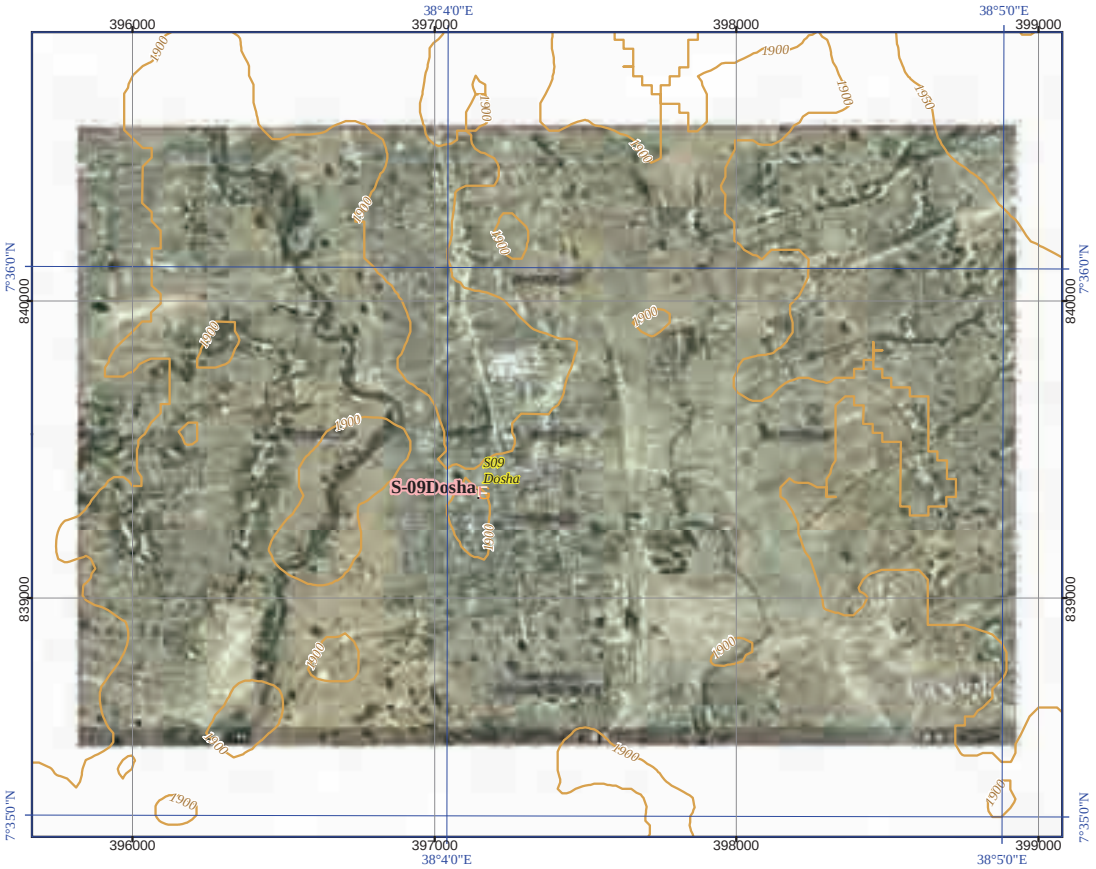
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure (suction valve level)	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	coming from villagers	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town is on flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		10%	
	(??m3*??PF+0m3*0HC+0m3*0BC)=??m3/day 3.6m3/20Lpcd.=180persons 180persons/1,881population=10%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L+??L+??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/1881population=??%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	B / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access is Asphalt & Sub grade road from Hosaina. (=18+10km) * Refer to Chapter 5 "Table 5-7: Categori			
13	Manpower Capability of Water Supply Management by Water Office (point)		6	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Hadiya	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store, Health pos	
	-2 Nearest other facilities from Town	km	39	
	-3 Main patients of water born diseases	persons / year	Mararia	6,131
			Typhoid	2,800
			Dysentery	251
			others	532
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
		Mr. Ahemed Hamza Human resources adm. 0912243561		
		Mr. Mulushewa Haile, Minicipality recording & documentation office 0917187582		
		Mr. Lemilo Wo ndu Manager of minicipality 0910455888		

Memo (Town sketch …etc.) :

04-02 Well spec.
Well No.1; Established on 1987 / Depth GL-37m / casing dia. ??"/ SWL GL-??m / ??L/sec.
Well No.2; Established on 2007 / Depth GL-30m / casing dia. ??"/ SWL GL-??m / ??L/sec.
Well No.2; Established on 2007 / Depth GL-32m / casing dia. ??"/ SWL GL-??m / ??L/sec.

データ 7.3　南部諸民族州の小都市プロファイル

S-09 Dosha



データ 7.3　南部諸民族州の小都市プロファイル

S-11 Fonko

SNNPR						8 / 52	
Name of small town	**:**		**Fonko**			**S- 11**	
Name of Woreda	**:**		**Analemmo**			**SW- 07**	
Name of Zone	**:**		**Hadiya**			**SZ- 02**	
Profile items				**Profile**			**!**
01 Population							
Town	male / female / total		by SNNPR	1,185	1,195	2,380	
Woreda	male / female / total		by Census 2007	35,959	37,249	73,208	
percentage of Town in Woreda						3.3%	
02 Town Coordination	UTM (Adindan)		Easting / Northig / Alt.	385587	844936	2,284	
03 Town Status				Town Administration			
04 Water Source							
04-01 Water source			Type, No.	Well*2nos. (2/2byHP abandoned)			
04-02 Well spec.			Depth., Casing Dia., S.W.L, Yield	GL-138m, 6*5/8", GL-55.5m, 6L/sec.			
04-03 Method of water draw			Pump, Gravity	Pump			
04-04 Pump Spec.			Type, Yield	Motorized pump / Hand pump (abandon)			
04-05 Power source for motorized pump			Type, Kva	Commercial Elec. / Manual			
04-06 Durartion of water draw (Operation hours)			daily hours, time	06:00~09:00 + 1hr. (4hrs./day)			
04-07 Water quality			Iron, Fluoride …etc.	Good			
04-08 Other technical specimen							
05 Existing Water Supply Facilities							
05-01 Established year			(Gregorian calendar)	1999			
05-02 Financial of implementation			Donor's name	SNNPR			
05-03 Name of implementation (Project name)				Fonko water supply project			
05-04 Intake Type				Well			
05-05 Intake No.				2nos.			
05-06 Conveyance Type (Water source ~ Reservoir)			Pipe material, length	GIP, 2", 1,500m			
05-07 Power to convey			Pressure, Gravity	Pressure / Manual			
05-08 Water treatment			Disinfection, Iron …etc.	nil.			
05-09 Water treatment capacity			m3/day	nil.			
05-10 Water reserver type			Type	GR			
05-11 Water reserver No.			no.	1no.			
05-12 Water reserver Capacity			m3	50m3			
05-13 Transmission Type (Booster pump Stn. ~ Reservoir)			Pipe material, length	nil.			
05-14 Power to transmit			Pressure, Gravity	nil.			
05-15 Distribution Type			Pipe material, length	See below memo			
05-16 Power to distribute			Pressure, Gravity	Gravity			
05-17 Structure Type of water point (Public Faucet, PF)			RC, Masonry, Pipe …etc.	Monsonry			
05-18 Number of water point (Public Faucet, PF)			no.	5 (2 fonction)			
05-19 Number of faucet at a water point (Public Faucet, PF)			no.	6			
05-20 Average of daily water consumption at a water point (PF)			m3/day	33m3/day			!
05-21 Number of House Connection (HC)				nil.			
05-22 Average of daily water consumption of House Connection(HC)			m3/day	nil.			
05-23 Number of Business Conection (BC)				nil.			
05-24 Type of Business Connection (BC)			Factory, School, Gov. office, Hospital …etc.	nil.			
05-25 Average of daily water consumption of Business Connection (BC)			m3/day	nil.			
05-26 Other technical specimen							
06 Operation and Maintenace							
06-01 Organization's name				Town water service			
06-02 Type of organization			Regional, Zone, Enterprice…etc.	Community based organization			
06-03 Number of thechnical staff				1			
06-04 Principal works of technical staff				Pump operation			
06-05 Number of the financial staff				2			
06-06 Principal works of financial staff				Water sale at PF			
06-07 Categories of water tariff			W.Point, House Connection…etc.	W. point			
06-08 Water tariff rate							
Water point (Public faucet)			Birr/L, 20L	0.1birr/20L			
House connection			Birr/m3	nil.			
Business connection			Birr/m3	nil.			
06-09 Average monthly income by water tariff			Birr/month	4,000birr/month			
06-10 Procurement of spare parts			at Town, Zonal Cap. Reg. Cap. …etc.	Hosaina, Addis Ababa			
06-11 Principal spare parts			Oil filter, Fuel filter, Pipes …etc	Pipe&fittings			
06-12 Method in case of serious repair			by Regional office, Private company …etc	Zone, Region			
06-13 Principal serious repair with 5-10 years				Pump control panel			
06-14 Fund for above 6-09, 6-10			by Organization, Gov., Donors …etc.	Committee			
06-15 Other technical specimen							

データ 7.3　南部諸民族州の小都市プロファイル

S-11 Fonko

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shortage water		
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		low		
	Shortage of budget to execute operation & maintenace		Not grasped		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Town status is changed to Woreda		
	Change in industry	increase factory, Trading …etc.	Increase trading		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Ridge of mountatin along asphalt road				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			139%	!
	(33m3*2PF+0m3*0HC+0m3*0BC)=66m3/day 66m3/20Lpcd.= 3,300persons 3,300persons / 2,380 population = 139%				
	Current Water Coverage (%) (by data of water source product))			363%	
	((6.0L)*3600sec.*8hrs)=172800L/day 172800/20Lcd=8640persos 8640persons/2380population=363%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Along asphalt road at 17km approx from Hosaina * Refer to Chapter 5 "Table 5-7: Categories of accessibili				
13	Manpower Capability of Water Supply Management by Water Office (point)			10	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	Refer to the Chapter 6				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle hills, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Hadiya		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	18		
	-3 Main patients of water born diseases	persons / year	Mararia	3,932	
			Typhoid	1,035	
			Dysentery	130	
			Diarrhea	89	
			others	1,107	
19	Main economic activities		Trade, Farming, Waving		
20	Particular comments :				
21	Remarks :				

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP 2*1/2"=2,500m	PVC 2"=1,350m	Total L=3,850m	

データ 7.3　南部諸民族州の小都市プロファイル

S-11 Fonko

データ 7.3　南部諸民族州の小都市プロファイル

S-12 Wada

	SNNPR					9 / 52	
	Name of small town	**:**		**Wada**		**S- 12**	
	Name of Woreda	**:**		**Mirab Badawocho**		**SW- 08**	
	Name of Zone	**:**		**Hadiya**		**SZ- 02**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	1,020	1,093	2,113	
	Woreda	male / female / total	by Census 2007	40,871	42,556	83,427	
	percentage of Town in Woreda					2.5%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	367494	789747	1,718	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no., Well (Shallow)*2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	Gravity / Pump			
	04-04 Pump Spec.		Type, Yield	nil. / Handpump			
	04-05 Power source for motorized pump		Type, Kva	nil. / Manual			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs. / 06:00-12:00, 13:00-20:00 (13hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	?? / 2010			
	05-02 Financial of implementation		Donor's name	SNNPR / Cathlic church			
	05-03 Name of implementation (Project name)			Wada water supply project			
	05-04 Intake Type			Spring (On-spot) / Well (Shallow well)			
	05-05 Intake No.			1no. / 2nos (1 function)			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	0.6m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Wada 01 kebele water system			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point (Handpump)			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	1.0birr/month/household			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Handpump broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	SNNPR			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

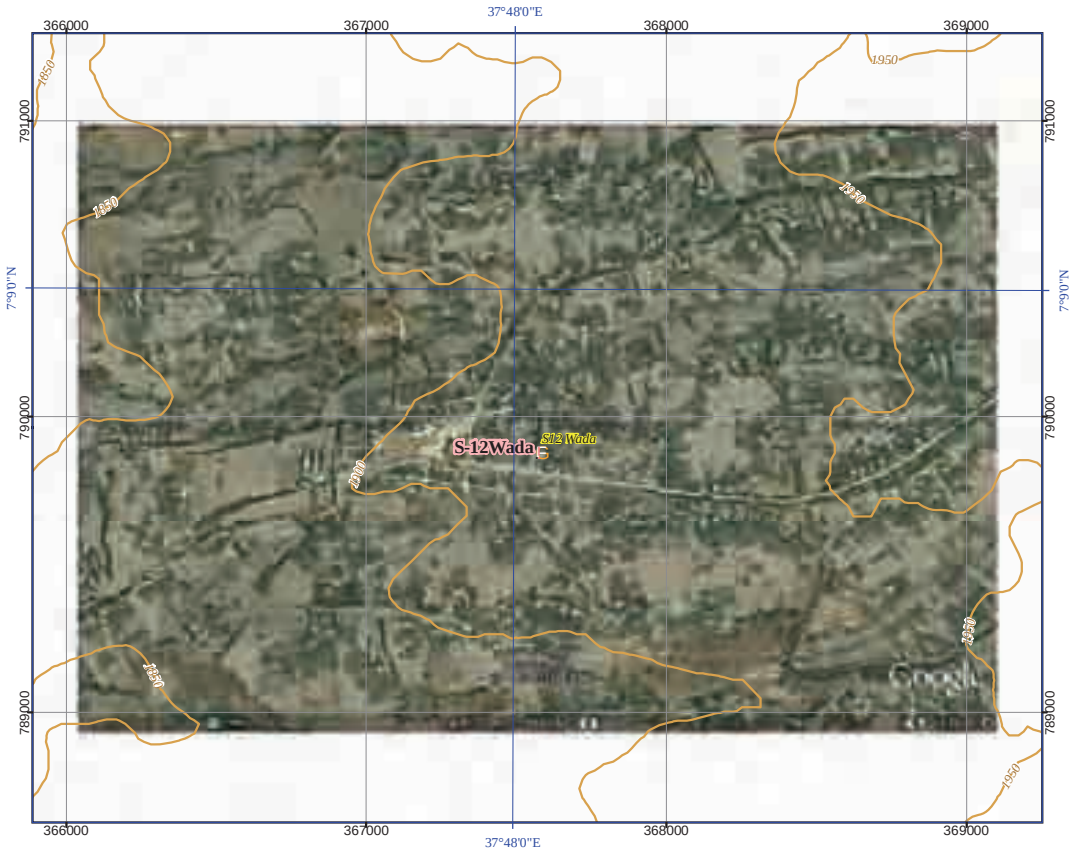
S-12 Wada

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shortage water		
	Water supply facility	Decrepit, leakage, design failure …etc	facility are limited		
	07-02 Finalcial				
	Management				
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		low		
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc	caming from villages		
	Change in industry	increase factory, Trading …etc	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the hill and slight slope.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			3%	!
	(0.6m3*2PF+0m3*0HC+0m3*0BC)=1.2m3/day 1.2m3/20Lpcd.= 60persons 60persons / 2,113 population = 3%				
	Current Water Coverage (%) (by data of water source product))			?? %	
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/2113population=??%				
11	Water Potential (A / B / C / D / E)			E	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			E / E	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access is Sub Grade road 16km approx. from Asphalt road * Refer to Chapter 5 "Table 5-7: Categories of				
13	Manpower Capability of Water Supply Management by Water Office (point)			5	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	Refer to the Chapter 6				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle hills, construction work is not difficult except water sources.				
16	Other Donors, NGO's				
	Cathlic church				
17	Main Ethnic Group		Hadiya		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Health post		
	-2 Nearest other facilities from Town	km	70		
	-3 Main patients of water born diseases	persons / year	Typhoid	4,000	
			Dysentery	3,900	
			Diarrhea	3,000	
			Malaria	1,972	
19	Main economic activities		Firming, Livestock		
20	Particular comments :				
	Out of the study area.				
21	Remarks :				
	Spring is 1,500m from town.				
		Mr. Dawit Daniel Minicipal Personel Mob. 0913694799			
		Mr. Kebede Sodano Supplies officer Mob. 0910442984			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-12 Wada



データ 7.3　南部諸民族州の小都市プロファイル

S-13 Anigacha

	SNNPR			**17 / 19**	10 / 52		
	Name of small town	**:**		**Anigacha**	**S- 13**		
	Name of Woreda	**:**		**Anigacha**	**SW- 09**		
	Name of Zone	**:**		**Kembaya Timbaro**	**SZ- 03**		
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		3,486	3,325	6,811
	Woreda	male / female / total	by Census 2007		44,042	44,018	88,060
	percentage of Town in Woreda						7.7%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		374202	811859	2,313
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well*1		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-166m, 6", GL-88m, 5.5L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump (15kw)		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00-10:30, 13:30-17:30 /day (8.5hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2000		
	05-02 Financial of implementation		Donor's name		UNICEF		
	05-03 Name of implementation (Project name)				Anigacha water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 3", 2,800m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*3nos.		
	05-12 Water reserver Capacity		m3		50m3, 10m3*2nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		-		
	05-14 Power to transmit		Pressure, Gravity		-		
	05-15 Distribution Type		Pipe material, length		GIP, 3"&21/2", 3,000m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		10		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		1.0 m3/day		
	05-21 Number of House Connection (HC)				266		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.4m3/day		
	05-23 Number of Business Conection (BC)				15		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov.*6, School*2, Church*6, Hospital*1		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.2m3/day		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Town water office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Town		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Pump operation, Pipe repair		
	06-05 Number of the financial staff				4		
	06-06 Principal works of financial staff				Bill corrction, Water meter reading …etc.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House Connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2 birr/20L		
	House connection		Birr/m3		3.5 birr/m3, Water Meter lease 2.0birr/month		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		3,100 birr/month (saving in Bank account)		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Hosaina, Sheshemane, Addis Ababa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zonal office, Regional office		
	06-13 Principal serious repair with 5-10 years				Well Pump motor was burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		SNNPR		
	06-15 Other technical specimen				nil.		

データ 7.3　南部諸民族州の小都市プロファイル

S-13 Anigacha

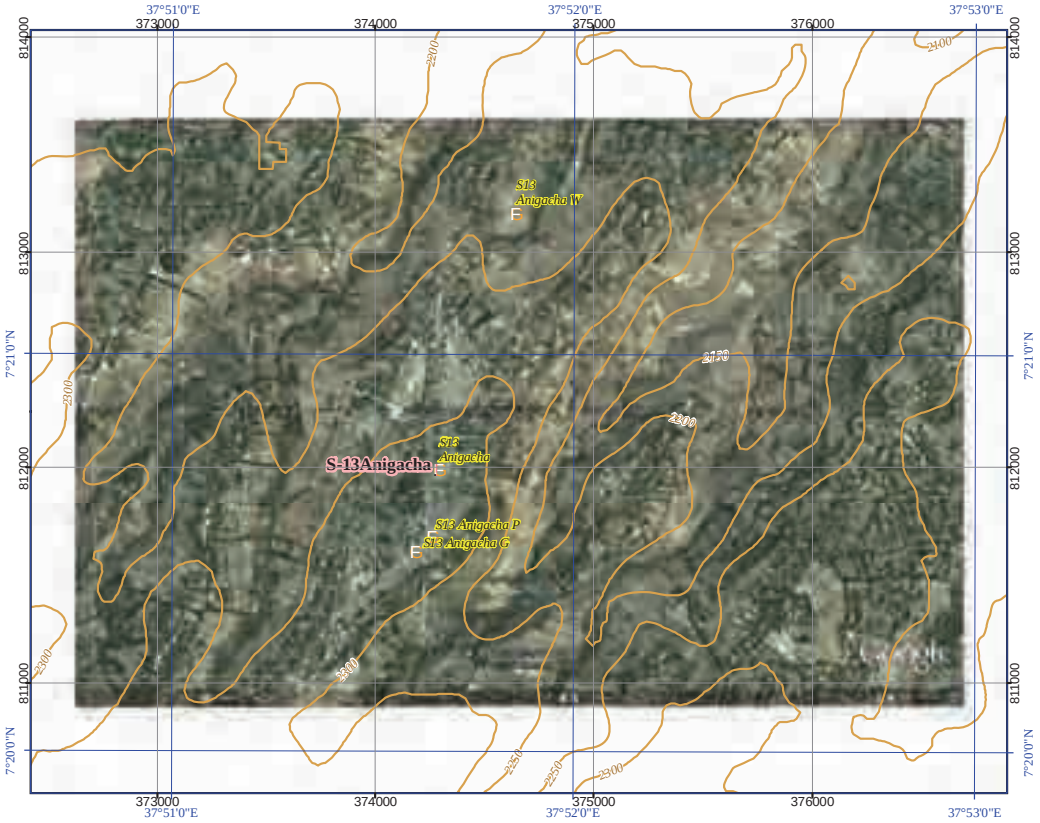
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage tools, Transportation, Lack of	
	Water supply facility	Decrepit, leakage, design failure …etc.	Skilled technicians	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Shortage budgets	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Slope of ridge, rolling, up and down			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			88%
	(1m3*10PF+0.4m3*266HC+0.2m3*15BC)/20Lpdc.=5970 persons　5970persons / 6811 population = 88%			
	Current Water Coverage (%) (by data of water source product))			116%
	((5.5L)*3600sec.*8hrs)=158400L/day　158400/20Lcd=7920persos　7920persons/6811population=116%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	From Hosaina Town to Anigacha Town is based cource road (Maddy in wet season) 15km approx* Refer to Chapter 5 "Table 5-7: Cat			
13	Manpower Capability of Water Supply Management by Water Office (point)			13
	Office has not any document, record of the existing water supply facility			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Inter Aide			
17	Main Ethnic Group		Kembata	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	31	
	-3 Main patients of water born diseases	persons / year	Typhoid	5,000
			Malaria	3,000
			Dysentery	1,775
19	Main economic activities		Farming, Trade	
20	Particular comments :			
	Due to growth and water consumption of residents, including surrouding villages, and frequently damaged pipes (water outage, reducting water faucets), water coverage has been declined. Therefore, it to be expected the rates of water poverty growth rapidly.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.
Well No.1; Established on 2000 / Depth GL-166m / casing dia. 6"/ SWL GL-88m / 5.5L/sec.

データ 7.3　南部諸民族州の小都市プロファイル

S-13 Anigacha



データ 7.3　南部諸民族州の小都市プロファイル

S-14 Adilo

	SNNPR					11 / 52	
	Name of small town	**:**		**Adilo**		**S- 14**	
	Name of Woreda	**:**		**Kedia Gamela**		**SW- 10**	
	Name of Zone	**:**		**Kembata Timbaro**		**SZ- 03**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,340	2,319	4,659
	Woreda	male / female / total	by Census 2007		45,004	45,193	90,197
	percentage of Town in Woreda						5.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		387502	796712	1,955
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		see memo below		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Generator		
	04-06 Durartion of water draw		daily hours, time		06:00-09:00, 16:00-18:00 (6hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1980 / 2009		
	05-02 Financial of implementation		Donor's name		SNNPR / World vision		
	05-03 Name of implementation				Adilo water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP 2"*700m / GIP 4"*2,000m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER / GR		
	05-11 Water reserver No.		no.		ER*1no. / GR*1no.		
	05-12 Water reserver Capacity		m3		ER*8m3 / GR*50m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		-		
	05-14 Power to transmit		Pressure, Gravity		-		
	05-15 Distribution Type		Pipe material, length		0m (On-spot) fm ER / 1*1/2"~4"=3,411m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		1 / 6		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6 / 6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		9.0m3/day		
	05-21 Number of House Connection (HC)				2		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		3.0m3/day		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water Committee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Town		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water fee correction, Bill issue …etc.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.4 birr/20L		
	House connection		Birr/m3		?? Birr/m3		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		11,314 birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sheshemane, Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipe, Fuacet, Filters		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Regional office		
	06-13 Principal serious repair with 5-10 years				Pump motor broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		SNNPR		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-14 Adilo

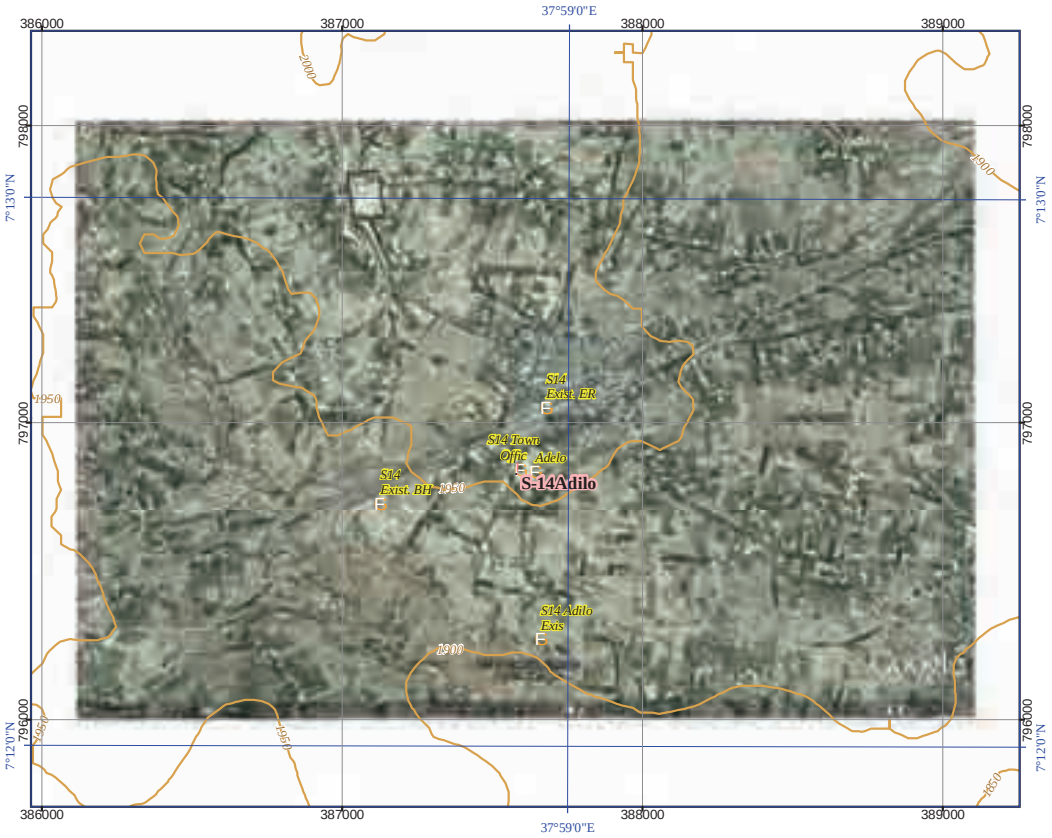
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Leakage from pipes,	
	07-02 Finalcial		Skill and shortage of the Technical staf	
	Management		Shorgtage of repair tools	
	Rate of water tarrif collection		Fuel cost	
	Personnel expenses		Power supply (not connected Ele. Line)	
	Shortage of budget to execute operation & maintenace			
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Coming from villages to demand water	
	Change in industry	Water office has and take advcrease factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			16%
	(9.0m3*1PF+3.0m3*2HC+0m3*0BC)/20Lpcd.= 750persons　750persons/4,659 population =16%			
	Current Water Coverage (%) (by data of water source product))			??%
	((??L+??L)*3600sec.*??hrs)=???L/day　???/20Lcd=???persos　???persons/4659population=??%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / B
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access roead is Asphalt road 49km fm Sodo. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			14
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Kembata, Hadiya	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	17	
	-3 Main patients of water born diseases	persons / year	Mararia	10,220
			Dysentery	977
			Typhoid	357
			others	761
19	Main economic activities		Farming, Trade, Livestock	
20	Particular comments :			
	New project has been under application on 18May2009. (They have a proposal document)			!
	Water office has and take advantage the drawings of the existing water pipe line, and they are planning new water supply facility.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.
Well No.1; Depth=GL-250m, Casing Dia. ??", S.W.L.= ??m, Yield ??L/sec. (Established 1981)
…Not. Working (Generator broken 04/Feb/2011)
Well No.2; Depth=GL-247m, Casing Dia. ??", S.W.L.= ??m, Yield ??L/sec. (Established 2010)

データ 7.3　南部諸民族州の小都市プロファイル

S-14 Adilo



データ 7.3　南部諸民族州の小都市プロファイル

S-15 Daniboya

	SNNPR			**11**	12 / 52		
	Name of small town	**:**		**Daniboya**	**S- 15**		
	Name of Woreda	**:**		**Daniboya**	**SW- 11**		
	Name of Zone	**:**		**Kembata Timbaro**	**SZ- 03**		
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		4,228	3,883	8,111
	Woreda	male / female / total	by Census 2007		41,119	40,652	81,771
	percentage of Town in Woreda						9.9%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		383977	812084	2,165
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Denth., Casing Dia., S.W.L		See belo memo		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec., Standby Generator		
	04-06 Durartion of water draw		daily hours, time		06:30-11:30, 15:00-18:00 /day (8hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1996		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation				Daniboya water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 3", 10m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*3nos.		
	05-12 Water reserver Capacity		m3		75m3, 20m3, 8m3 ea.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		8		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		5m3/day		
	05-21 Number of House Connection (HC)				161		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.166m3/day		
	05-23 Number of Business Conection (BC)				11		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov.*5, School*3, Health Center*1, Chrch*2		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.2m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Zone		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		Water point, House conne		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.25 birr/20L		
	House connection		Birr/m3		see below memo		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		8,512birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sheshemane, Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe&fitting		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone		
	06-13 Principal serious repair with 5-10 years				Generator broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Town Adiministration, Municipality		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-15 Daniboya

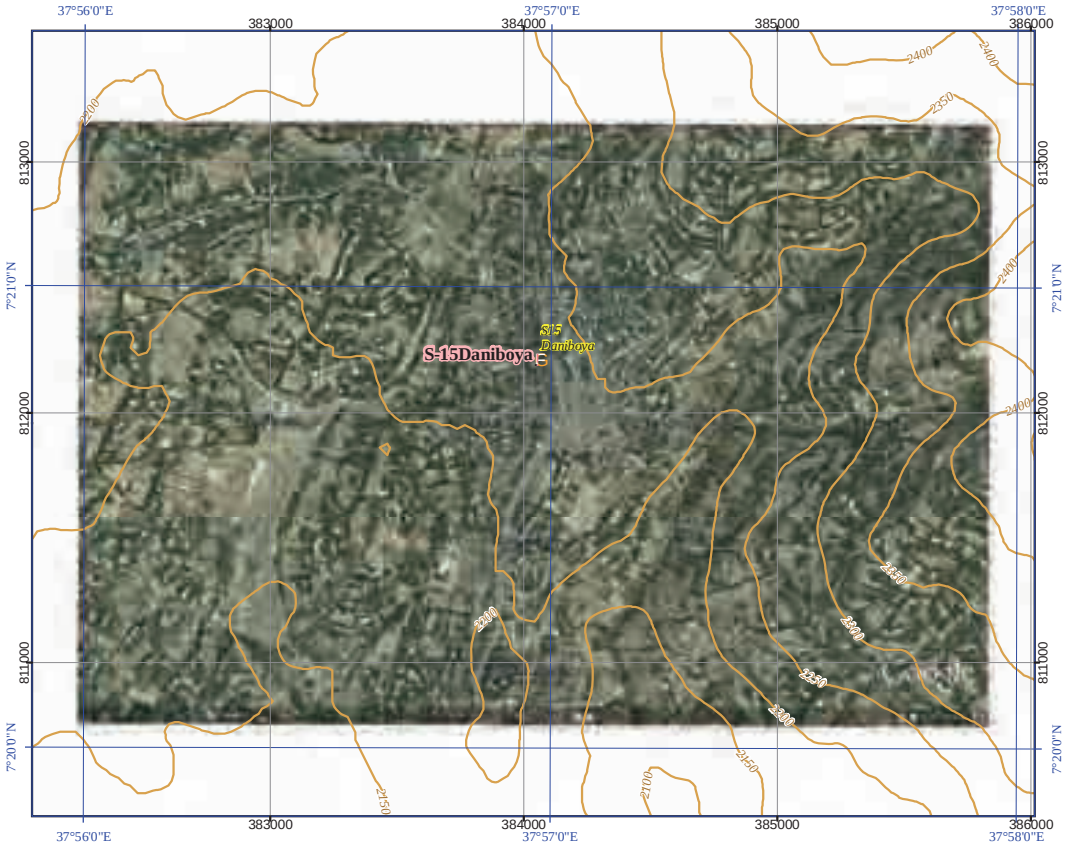
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Pipe network design (low pressure,		
	Water supply facility	Decrepit, leakage, design failure …etc.	Reservoir capacity)		
	07-02 Finalcial				
	Management		Delay of tariff correction		
	Rate of water tarrif collection		Not grasp		
	Personnel expenses		No answer		
	Shortage of budget to execute operation & maintenace		Shortage skilled manpowe		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Increse town population		
	Change in industry	increase factory, Trading …etc.	Not grasp		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other technical specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Gentle slope on mountain				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)		42%		
	(5.0m3*8PF+0.166m3*161HC+0.20m3*11BC)/20Lpcd.= 3,446 persons　3,446persons / 8,111 population = 42%				
	Current Water Coverage (%) (by data of water source product))		??%		
	((2.1L+??L)*3600sec.*??hrs)=???L/day　???/20Lcd=???persos　???persons/8111population=??%				
11	Water Potential (A / B / C / D / E)		B		
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	C / C		
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt and Sub grade (only dry season) 52km from Hosaina * Refer to Chapter 5 "Table 5-7: Categories of accessibil				
13	Manpower Capability of Water Supply Management by Water Office (point)		13		
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	Refer to the Chapter 6				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Kembata		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	12		
	-3 Main patients of water born diseases	persons / year	Mararia	1,000	
			Typhoid	200	
			Dysentery	150	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	Ground water is deep, 200m drilled is dry 2nd. Well wass dry up to 275m total depth drilledd is 300m & Q=2.1l/sec.				
	The willing to pay of residents is high.				
21	Remarks :				

Memo (Town sketch …etc.) :

04-02 Well spec.				
Well No.1; Estbsh on 1996	GL-??m / Casing dia.??" / SWL GL-??m / ??L/sec.	Abandon		
Well No.2; Estbsh on ??	GL-300m / Casing dia.6" / SWL GL-228.4m / 2.1L/sec.			
05-15 Distribution Type GIP				
ND-3"=2,000m	ND-2*1/2"=1,000m	ND-2"=3,000m		
ND-1*1/2"=2,000m	ND-1"=500m	Total=8,500m		
06-08 Water tariff rate (House & Buisiness Connection)				
0~5 m3 =6.0birr/m3	21~ 30m3 =6.75birr/m3	Water Meter Lease		
6~10 m3 =6.25birr/m3	31m3 ~ = 7.00birr/m3	ND-1/2"=3.0birr/month	ND-1"=5.0birr/month	
11~20 m3 =6.50birr/m3		ND-3/4"=4.0birr/month	ND-1*1/2"=6.0birr/month	

データ 7.3　南部諸民族州の小都市プロファイル

S-15 Daniboya



データ 7.3　南部諸民族州の小都市プロファイル

S-16 Leku

	SNNPR					13 / 52	
	Name of small town	**:**		**Leku**		**S- 16**	
	Name of Woreda	**:**		**Shebedio**		**SW- 12**	
	Name of Zone	**:**		**Sidama**		**SZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	6,290	5,520	11,810	
	Woreda	male / female / total	by Census 2007	95,888	93,947	189,835	
	percentage of Town in Woreda					6.2%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	438137	759326	1,868	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well*2nos.			
	04-02 Well spec.		Denth., Casing Dia., S.W.L	see below memo			
	04-03 Methor of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source		Type, Kva	Commercial Elec. (No.1 with Standby GE)			
	04-06 Durartion of water draw		daily hours, time	06:00-09:00, 15:00-18:00 (6hrs/day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good (No.2 well has turdbidity)			
	04-08 Other technical specimen			nil.			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	Aug. 2008			
	05-02 Financial of implementation		Donor's name	Plan Ethiopia			
	05-03 Name of implementation			Leku water project			
	05-04 Intake Type			Well			
	05-05 Intake No.			2			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP / 4" / L=511m * 2 network			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	2 nos.			
	05-12 Water reserver Capacity		m3	100m3 * 2 nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	-			
	05-14 Power to transmit		Pressure, Gravity	-			
	05-15 Distribution Type		Pipe material, length	GIP / 6", 2*1/2"~1*1/2" / L=11,000m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	28			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	10m3/day			
	05-21 Number of House Connection (HC)			400 / (500 back order)			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.225m3/day			
	05-23 Number of Business Conection (BC)			same as house connection			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Hotel			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	same as house connection			
	05-26 Other technical specimen			nil.			
06	Operation and Maintenace						
	06-01 Organization's name			Leku town water supply enterprice			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Enterprise			
	06-03 Number of thechnical staff			7			
	06-04 Principal works of technical staff			Pump operation, Mechani			
	06-05 Number of the financial staff			5			
	06-06 Principal works of financial staff			Water meter read, Bill, Procurement …etc.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point / House & Business Connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.15birr/20L (contract price 6.0birr/m3)			!
	House connection		Birr/m3	5.0birr/0~10m3 / 5.5birr/>10m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	17,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Awasa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, pipe fittings, Filter of GE			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Regional office			
	06-13 Principal serious repair with 5-10 years			Well pump broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Regional office			
	06-15 Other technical specimen			nil.			

データ 7.3　南部諸民族州の小都市プロファイル

S-16 Leku

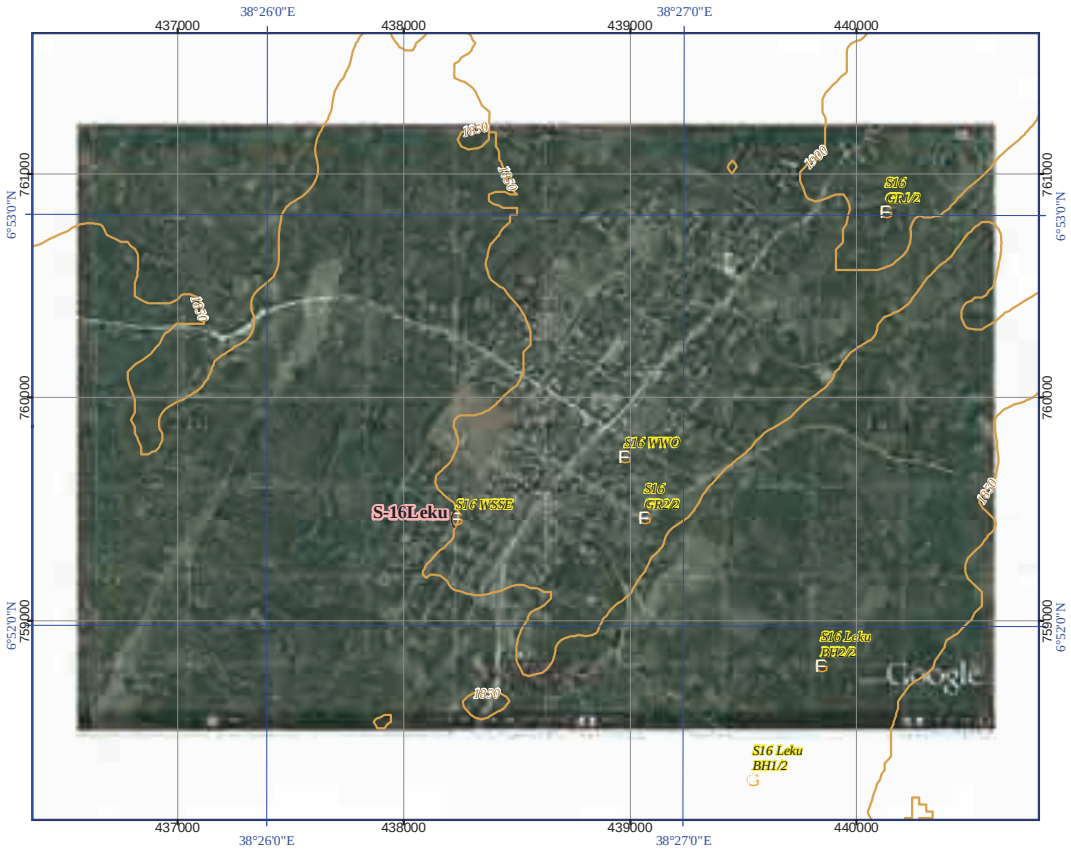
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	No response	
	Water supply facility	Decrepit, leakage, design failure …etc	Lack of design in distribution network	
	07-02 Finalcial			
	Management		No response	
	Rate of water tarrif collection		No response	
	Personnel expenses		Skill of technical staff	
	Shortage of budget to execute operation & maintenace		No response	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	village peoples	
	Change in industry	increase factory, Trading …etc.	Trading	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		157%	!
	(10m3*28PF+0.225m3*400HC)=370m3/day 370m3/20Lpcd.= 18,500 persons 18,500persons / 11,810 population = 157%			
	Current Water Coverage (%) (by data of water source product))		332%	
	((16.9L+10.33L)*3600sec.*8hrs)=784224L/day 784224/20Lcd=39211persos 39211persons/11810population=332%			
11	Water Potential (A / B / C / D / E)		A	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 22km from Awasa * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		19	
	Head, chief of administration are grasp facility, data and has document and records except drawings.			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Plan Ethiopia			
17	Main Ethnic Group		Sidama, Gurage	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	27	
	-3 Main patients of water born diseases	persons / year	Mararia	240
			Typhoid	208
			Dysentery	136
			Cholera	101
			Diarrhea	89
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	The existing water supply facility was constructed by NGOon 2008.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.	
Well No.1 ; Establish on 2008 / Depth GL-146m / Casing dia. 8" / SWL GL-33.07m / 16.9L/sec. with Stand-by Generator 110	
Well No.2 ; Establish on 2008 / Depth GL-162m / Casing dia. 8" / SWL GL-33.10m / 10.33L/sec. Water has turbidity	

データ 7.3　南部諸民族州の小都市プロファイル

S-16 Leku



データ 7.3　南部諸民族州の小都市プロファイル

S-17 Kebado

	SNNPR					14 / 52	
	Name of small town	**:**		**Kebado**		**S- 17**	
	Name of Woreda	**:**		**Dara**		**SW- 13**	
	Name of Zone	**:**		**Sidama**		**SZ- 04**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		4,239	4,126	8,365
	Woreda	male / female / total	by Census 2007		77,811	80,055	157,866
	percentage of Town in Woreda						5.3%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		427292	715624	1,804
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well * 2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		see below memo		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw		daily hours, time		10:00-13:00, 20:00-23:00 6hrs./day		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1980		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation				Kabado water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2 nos.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2*1/2" 472m, 3" 1,453m (total 1,925m)		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*1no.		
	05-12 Water reserver Capacity		m3		75m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP 3/4"~2*1/2" (total 1,896m)		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		9		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2.04m3/day		
	05-21 Number of House Connection (HC)				224		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.04m3/day		
	05-23 Number of Business Conection (BC)				13		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov., School, Clinic		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.46m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply service		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Woreda		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water meter reading, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		Water point, House Connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2birr/20L		
	House connection		Birr/m3		3.25birr/0~5m3, 2.75birr/5m3~		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		2,650		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Dilla		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe&Fitting		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone, Region		
	06-13 Principal serious repair with 5-10 years				Well rehabilitation (cleani		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		no answer		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-17 Kebado

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Not grasp	
	Water supply facility	Decrepit, leakage, design failure …etc.	Shortage water point, Pipe network	
	07-02 Finalcial			
	Management		Measure of transportaion	
	Rate of water tarrif collection			
	Personnel expenses		Shortage	
	Shortage of budget to execute operation & maintenace		Shortage of budget for maintainance	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increace Town population	
	Change in industry	increase factory, Trading …etc.	Increace Trading buisiness	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			20%
	(2.04m3*9PF+0.04m3*224HC+0.46*13BC)=33.3m3/day 33.3m3/20Lpcd.= 1,665 persons		1,665persons / 8,365 population = 20%	
	Current Water Coverage (%) (by data of water source product))			%
	((8.0L+??L)*3600sec.*8hrs)=??day ??/20Lcd=??persos ??persons/8365population=??%			
11	Water Potential (A / B / C / D / E)			A
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Asphalt road and Sub grade (only dry season) 12km from Dilla.* Refer to Chapter 5 "Table 5-7: Categories of accessibi			
13	Manpower Capability of Water Supply Management by Water Office (point)			13
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, which is not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Sidama	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	8	
	-3 Main patients of water born diseases	persons / year	Dysentery	350
			Malaria	210
			Typhoid	205
			others	180
19	Main economic activities		Trade, Livestock, Waving	
20	Particular comments :			
21	Remarks :			

Memo (Town sketch …etc.) :

	04-02 Well spec.
	Well No.1 ; Establish on 1980 / Depth GL-72m / Casing dia. 6*5/8" / SWL GL-54m / 8.0L/sec. with Stand-by Generator (Bro
	Well No.2 ; Establish on 2009 / Depth GL-??m / Casing dia. ??" / SWL GL-??m / ??L/sec. (Not yet use)

データ 7.3　南部諸民族州の小都市プロファイル

S-17 Kebado

データ 7.3　南部諸民族州の小都市プロファイル

S-18 Teferi Kela

	SNNPR					15 / 52	
	Town Name & ID No. :			**Teferi Kela**		**S- 18**	
	Woreda Name & ID No. :			**Dara**		**SW- 13**	
	Zone Name & ID No. :			**Sidama**		**SZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	2,153	2,025	4,178	
	Woreda	male / female / total	by Census 2007	77,811	80,055	157,866	
	percentage of Town in Woreda					2.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	432846	718356	1,874	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well*1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield				
	04-03 Method of water draw		Pump, Gravity				
	04-04 Pump Spec.		Type, Yield				
	04-05 Power source for motorized pump		Type, Kva				
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00-12:00 (6hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1967			
	05-02 Financial of implementation		Donor's name	China			
	05-03 Name of implementation (Project name)			Teferi Kella town water supply project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 2", 1,000m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	50m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	2*1/2" 1,350m, 1*1/2" 2,050m (Total 3,400m)			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	9 (8 function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2FC*1PF, 6FC*8PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	1.4m3/day			
	05-21 Number of House Connection (HC)			90			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.17m3/day			
	05-23 Number of Business Conection (BC)			30			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov., Chrch Health center, Mosque			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.233m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Teferi Kella water supply system			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Woreda water office			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation			
	06-05 Number of the financial staff			nil.			!
	06-06 Principal works of financial staff			nil.			!
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connectin			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.2birr/20L			
	House connection		Birr/m3	See below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	6,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Dilla			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, Pipes&fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone, Region			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Wareda water office			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-18 Teferi Kela

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Deterioration	
	07-02 Finalcial			
	Management		nil.	
	Rate of water tarrif collection		nil.	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	nil.	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Town is on flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		40%	
	(1.4m3*8PF+0.17m3*90HC+0.233m3*30BC)=33.5m3/day 33.5m3/20Lpcd.= 1,675persons 1,675persons / 4,178 population = 40%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/4178population=??%			
11	Water Potential (A / B / C / D / E)			
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Base course road 7km approx. from Asphalt road at Kebado (15km from Dila) * Refer to Chapter 5 "Table 5-7: Categories o			
13	Manpower Capability of Water Supply Management by Water Office (point)		12	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Sidama, Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	17	
	-3 Main patients of water born diseases	persons / year	Dysentery	400
			Typhoid	309
			Mararia	150
			others	200
19	Main economic activities		Trade, Livestock, Waving	
20	Particular comments :			
	Town has 2 wells and 2nd. well was constructed by SNNPRon 2009. However, this well is not under operationg due to there is no plan of other water supply facility.			
21	Remarks :			
		Mr. Belayneh Biftu Kebado Town Wss Head Mob. 0910084580		
		Mr. Dangiso Daniso Water saler		
		Mr. Gizaw Balcha Planning & program officef 0913165442		

Memo (Town sketch …etc.) :

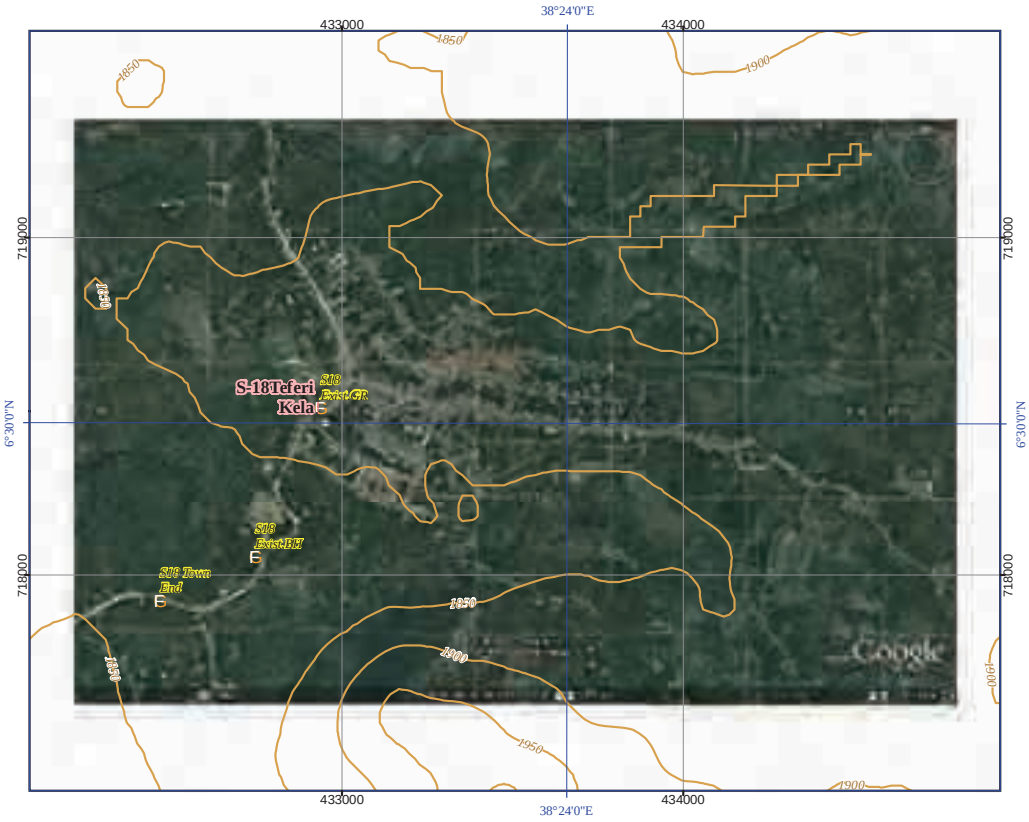
06-08 Water Tariff (House and Business Connection)

0 ~ 5 m3 = 3.25birr/m3　　11 ~ 30 m3 = 4.00birr/m3

6 ~ 10m3= 3.75birr/m3

データ 7.3　南部諸民族州の小都市プロファイル

S-18 Teferi Kela



データ 7.3　南部諸民族州の小都市プロファイル

S-19 Goreche

	SNNPR					16 / 52	
	Name of small town	**:**	**Goreche**			**S- 19**	
	Name of Woreda	**:**	**Goreche**			**SW- 14**	
	Name of Zone	**:**	**Sidama**			**SZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	1,614	1,372	2,986	
	Woreda	male / female / total	by Census 2007	70,816	68,964	139,780	
	percentage of Town in Woreda					2.1%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	453653	759991	2,387	
03	Town Status			Woreda Capital			
04	Water Source						
	04-01 Water source		Type, No.	Spring (On-spot)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hrs. (Actual 10hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2005			
	05-02 Financial of implementation		Donor's name	SNNPR			
	05-03 Name of implementation (Project name)			Gorche spring developemnt project			
	05-04 Intake Type			Spring (On-spot)			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	1 (On-spot)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	18m3/day or less (Approx.)			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate			nil.			
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

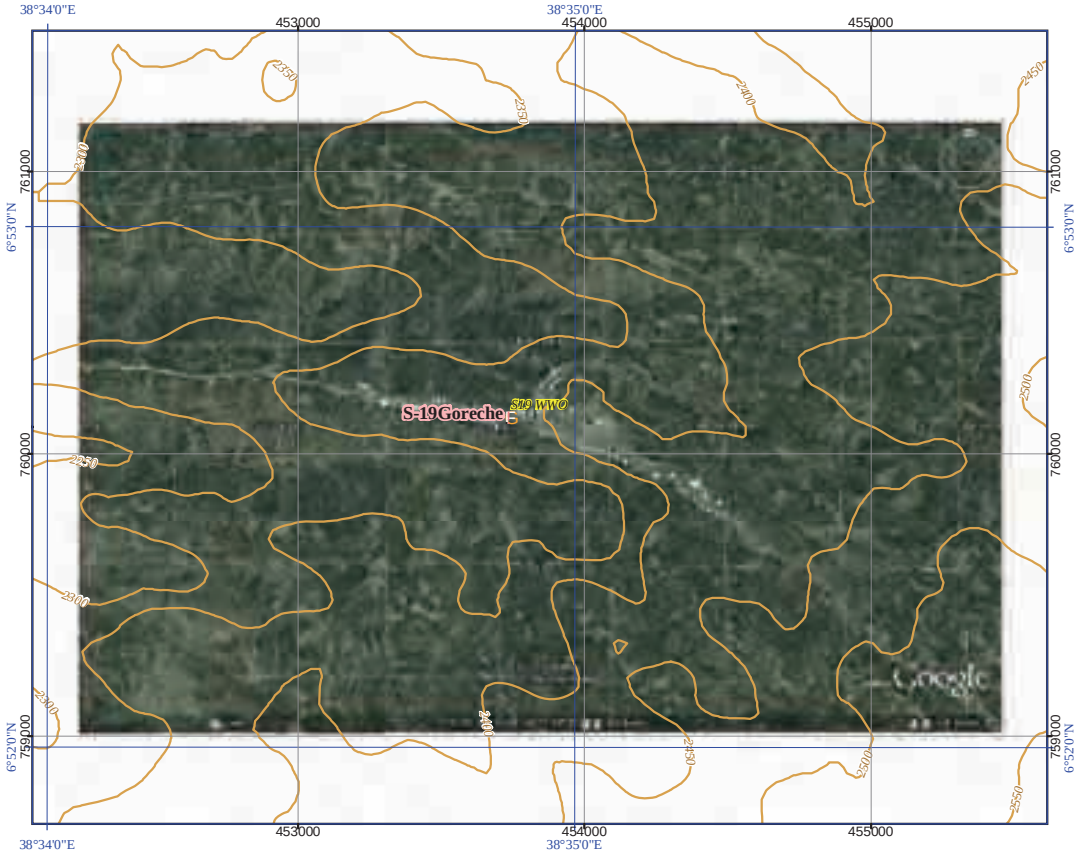
S-19 Goreche

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water Shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		nil.	
	Personnel expenses		nil.	
	Shortage of budget to execute operation & maintenace		nil.	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	coming from other villages to spring	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the top of ridge.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			30%
	(18m3*1PF+0m3*0HC+0m3*0BC)=18m3/day 18m3/20Lpcd.=900persons 900persons/2,986population=30%			
	Current Water Coverage (%) (by data of water source product))			?? %
	((??L)*3600sec.*24hrs)=??L/day ??/20Lcd=??persos ??persons/2986population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Base course road 16km approx. from Asphalt road at Leku. (23km from Awasa)			
13	Manpower Capability of Water Supply Management by Water Office (point)			3
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, however, construction work is not difficult.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Sidama	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store, Health post	
	-2 Nearest other facilities from Town	km	45	
	-3 Main patients of water born diseases	persons / year	Dysentery	150
			Diarrhea	120
			Typhoid	60
			others	200
19	Main economic activities		Trade, Farming, Livestock	
20	Particular comments :			
	The distance to the water source, womens and children has become a burden to caeey water.			
21	Remarks :			
	Ato Philipos Nahome Woreda water supply & sanitation process owner Mob. 0916027247			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-19 Goreche



データ 7.3　南部諸民族州の小都市プロファイル

S-20 Manicho

	SNNPR					17 / 52	
	Name of small town	**:**		**Manicho**		**S- 20**	
	Name of Woreda	**:**		**Malga**		**SW- 15**	
	Name of Zone	**:**		**Sidama**		**SZ- 04**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,115	1,902	4,017
	Woreda	male / female / total	by Census 2007		57,757	56,273	114,030
	percentage of Town in Woreda						3.5%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		451882	767071	2,164
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Well*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-110m, 6*5/8", GL-41m, 5.0L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		No operation due to water quality (Iron)		!
	04-07 Water quality		Iron, Fluoride …etc.		Iron		!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2004		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Wujigra town water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2*1/2", 400m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		2m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		1*1/2" 200m, 1" 56m (Total 256m)		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		2		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		1.0m3/day		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Wujiga town water supply system		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				1		
	06-06 Principal works of financial staff				Water sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2birr/20L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		2,800birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda water office		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		nil.		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

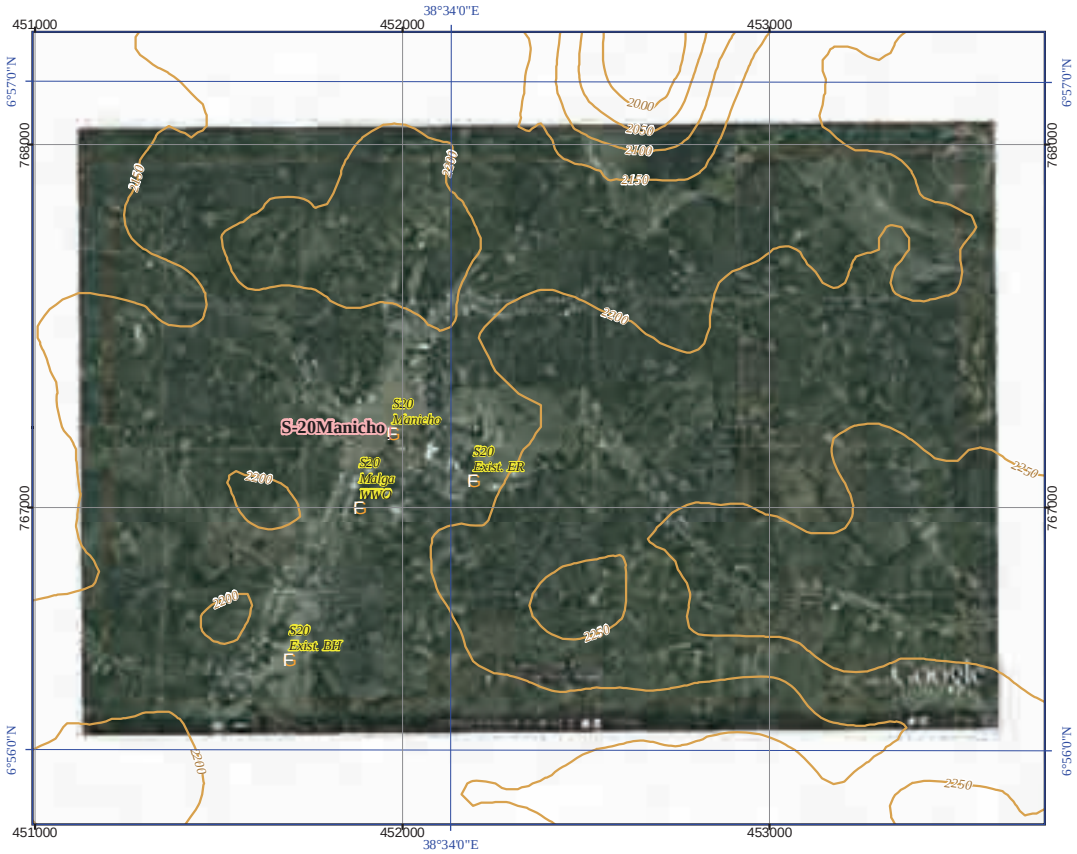
S-20 Manicho

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Quality (Iron)		
	Water supply facility	Decrepit, leakage, design failure …etc.	Pipe network is limited		
	07-02 Finalcial				
	Management				
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not budget due to suspension of operation		
	Shortage of budget to execute operation & maintenace		ditto		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Increase population from villages		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the top of ridge.				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			2.5%	
	(1.0m3*2PF+0m3*0HC+0m3*0BC)=2.0m3/day 2.0m3/20Lpcd.=100persons 100persons/4,017population=2.5%				
	Current Water Coverage (%) (by data of water source product))			179%	
	((5.0L)*3600sec.*8hrs)=144000L/day 144000/20Lcd=??persos 7200persons/4017population=179%				
11	Water Potential (A / B / C / D / E)			C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access is Sub Grade road 13km approx. from Asphalt road at Tula. (23km from Awasa)				
13	Manpower Capability of Water Supply Management by Water Office (point)			8	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. However, it is necessary to consider of simple water treatmentfacility to reduce Iron for improvement water quality. The small town is on the gentle ridge, however, construction work is not difficult.				
16	Other Donors, NGO's				
	nil.				
17	Main Ethnic Group		Sidama		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	44		
	-3 Main patients of water born diseases	persons / year	Dysentery	75	
			Typhoid	43	
			Mararia	40	
			Diarrhea	25	
			others	50	
19	Main economic activities		Trade, Farming, Livestock		
20	Particular comments :				
	Water supply facility (incl. well operation) has been suspended due to water quality (Iron).				!
	The existing water supply facility, which constructed on 2004 is not commensurate with design for town population. Hence, it is necessary to construct new facility which to be included facility expansion.				
21	Remarks :				
	Ato Abrham Abaye Woreda water & Energy Head Mob. 0913175093/ 0461191648				

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-20 Manicho



データ 7.3　南部諸民族州の小都市プロファイル

S-21 Bokasa

	SNNPR					18 / 52	
	Name of small town	**:**		**Bokasa (Bokaso)**		**S- 21**	
	Name of Woreda	**:**		**Wensho**		**SW- 16**	
	Name of Zone	**:**		**Sidama**		**SZ- 04**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		1,044	995	2,039
	Woreda	male / female / total	by Census 2007		61,199	59,456	120,655
	percentage of Town in Woreda						1.7%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		445220	746447	2,010
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-132m, 6*5/8", GL-62.1m, 1L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump (0.38kw)		
	04-05 Power source for motorized pump		Type, Kva		Solar panel		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		Day time		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2006		
	05-02 Financial of implementation		Donor's name		Action Flame, Unicef		
	05-03 Name of implementation (Project name)				Bokasa town water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 1*1/4", 18m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR (Roto tank)		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		10m3.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 1*1/2", 50m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		1no.		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2m3/day		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Bokasa water supply system		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				1		
	06-06 Principal works of financial staff				Water sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2birr/20L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		640birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipefittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				Solar system		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

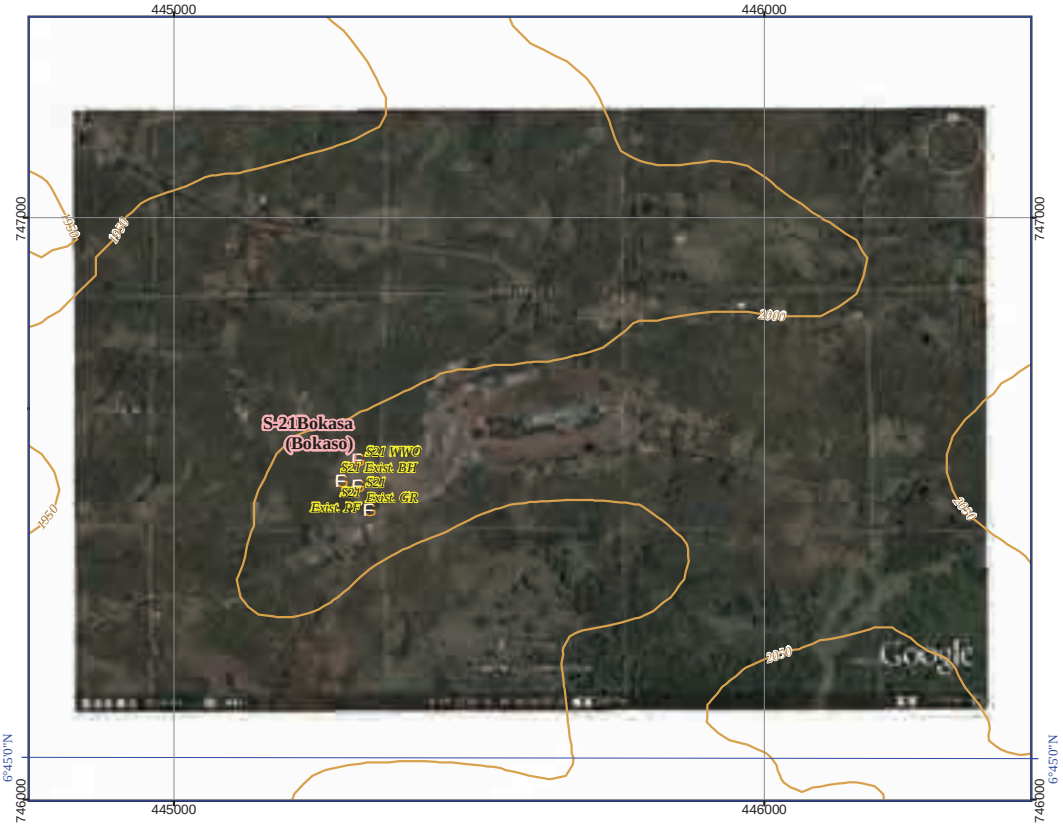
S-21 Bokasa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.		
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M (Solar system)	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	coming from villages	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the top of ridge.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			5%
	(2m3*1PF+0m3*0HC+0m3*0BC)=2.0m3/day 2.0m3/20Lpcd.= 100persons 100persons / 2,039 population = 5%			
	Current Water Coverage (%) (by data of water source product))			71%
	((1.0L)*3600sec.*8hrs)=28800L/day 28800/20Lcd=1440persos 1440persons/2039population=71%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Sub Grade road 16km approx. from Asphalt road at Yirga Alem (39km from Awasa)			
13	Manpower Capability of Water Supply Management by Water Office (point)			6
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, construction works is required some ingenuity.			
16	Other Donors, NGO's			
	Action Flame, Unicef			
17	Main Ethnic Group		Sidama	
18	Health conditions			
	-1 Medical facilities in Town		Health Center	
	-2 Nearest other facilities from Town	km	15	
	-3 Main patients of water born diseases	persons / year	Dysentery	494
			Typhoid	430
			Diarrhea	371
			Malaria	149
19	Main economic activities		Farming, Trade	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-21 Bokasa



データ 7.3　南部諸民族州の小都市プロファイル

S-22 Chuko

	SNNPR					19 / 52	
	Name of small town	**:**	**Chuko**			**S- 22**	
	Name of Woreda	**:**	**Alta Chuko**			**SW- 41**	
	Name of Zone	**:**	**Sidama**			**SZ- 04**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR town list Feb.201	4,756	4,125	8,881	
	Woreda	male / female / total	by Census 2007	88,243	83,424	171,667	
	percentage of Town in Woreda					5.2%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	426989	728179	1,868	
03	Town Status			Woreda Capital			
04	Water Source						
	04-01 Water source		Type, No.	Well*3nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	see below memo			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. & SB. Generators			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	07:00-12:00, 15:00-18:00 (8hrs/day)			
	04-07 Water quality		Iron, Fluoride …etc.	On spec.(ETH Standard &WHO)			
	04-08 Other technical specimen			nil.			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1981			
	05-02 Financial of implementation		Donor's name	SNNPRS			
	05-03 Name of implementation (Project name)			Chuko water supply satelite			
	05-04 Intake Type			Well			
	05-05 Intake No.			3			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP&PVC, 2-1/2", 4,559m see below memo			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR (Masonry with Core) & ER (Poly)			
	05-11 Water reserver No.		no.	GR*1no., ER*2nos.			
	05-12 Water reserver Capacity		m3	GR100m3*1no., ER8m3*2nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	-			
	05-14 Power to transmit		Pressure, Gravity	-			
	05-15 Distribution Type		Pipe material, length	GIP, 1~6", 10,900m see below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Masonry			
	05-18 Number of water point (Public Faucet, PF)		no.	17			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	1m3/day or less			
	05-21 Number of House Connection (HC)			980	(Avr. 5psn./house)		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	2m3/day	(67Lpcd.)		!
	05-23 Number of Business Conection (BC)			13			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School*6, Gov.*6, Health center*1			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	8m3/day			
	05-26 Other technical specimen			Drawing was missied. Hand schetch only.			
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply servic			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Town			
	06-03 Number of thechnical staff			5			
	06-04 Principal works of technical staff			Operation, Maintenance			
	06-05 Number of the financial staff			8			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	Water Point / House Connnection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.2birr/25L see below memo			
	House connection		Birr/m3	3.5birr/m3 see below memo			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	19,000bir/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Dila, Wondo, Awasa, Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Water meter, Pipe&Fitting, Filter of GI			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	SNNPR			
	06-13 Principal serious repair with 5-10 years			ER leakage, GE broken, Elec. Transfomer broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Town water supply service			
	06-15 Other technical specimen			Existing facility is not able to cover			
				current water demand (Request to			

データ 7.3　南部諸民族州の小都市プロファイル

S-22 Chuko

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	No answer	
	Water supply facility	Decrepit, leakage, design failure …etc.	see below memo	
	07-02 Finalcial			
	Management		see below memo	
	Rate of water tarrif collection		No answer	
	Personnel expenses		No answer	
	Shortage of budget to execute operation & maintenace		No answer	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Yes	
	Change in industry	increase factory, Trading …etc.	Extremely little	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		1113%	!
	(1m3*17PF+2m3*980HC)=1,977m3/day 1,977m3/20Lpcd.= 98,850 persons 98,850 persons / 8,881 population = 1,113%			
	Current Water Coverage (%) (by data of water source product))		%	
	((??L+??L+??L)*3600sec.*8hrs)=??day ??/20Lcd=??persos ??persons/8881population=??%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 24km from Dila. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		19	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Sidama, Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	27	
	-3 Main patients of water born diseases	persons / year	Diarrhea	520
			Dysentery	433
			Malaria	415
			Typhoid	210
			Cholera	173
			others	325
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	Credibility of above water coverage is consideredlow. This facility has 3 wells which are under operation and in good operating order.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.

Well No.1 ; Establish on 1981 / Depth GL-114m / Casing dia. 6" / SWL GL-???m / ???L/sec. with Stand-by Generator 45kva

Well No.2 ; Establish on 1998 / Depth GL-118m / Casing dia. 6" / SWL GL-???m / ???L/sec. with Stand-by Generator 45kva

Well No.3 ; Establish on 2002 / Depth GL-118m / Casing dia. 6" / SWL GL-???m / ???L/sec.

05-06 Conveyance Type (Water source ~ Reservoir)

Well No.1 to GR GIP 2" L=309m

Well No.2 to ER GIP 3" L=1,250m

Well No.3 to ER GIP 2" L=500m & PVC L=2,500m Total L=4,559m

05-15 Distribution Type

データ 7.3　南部諸民族州の小都市プロファイル

S-22 Chuko

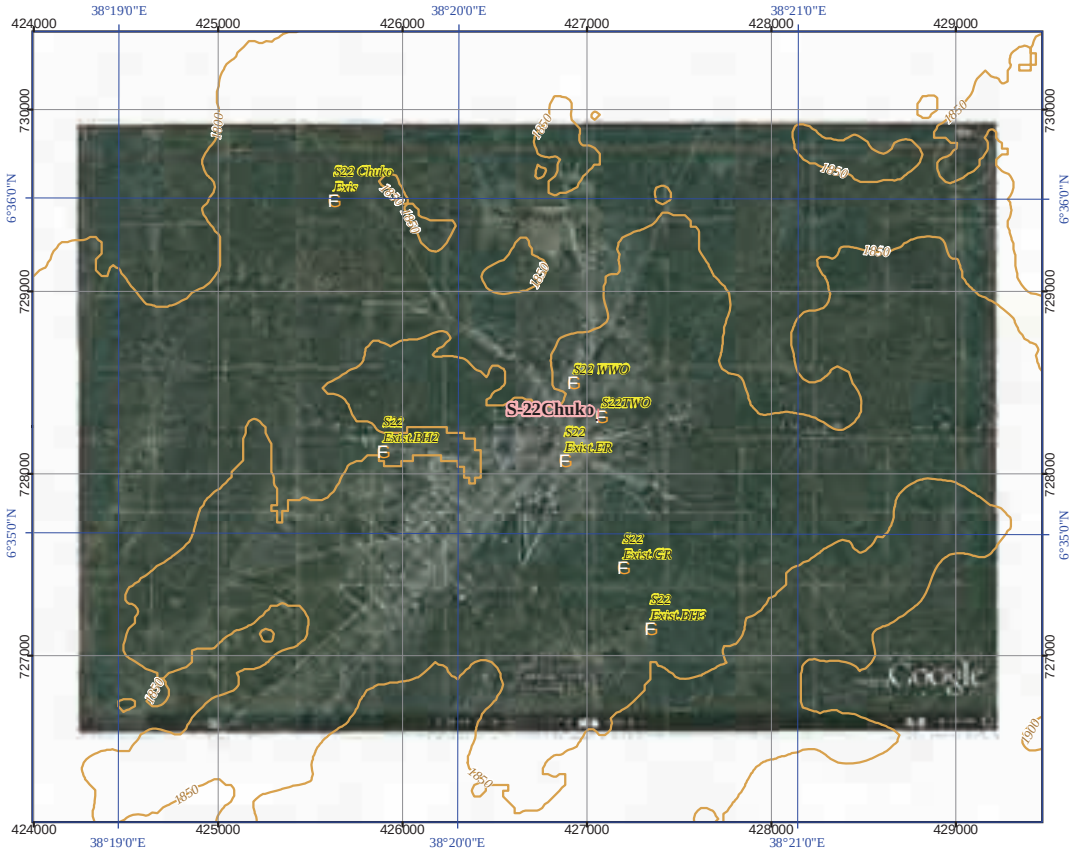
GIP 1"=800m　GIP 1*1/2"=960m　GIP 2"=4,760m　GIP 2*1/2"=680m
GIP 3"=2,450m　GIP 4"= 300m　GIP 6"= 950m
Total L=10,900m

06-08 Water Tariff (House and Business Connection)
0 ~ 5 m3 = 3.5birr/m3　Water meter lease ; dia. 1/2"= 3.0birr/month　dia. 3/4"= 4.0birr/month
6 ~ 30m3= 5.0birr/m3　dia. 1"= 5.0birr/month

07-01 Technical
Deterioration of facility (Leakage, broken), Lack of Design (Pipe network), Interruption & unstable voltage of Commercial Ele
07-01 Financial
Fuel for Generator from other towns, Missing documents and drawings

データ 7.3　南部諸民族州の小都市プロファイル

S-22 Chuko



データ 7.3　南部諸民族州の小都市プロファイル

S-23 Chuko

	SNNPR					20 / 52	
	Name of small town	**:**		**Chuko**		**S- 23**	
	Name of Woreda	**:**		**Wendo Genet**		**SW- 18**	
	Name of Zone	**:**		**Sidama**		**SZ- 04**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		7,936	6,690	14,626
	Woreda	male / female / total	by Census 2007		78,365	74,918	153,283
	percentage of Town in Woreda						9.5%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		456586	775754	1,718
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Spring		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasped		
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		24hors.		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1986		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Kella kebele abaya spring		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP. 2", 2,000m		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		Gravity		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		50m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 2*1/2"*1,400m, 2"*5,387m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		12nos.		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6nos.		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2.0m3/day		
	05-21 Number of House Connection (HC)				482		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.266m3/day		
	05-23 Number of Business Conection (BC)				29		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Schools, Gov., Health center		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.6m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Wondo genet town water supply office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Zone		
	06-03 Number of thechnical staff				4		
	06-04 Principal works of technical staff				Plumbing, maitenance		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.15birr/20L		
	House connection		Birr/m3		see below memo		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		8,800birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sheshemane		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Region		
	06-13 Principal serious repair with 5-10 years				Pipe line was dismantled by Road construction		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water supply office		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-23 Chuko

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Contamination of water source by resident	
	Water supply facility	Decrepit, leakage, design failure …etc	Expantion pipe line without design	
	07-02 Finalcial			
	Management		Good	
	Rate of water tarrif collection		Good	
	Personnel expenses		Good	
	Shortage of budget to execute operation & maintenace		Shortage	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Coming from other towns & villagers	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	Often	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area & gentle slope			
09	Necessary Institution (Facility, Material)			
	Spring source shall be capped by rehabilitation by water office.			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		58%	
	(2m3*12PF+0.266m3*482HC+0.6m3*29BC)=170m3/day 170m3/20Lpcd.=8500persons 8500persons / 14626population =58%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/14626population=??%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road & Base course 24km from Awasa. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		11	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Sidama	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store, Health post	
	-2 Nearest other facilities from Town	km	26	
	-3 Main patients of water born diseases	persons / year	Mararia 4,215	
			Cholera 264	
			Typhoid 166	
			others 3,470	
19	Main economic activities		Trade, Farming, Livestock	
20	Particular comments :			
	Ethnic conflict has been appeared.Town population is more than 14,000 persons in accordance with list of the candidate small towns.			!
	Water source (spring) has been contaminating by people.			!
	Pipe line has been expanded every year with out plan for Neighboring villages & towns like Intaye			!
21	Remarks :			
		Mr. Kassu Haile Wondo Genet Water Supply Service Head.		

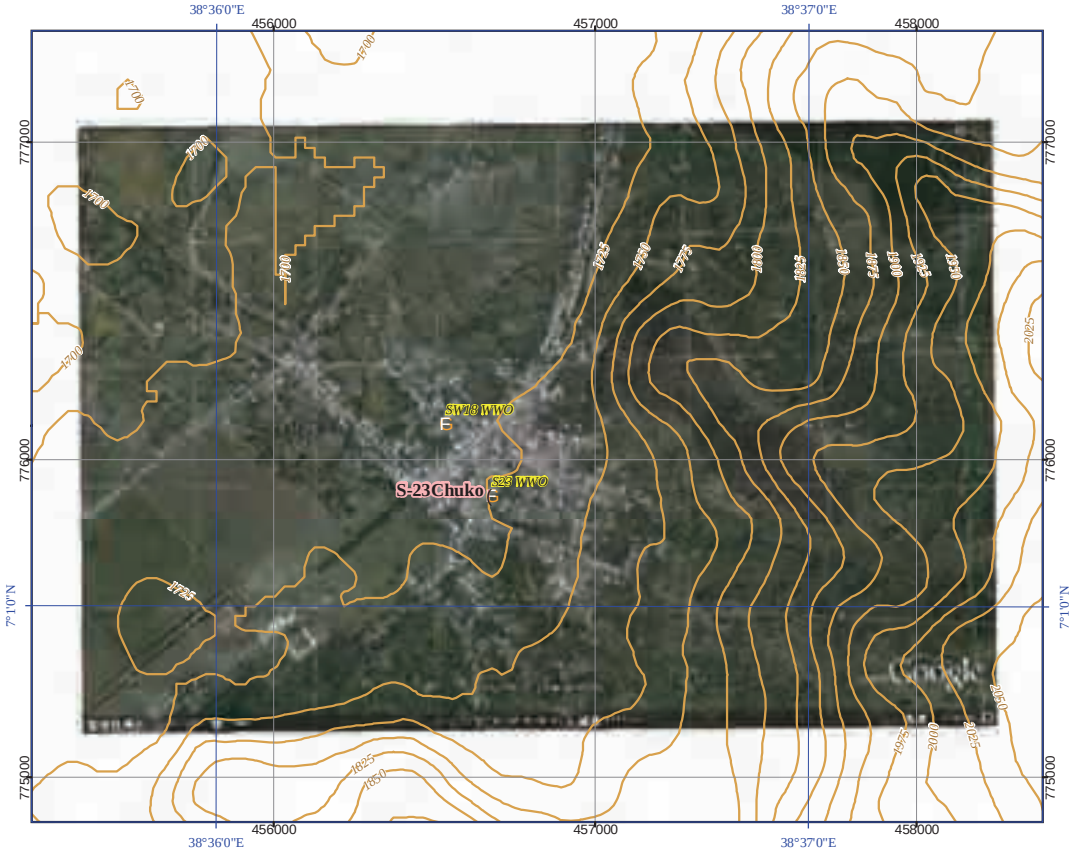
Memo (Town sketch …etc.) :

06-08 Water tariff rate (Buisiness Connection)

0~5 m3 =1.25birr/m3	11~30 m3 =2.25birr/m3
6~10 m3 =1.50birr/m3	31~ m3 =3.10birr/m3

データ 7.3　南部諸民族州の小都市プロファイル

S-23 Chuko



データ 7.3　南部諸民族州の小都市プロファイル

S-24 Ela(Kela)

	南部州					21 / 52	
	小都市名	:		Eka (Kela)		S- 24	
	ワレダ名	:		Wendo Genet		SW- Transmi	
	ゾーン名	:		Sidama		SZ- 04	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,803	2,456	5,259
	Woreda	male / female / total	by Census 2007		78,365	74,918	153,283
	percentage of Town in Woreda						3.4%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		454618	775068	1,700
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		6 or more L/sec. approx.		
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		24hrs.		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				3 Outlet pipes are not use (discharging)		!
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1986 / 2007		
	05-02 Financial of implementation		Donor's name		UNICEF / IRC (Expansion)		
	05-03 Name of implementation (Project name)				Kela water project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2*1/2", ???m		!
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*1nos.		
	05-12 Water reserver Capacity		m3		50m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		-		
	05-14 Power to transmit		Pressure, Gravity		-		
	05-15 Distribution Type		Pipe material, length		GIP 2"*???m / PVC 2"*682m / other 20km ?		!
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		11		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		3m3/day		
	05-21 Number of House Connection (HC)				342		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.5m3/day		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Wondo Genet Chouko Water Supply Enterprise		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Enterprise		
	06-03 Number of thechnical staff				4		
	06-04 Principal works of technical staff				Maintenance, Pipe repair		
	06-05 Number of the financial staff				6		
	06-06 Principal works of financial staff				Water fee corrction, Bill …etc.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.				
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		Free		
	House connection		Birr/m3		see below memo		
	Business connection		Birr/m3		nil		
	06-09 Average monthly income by water tariff		Birr/month		8,000birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Awasa, Sheshemane		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe & fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone, Regional		
	06-13 Principal serious repair with 5-10 years				Pipe leakage		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Zone, Regional		
	06-15 Other technical specimen				nil.		

データ 7.3　南部諸民族州の小都市プロファイル

S-24 Ela(Kela)

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	No answer	
	Water supply facility	Decrepit, leakage, design failure …etc.	No answer	
	07-02 Finalcial			
	Management		No answer	
	Rate of water tarrif collection		No answer	
	Personnel expenses		No answer	
	Shortage of budget to execute operation & maintenace		No answer	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	No answer	
	Change in industry	increase factory, Trading …etc.	No answer	
	Human conflict	Ethnic, Administrative …etc	Ethnic conflict	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is slope of mountain and flat area along road			
09	Necessary Institution (Facility, Material)			
	Rehabilitation of conveyance pipe line and new reservoir tank (Ground Reservoir), Distribution pipe lines.			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		194%	!
	(3m3*11PF+0.5m3*342HC)=204m3/day 204m3/20Lpcd.= 10,200 persons 10,200 persons / 5,259 population = 194%			
	Current Water Coverage (%) (by data of water source product))		493%	
	((6L)*3600sec.*24hrs)=518400L/day 518400/20Lcd=25920persos 25920persons/5259population=493%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Town along the under construction road. Distance from asphalt paved road of Awasa is 15km approx.			
13	Manpower Capability of Water Supply Management by Water Office (point)		13	
	Enterprise staff has not any of document, DWGS for existing water supply facility.			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. There are some risks of troubles, conflicts with neighborhoods for development of water sources. The small town is on the generally flat terrains, however, construction works is required some ingenuities.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Sidama	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	70	
	-3 Main patients of water born diseases	persons / year	Mararia 1,523	
			Typhoid 196	
			Dysentery 10	
			others 3,470	
19	Main economic activities		Faring, Trade	
20	Particular comments :			
	Water intake is not corrected spring water efficiently.			!
	Over half of spring source is descharged 2 drain pipes and 1 outlet pipe. (Loose water source)			
	Staff of the enterprise are not grasp their water supply facility and have not any technical documents (DWG etc.)			
21	Remarks :			
	The existing water source (spring) has been convayed by intake facility and conveyance pipes which is consumed less than half of full amount of spring and rest of spring is discharged into the stream. Hence, the capacity of spring water is enough for expansion. This small town is a priority of tranquility for public safety.			

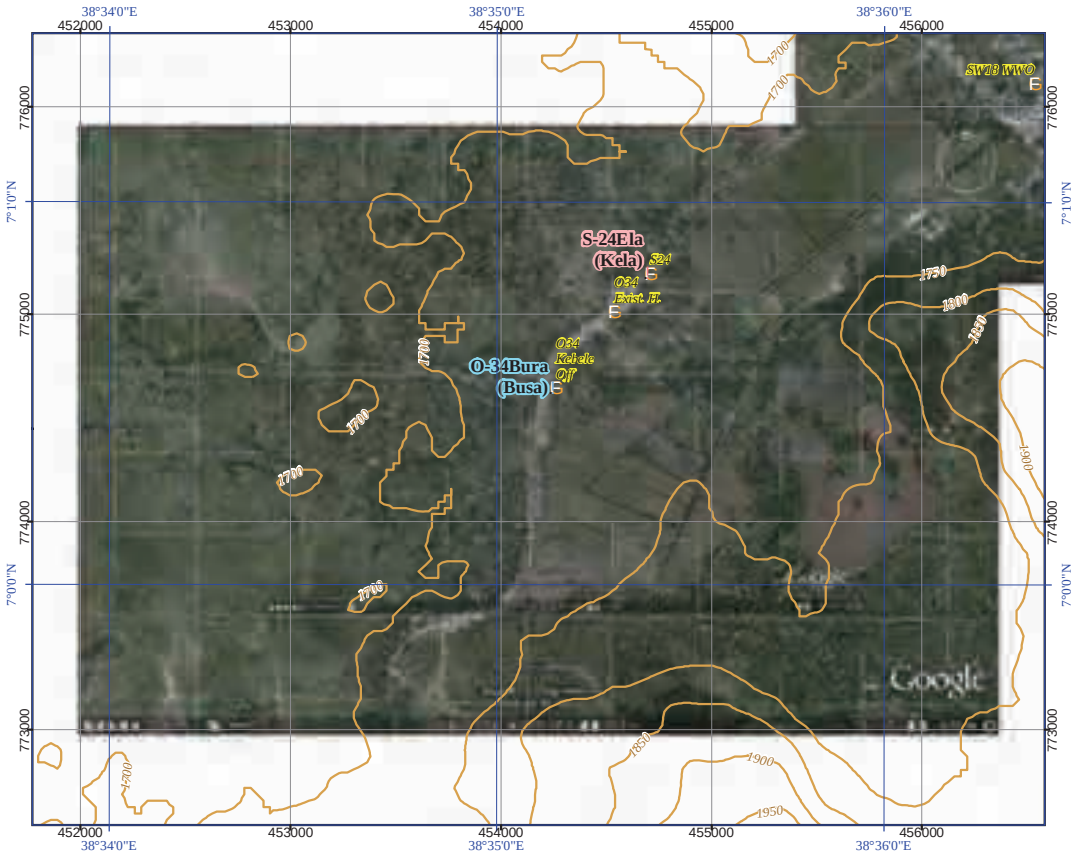
Memo (Town sketch …etc.) :

05-06 Conveyance Type (Water source ~ Reservoir)
L=1,100m or more by GPS data

06-05 Water tariff　　Water meter lease ;
0~5m3 = 1.25birr/m3　　11~30m3 = 2.25birr/m3　　Dia. 1/2" = 3.0birr/month
6~10m3 = 1.50birr/m3　　31m3~ = 3.10birr/m3

データ 7.3　南部諸民族州の小都市プロファイル

S-24 Ela(Kela)



データ 7.3　南部諸民族州の小都市プロファイル

S-27 Fiseha Genet

	SNNPR					22 / 52	
	Name of small town	**:**		**Fiseha Genet**		**S- 27**	
	Name of Woreda	**:**		**Kochore**		**SW- 20**	
	Name of Zone	**:**		**Gedeo**		**SZ- 05**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,107	2,082	4,189
	Woreda	male / female / total	by Census 2007		65,235	66,183	131,418
	percentage of Town in Woreda						3.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		411345	671729	2,202
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well *1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-90m, 6*5/8", GL-??m., 1.73L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Mono Pump (Euroflo Pump)		
	04-05 Power source for motorized pump		Type, Kva		2 cylider diesel engine		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00~10:00 (4hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1981		
	05-02 Financial of implementation		Donor's name		Canadian International Development (CIDA)		
	05-03 Name of implementation (Project name)				Fiseha Genet Water Supply Project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2", 200m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		25m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		6		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6FC*3PF, 4FC*3PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		3.3m3/day		
	05-21 Number of House Connection (HC)				61		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.133m3/day		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water supply office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				6		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.4birr/20L		
	House connection		Birr/m3		7.50birr/m3		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		4,800birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Dilla		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Parts of Mono-pump, Pipe fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda, Zone		
	06-13 Principal serious repair with 5-10 years				Engine broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Woreda, Water supply office		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-27 Fiseha Genet

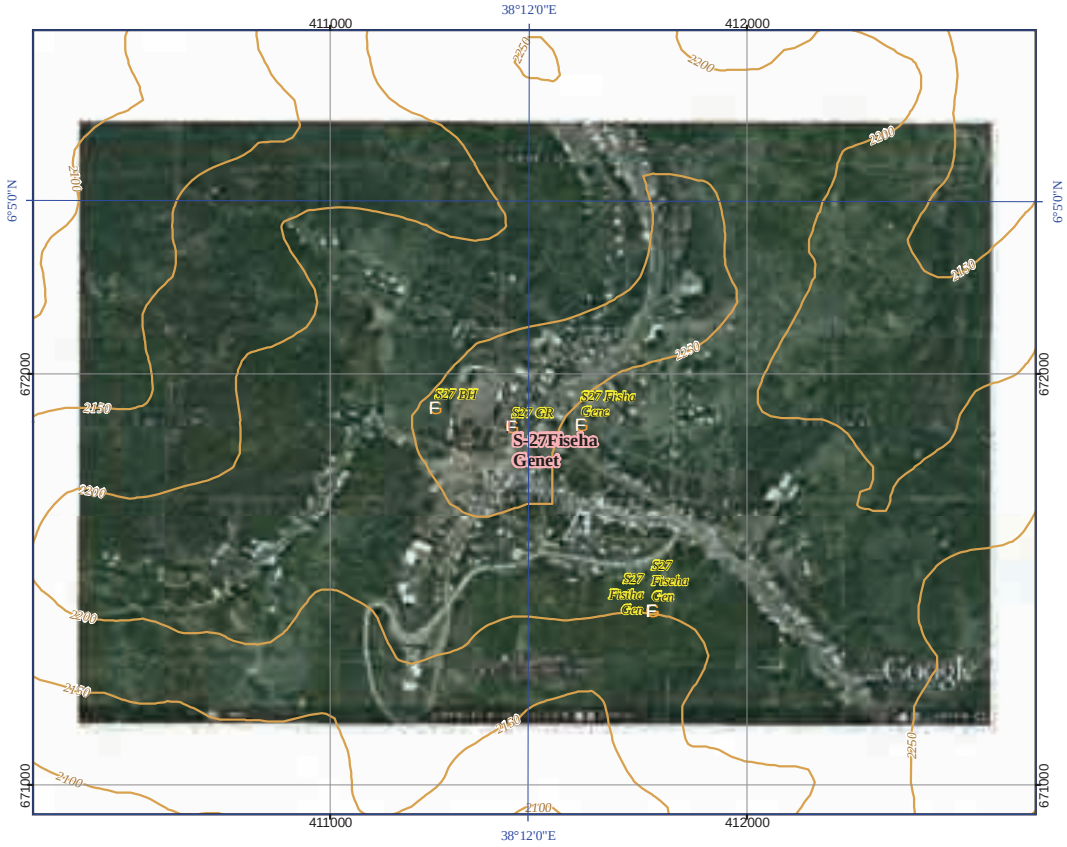
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure of pipe lines	
	07-02 Finalcial			
	Management		Not grasp	
	Rate of water tarrif collection		good	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Coming from villagers	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the top of ridge			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			33%
	(3.3m3*6PF+0.133m3*61HC+0m3*0BC)=27.9m3/day 27.9m3/20Lpcd.= 1,395persons 1,395persons / 4,189 population = 33%			
	Current Water Coverage (%) (by data of water source product))			59%
	((1.73L)*3600sec.*8hrs)=49824L/day 49824/20Lcd=2491persos 2491persons/4189population=59%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			A / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road from Yigra Chafe is asphalt paved. (45km from Dila) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			16
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Gedeo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Drug store	
	-2 Nearest other facilities from Town	km	45	
	-3 Main patients of water born diseases	persons / year	Dysentery	209
			Typhoid	50
			Cholera	50
			others	280
19	Main economic activities		Trade, Farming	
20	Particular comments :			
21	Remarks :			
		Mr. Eshetu Obse Water Com. chairman	0916-428-418	
		Mr. Tamirat Tsegaye Operator	0916-635-319	

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP 3"=150m	PVC 1"=1,900m	Total L=2,050m	

データ 7.3　南部諸民族州の小都市プロファイル

S-27 Fiseha Genet



データ 7.3　南部諸民族州の小都市プロファイル

S-28 Gedeb

	SNNPR					23 / 52	
	Name of small town	**:**		**Gedeb**		**S- 28**	
	Name of Woreda	**:**		**Gedeb**		**SW- 21**	
	Name of Zone	**:**		**Gedeo**		**SZ- 05**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		5,160	4,861	10,021
	Woreda	male / female / total	by Census 2007		73,480	73,252	146,732
	percentage of Town in Woreda						6.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		416921	653784	2,251
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		see below memo		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec. & Stand by Generator		
	04-06 Durartion of water draw		daily hours, time		No.1 06:00~14:00, 16:00~18:00 (10hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				nil.		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2010		
	05-02 Financial of implementation		Donor's name		LIG, World Bank		
	05-03 Name of implementation				Gedeb water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR, ER (not use)		
	05-11 Water reserver No.		no.		GR*1no., ER*1no.(not use)		
	05-12 Water reserver Capacity		m3		GR100m3, ER4m3 (not use)		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		-		
	05-14 Power to transmit		Pressure, Gravity		-		
	05-15 Distribution Type		Pipe material, length		GIP		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.				
	05-18 Number of water point (Public Faucet, PF)		no.		12		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		1m3/day		
	05-21 Number of House Connection (HC)				56	(Avr. 6psn./house)	
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.083m3/day	(14Lpcd.)	
	05-23 Number of Business Conection (BC)				Not grasped		!
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Chrch, Mosque, Health Ctr., School		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.377m3/day		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Water committee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Committee		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				3		
	06-06 Principal works of financial staff				Water meter count, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		Water Point / House Connnection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.35 bir/25L		
	House connection		Birr/m3		8.0 birr/m3		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		2,000bir/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Dila, Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipe and Fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone, Region		
	06-13 Principal serious repair with 5-10 years				Burned pump motor by unstable Elec. Voltage		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Woreda, Zone office		
	06-15 Other technical specimen				nil.		

データ 7.3　南部諸民族州の小都市プロファイル

S-28 Gedeb

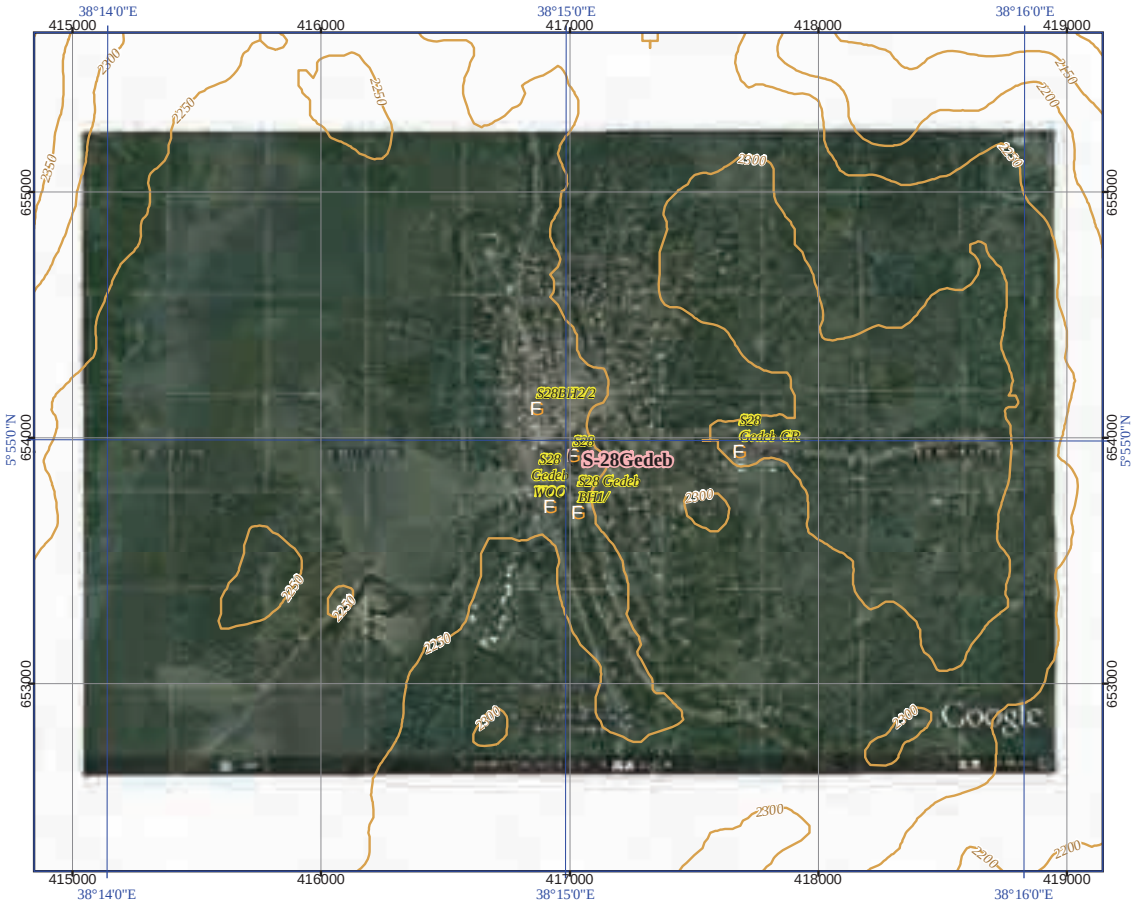
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	Shrtage distribution pipe lines	
	07-02 Finalcial			
	Management		No answer	!
	Rate of water tarrif collection		No answer	!
	Personnel expenses		No answer	!
	Shortage of budget to execute operation & maintenace		No answer	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Residence complain water shortage	
	Change in industry	increase factory, Trading …etc.	No answer	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen		No answer	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is top of ridge gently.			
09	Necessary Institution (Facility, Material)			
	New water source (Well), Conveyance and Distribution pipe lines, Groud Reservoir			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		8%	!
	(1m3*12PF+0.083m3*56HC)=16.6m3/day 16.6m3/20Lpcd.= 830 persons 830 persons / 10,021 population = 8%			
	Current Water Coverage (%) (by data of water source product))		89%	
	((1.67L+4.5)*3600sec.*8hrs)=177696L/day 177696/20Lcd=8885persos 8885persons/10021population=89%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / C	
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road from Awasa is asphalt paved. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		10	
	Water committee's staff has not any of document, DWGS for existing water supply facility.			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle ridge, however, construction work is not difficult.			
16	Other Donors, NGO's			
	International Resque Committee (IRC)			
17	Main Ethnic Group		Gedeo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	74	
	-3 Main patients of water born diseases	persons / year	Typhoid 4,557	
			Diarrhea 900	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec		
Well No.1 ; Establish on ??? / Depth GL-82m / Casing dia. ??" / SWL GL-???m / 1.67L/sec. (Not use, abandon)		
Well No.2 ; Establish on ??? / Depth GL-72m / Casing dia. ??" / SWL GL-???m / 4.5L/sec. with Stand-by Generator		!
* Actual water discharge of well No.2 may be 0.5~1.0L/sec. at the Inlet of GR by visual observation.		

データ 7.3　南部諸民族州の小都市プロファイル

S-28 Gedeb



データ 7.3　南部諸民族州の小都市プロファイル

S-30 Tabela (Humbo)

	SNNPR					24 / 52	
	Name of small town	**:**		**Tabela (Humbo)**		**S- 30**	
	Name of Woreda	**:**		**Humbo**		**SW- 23**	
	Name of Zone	**:**		**Wolayita**		**SZ- 06**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		3,283	2,963	6,246
	Woreda	male / female / total	by Census 2007		62,967	62,319	125,286
	percentage of Town in Woreda						5.0%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		364091	741131	1,628
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		12L/sec.　(1.2L/sec. ?!)		!
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		12~15hrs./day　(see below memo)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				nil.		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1964		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Tabela (Humbo) water project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 4", 3,500m		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*4nos.		
	05-12 Water reserver Capacity		m3		10m3*4nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP 6,500m (see below memo)		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansory		
	05-18 Number of water point (Public Faucet, PF)		no.		7		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		2		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		3.6m3/day		
	05-21 Number of House Connection (HC)				400	(Avr. 6psn./house)	
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.05m3/day		
	05-23 Number of Business Conection (BC)				27		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		see below memo		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.8~1.7m3/day		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply service office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Town		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Operation (Valve Control), Plumbing		
	06-05 Number of the financial staff				1		
	06-06 Principal works of financial staff				Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		5 categorized (see below memo)		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		3.0birr/household/month		
	House connection		Birr/m3		6.0 birr/household/month from year 2010		
	Business connection		Birr/m3		see below memo		
	06-09 Average monthly income by water tariff		Birr/month		3,834birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sodo		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Wold Vision		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Town water office		
	06-15 Other technical specimen				nil.		

データ 7.3　南部諸民族州の小都市プロファイル

S-30 Tabela (Humbo)

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.		
	Water supply facility	Decrepit, leakage, design failure …etc.		
	07-02 Finalcial			
	Management		Shortage manpower (Office sta	
	Rate of water tarrif collection		on trial since 2010	
	Personnel expenses		System of water charge has been managed	
	Shortage of budget to execute operation & maintenace		ditto	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Back order of House connection	
	Change in industry	increase factory, Trading …etc.		
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is slope of mountain and flat area.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			36%
	(3.6m3*7PF+0.05m3*400HC)=45.2m3/day 45.2m3/20Lpcd.= 2260 persons 2260 persons / 6246population = 36%			
	Current Water Coverage (%) (by data of water source product))			83%
	((1.2L)*3600sec.*24hrs)=103680L/day 103680/20Lcd=5184persos 5184persons/6246population=83%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			A / A
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 20km from Sodo. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			11
	Water office staff has not any of document, DWGS for existing water supply facility.			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Wold Vision (intent for development of rural area)			
17	Main Ethnic Group		Welayita	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	22	
	-3 Main patients of water born diseases	persons / year	Mararia	4,684
			Dysentery	937
			Typhoid	625
			Diarrhea	312
			others	312
19	Main economic activities		Trade, Farming, Waving	
20	Particular comments :			
	System of water fee charge has been commenced since 2010. This system to be firmly established.			!
	Private connection (House & Business Connection) has been contracted with the Format of SNNPR (Water supply service)			
	Salary of TWO's staff are still paied from Woreda Office. Howevwer,TWO to be independed in future with above water charge sysytem.			
21	Remarks :			
	This town population has been growth due to have a major junction for Awasa, Sod and Arba-Minch.Therefore, beneficiary effect of new water supply facility is high.			

Memo (Town sketch …etc.) :

04-06 Durartion of water draw (Operation hours)				
Area 1-1 05:00~09:00 (BC)	2-1 05:00~11:00 (PF, HC)	3-1 05:00~08:00 (PF, HC)		PF=W. Point
1-2 09:00~12:00 (PF, HC, B	(2-2 11:00~16:00 (HC)	3-2 08:00~12:00 (HC, BC)		HC=House Connection
1-3 12:00~13:30 (PF, HC)	2-3 16:00~20:00 (HC)	3-3 12:00~13:00 (HC)		BC=Business connection
1-4 13:30~20:00 (PF, BC)		3-4 13:00~14:00 (HC)		
		3-5 14:00~16:00 (HC)		
Sub-Total 15hrs/day	Sub-Total 15hrs/day	3-6 17:00~18:00 (HC)	Sub-Total 12hrs/da	

05-15 Distribution Type

GIP 3"=1,000m	GIP 1"=1,000m	
GIP 2"=3,000m	GIP 3/4"=500m	
GIP 1*1/2"=1,000m		Total = 6,500m

データ 7.3　南部諸民族州の小都市プロファイル

S-30 Tabela (Humbo)

05-24 Type of Business Connection (BC)

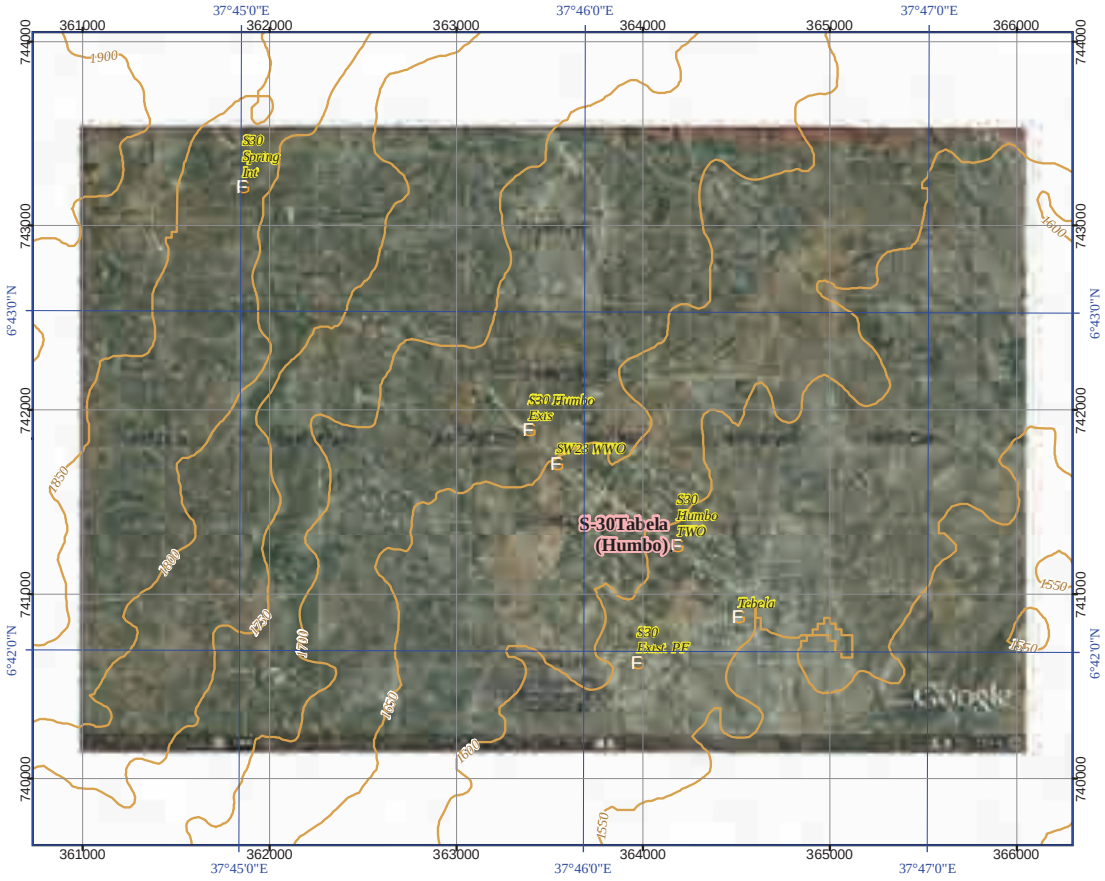
Chrch*6 with own ER10m3*1	Health center*1 with own ER5m3*1	Gov. institution*10
School*3 with own ER10m3*1	Hotel*7	Total 27 BC

06-07 & 08　Categories of water tariff & Water tariff rate

1- Water point (PF)	3birr/month	4- Tea house, shop (BC)	12birr/month
2- House connection (HC)	6birr/month	5- Gov., Chrch …etc. (BC)	30~50birr/month
3- Hotel (BC)	25birr/month		

データ 7.3　南部諸民族州の小都市プロファイル

S-30 Tabela (Humbo)



データ 7.3　南部諸民族州の小都市プロファイル

S-32 Dimtu

	SNNPR					25 / 52	
	Name of small town	**:**		**Dimtu**		**S- 32**	
	Name of Woreda	**:**		**Deguna Fanigo**		**SW- 24**	
	Name of Zone	**:**		**Wolayita**		**SZ- 06**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		811	891	1,702
	Woreda	male / female / total	by Census 2007		47,486	48,986	96,472
	percentage of Town in Woreda						1.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		403721	766084	1,521
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasped		
	04-03 Method of water draw		Pump, Gravity		Gravity (On-spot)		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		24hrs.		
	04-07 Water quality		Iron, Fluoride …etc.		Not grasped		
	04-08 Other technical specimen				Pomp was broken. (Not function)		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2010		
	05-02 Financial of implementation		Donor's name		Ethiopian Red Cross		
	05-03 Name of implementation (Project name)				Town water supply		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		nil. (On-spot)		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		nil.		
	05-11 Water reserver No.		no.		nil.		
	05-12 Water reserver Capacity		m3		nil.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		nil.		
	05-16 Power to distribute		Pressure, Gravity		nil.		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		nil.		
	05-18 Number of water point (Public Faucet, PF)		no.		nil.		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		nil.		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		nil.		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Bilate water system		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Municipality		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				nil.		
	06-06 Principal works of financial staff				nil.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		nil.		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		nil.		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		nil.		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		nil.		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		nil.		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		nil.		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		nil.		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-32 Dimtu

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	No facility	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	Often (Water right)	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area (bottom of rift valley)			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		?? %	
	(??m3*1PF+0m3*0HC+0m3*0BC)=??m3/day ??m3/20Lpcd.=??persons ??persons/1,702population=??%			
	Current Water Coverage (%) (by data of water source product))		51%	
	((0.2L)*3600sec.*24hrs)=L/day 17280/20Lcd=864persos 864persons/1702population=51%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Base course 42km from Sodo * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		2	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Walayita, Amhara	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	64	
	-3 Main patients of water born diseases	persons / year	Mararia 5,000	
			Typhoid 850	
			Dysentery 400	
19	Main economic activities		Trade, Farming, Livestock	
20	Particular comments :			
	Water right to be problem due to ethnic conflict.			!
	Town population is less than 2,000 persons in accordance with list of the candidate small towns. In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-32 Dimtu

データ 7.3　南部諸民族州の小都市プロファイル

S-34 Birbir

	SNNPR					26 / 52	
	Name of small town	**:**		**Birbir**		**S- 34**	
	Name of Woreda	**:**		**Mirab Abaya**		**SW- 26**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,928	2,903	5,831
	Woreda	male / female / total	by Census 2007		37,395	37,506	74,901
	percentage of Town in Woreda						7.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		363450	695658	1,239
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Denth., Casing Dia., S.W.L		See below memo		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec. , Standby Generator for Pump No.1		
	04-06 Durartion of water draw		daily hours, time		06:00~11:00, 16:00~23:00 (13hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1991 / 2005		
	05-02 Financial of implementation		Donor's name		World vision		
	05-03 Name of implementation				Birbir water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		See below memo		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*2nos.		
	05-12 Water reserver Capacity		m3		GR*75m3, 50m3 ea.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		10		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4 FC*6PF, 2FC*4PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2.5m3/day		
	05-21 Number of House Connection (HC)				691		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.278m3/day		
	05-23 Number of Business Conection (BC)				76		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov*16, NGO*10, Others*50		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.66m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Zone		
	06-03 Number of thechnical staff				6		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		Water point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2 birr/20L		
	House connection		Birr/m3		See below memo		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		14,973birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Arba-Minch		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipe&fitting		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone, Region		
	06-13 Principal serious repair with 5-10 years				Pump burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Region		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-34 Birbir

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Well source yield	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	
	07-02 Finalcial			
	Management		Measure of transportaion, PC	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped	
	Change in industry	increase factory, Trading …etc.	Not grasped	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Gentle slope on mountain			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		252%	!
	(2.5m3*10PF+0.278m3*691HC+0.66m3*76BC)=293.8m3/day 293800/20Lpcd.= 14,690 persons		14,690persons / 5,831 population = 252%	
	Current Water Coverage (%) (by data of water source product))		??%	
	((2.1L+??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos		???persons/5831population=??%	
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	B / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Unde construction * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		18	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Gamo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	42	
	-3 Main patients of water born diseases	persons / year	Mararia 5,484	
			Dysentery 749	
			Typhoid 448	
			Diarrhea 90	
19	Main economic activities		Trade, Livestock	
20	Particular comments :			
	The new well (2nd.) which was constructed by NGO on 2005 has not yet used for water supply.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.
- Well No.1; Estbsh on 1991 GL-54m / Casing dia.8" / SWL GL-??m / ??L/sec. / standby Generator :
- Well No.2; Estbsh on 2005 GL-107m / Casing dia.6" / SWL GL-??m / ??L/sec. Before Hand over from World Vision

05-06 Conveyance Type (Water source ~ Reservoir)
- Well No.1 (Old well) ; GIP 3" 2,500m
- Well No.2 (New well) ; GIP 3" 1,500m

05-15 Distribution Type

ND-2*1/2"=500m	ND-1*1/2"=650m	
ND-2"=200m	ND-1*1/4"=500m	Total=1,850m

06-08 Water tariff rate (House & Buisiness Connection)

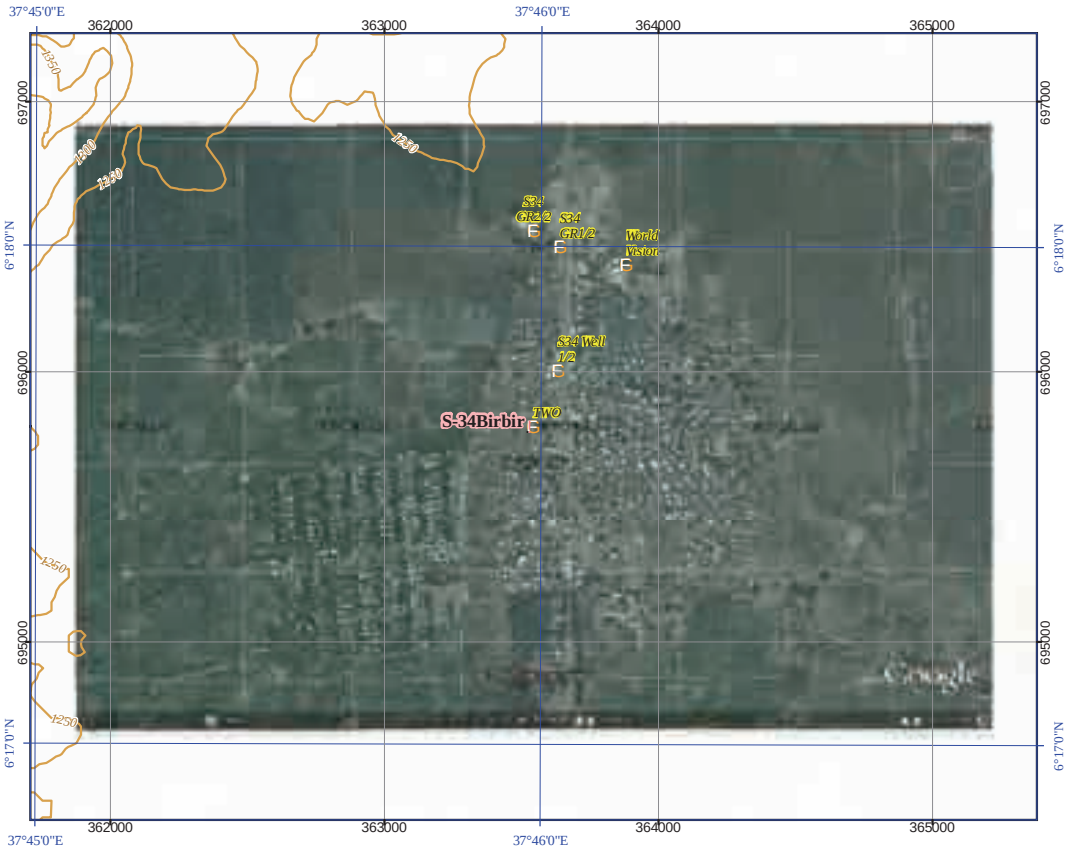
データ 7.3　南部諸民族州の小都市プロファイル

S-34 Birbir

0~10 m3 =2.00birr/m3　　31m3 ~ =4.00birr/m3
11~30 m3 =3.00birr/m3

データ 7.3　南部諸民族州の小都市プロファイル

S-34 Birbir



データ 7.3　南部諸民族州の小都市プロファイル

S-35 Chenicha

	SNNPR					27 / 52	
	Name of small town	**:**		**Chenicha**		**S- 35**	
	Name of Woreda	**:**		**Chencha**		**SW- 27**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		5,173	5,050	10,223
	Woreda	male / female / total	by Census 2007		51,307	60,373	111,680
	percentage of Town in Woreda						9.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		342198	691040	2,730
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no., Well*1no., New well*1no		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		See below memo		
	04-03 Methor of water draw		Pump, Gravity		Gravity, Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw		daily hours, time		08:00-12:00, 15:00-19:00 (8hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1988 Spring / 1994 Well-1 / 2010 Well-2		
	05-02 Financial of implementation		Donor's name		Catholic church (Spring), World vision (Well)		
	05-03 Name of implementation				Dako Dalo water project		
	05-04 Intake Type				Spring, Well		
	05-05 Intake No.				Spring *1, Well * 2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP 3" 1,500m, PVC 2" 4,000m		
	05-07 Power to convey		Pressure, Gravity		Gravity (Spring), Pressure (Well)		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*2nos.		
	05-12 Water reserver Capacity		m3		GR100m3*1no., GR50m3*1no.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		14		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4 FC*4PF, 3FC*3PF, 2FC*7PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		0.2m3/day		
	05-21 Number of House Connection (HC)				418		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.08m3/day		
	05-23 Number of Business Conection (BC)				82		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov., School, Hotel, Chrch, Hospital		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.37m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply servse office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Zone		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				3		
	06-06 Principal works of financial staff				Water meter reading, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House & Business Connction		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1 birr/20L		
	House connection		Birr/m3		0~30m3=3.0birr/m3, 30m3~=4.0birr/m		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		6,500birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Arba Minch, Chencha		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipes&Fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone		
	06-13 Principal serious repair with 5-10 years				Generator broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Town water service office		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-35 Chenicha

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Poor design of pipe network (dia.)	
	07-02 Finalcial			
	Management		Not grasp	
	Rate of water tarrif collection		shall be rised water tariff	
	Personnel expenses		Not grasp	
	Shortage of budget to execute operation & maintenace		Measure of transportaion	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Incresing worker for apple plantation	
	Change in industry	increase factory, Trading …etc.	Increse trading (Apple pla	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Slope on mountain, Highland Area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			33%
	(0.2m3*14PF+0.08m3*418HC+0.37m3*82BC)/20Lpcd.= 3,329 persons　3,329persons / 10,223 population = 33%			
	Current Water Coverage (%) (by data of water source product))			??%
	((??L+??L+??L)*3600sec.*??hrs)=???L/day　???/20Lcd=???persos　???persons/10223population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Sub Grade road 17km from Asphalt road of Arba Minch. (=13+17km)			
13	Manpower Capability of Water Supply Management by Water Office (point)			12
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	Refer to the Chapter 6			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is not difficult.			
16	Other Donors, NGO's			
	Catholic church, World vision			
17	Main Ethnic Group		Gamo	
18	Health conditions			
	-1 Medical facilities in Town		Hospital, Drug store	
	-2 Nearest other facilities from Town	km	0	
	-3 Main patients of water born diseases	persons / year	Typhoid	300
			Malaria	100
			Others	2,000
19	Main economic activities		Trade, Livestock, Weaving, Farming	
20	Particular comments :			
	0.5 " pipe is used as distribution line in the net work, so that custemers complain for irregular water supply service			
	The new well (2nd.) and water supply facility which were constructed by NGO on 2010 is not contributed the effect of water coverage due to lack of design.			
21	Remarks :			
			Ato Guracha Guja Head of WSS	
			[obil 0916881004, Office: 0467760093	

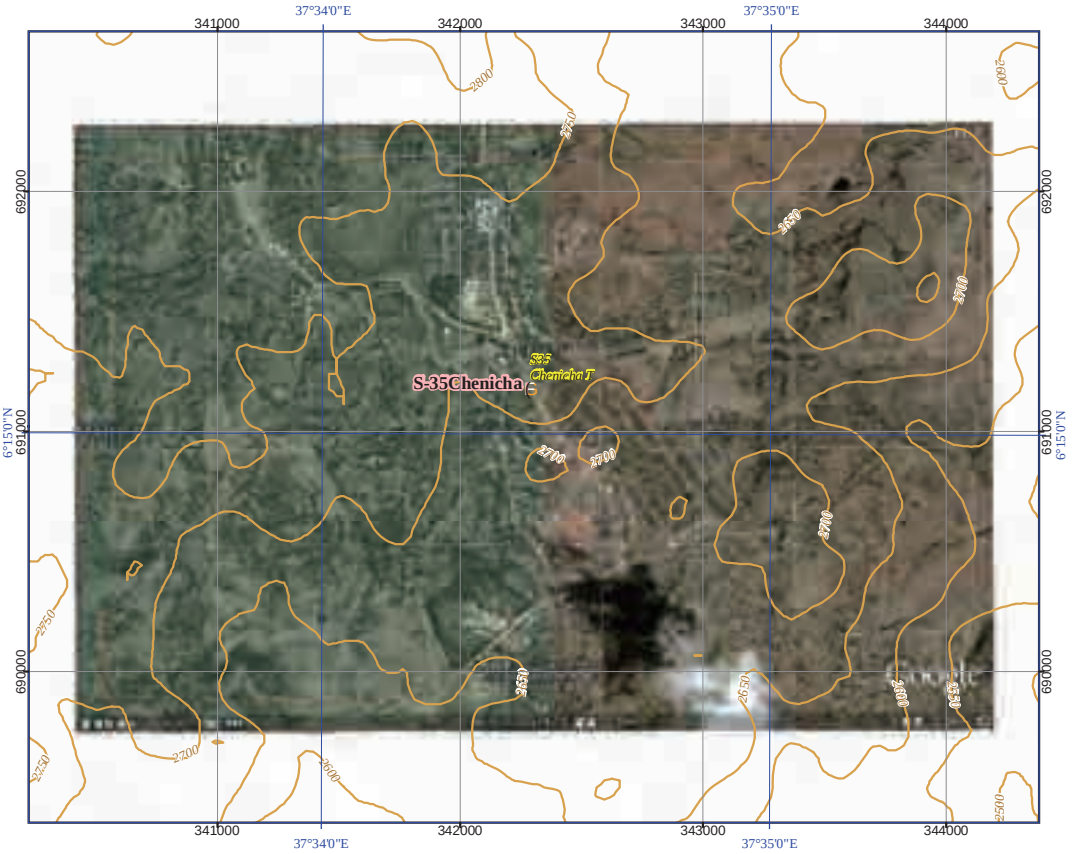
Memo (Town sketch …etc.) :

04-02 Well spec.				
Spring No.1 Established on 1988	??L/sec.			
Well No.1 Established on 1994	Depth GL-154m / casing dia. 6"/ SWL GL-??m / ??L/sec.			
Well No.2 Established on 2010	Depth GL-??m / casing dia. ??"/ SWL GL-??m / ??L/sec.			

05-15 Distribution Type				
GIP ND-2*1/2=2,000m	GIP ND-1"=4,000m	PVC ND-2"=3,000m	PVC ND-1/2"=3,000m	
GIP ND-2"=3,000m	GIP ND-3/4"=2,000m	PVC ND-1"=8,000m		
GIP ND-1*1/2"=4,000m	GIP ND-1/2"=3,000m	PVC ND-3/4"=3,000m	Total= 35,000m	

データ 7.3　南部諸民族州の小都市プロファイル

S-35 Chenicha



データ 7.3　南部諸民族州の小都市プロファイル

S-36 Ezo

	SNNPR					28 / 52	
	Name of small town	**:**	**Ezo**			**S- 36**	
	Name of Woreda	**:**	**Chencha**			**SW- 27**	
	Name of Zone	**:**	**Gamo Gofa**			**SZ- 07**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	836	986	1,822	
	Woreda	male / female / total	by Census 2007	51,307	60,373	111,680	
	percentage of Town in Woreda					1.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	344386	702079	2,825	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well * 5nos. (Not function)			!
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			!
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Handpump			
	04-05 Power source for motorized pump		Type, Kva	Manual			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	Not function			!
	04-07 Water quality		Iron, Fluoride …etc.	Not grasped			!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	2004			
	05-02 Financial of implementation		Donor's name	World Vision			
	05-03 Name of implementation (Project name)			Ezo water system			
	05-04 Intake Type			Well (Shallow well)			
	05-05 Intake No.			5nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	5 (Handpump)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	Not grasped (Handpump)			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Ezo water system			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	Free			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Not grasped			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Handpump parts			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Regional			
	06-13 Principal serious repair with 5-10 years			Pump broken			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Regional			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

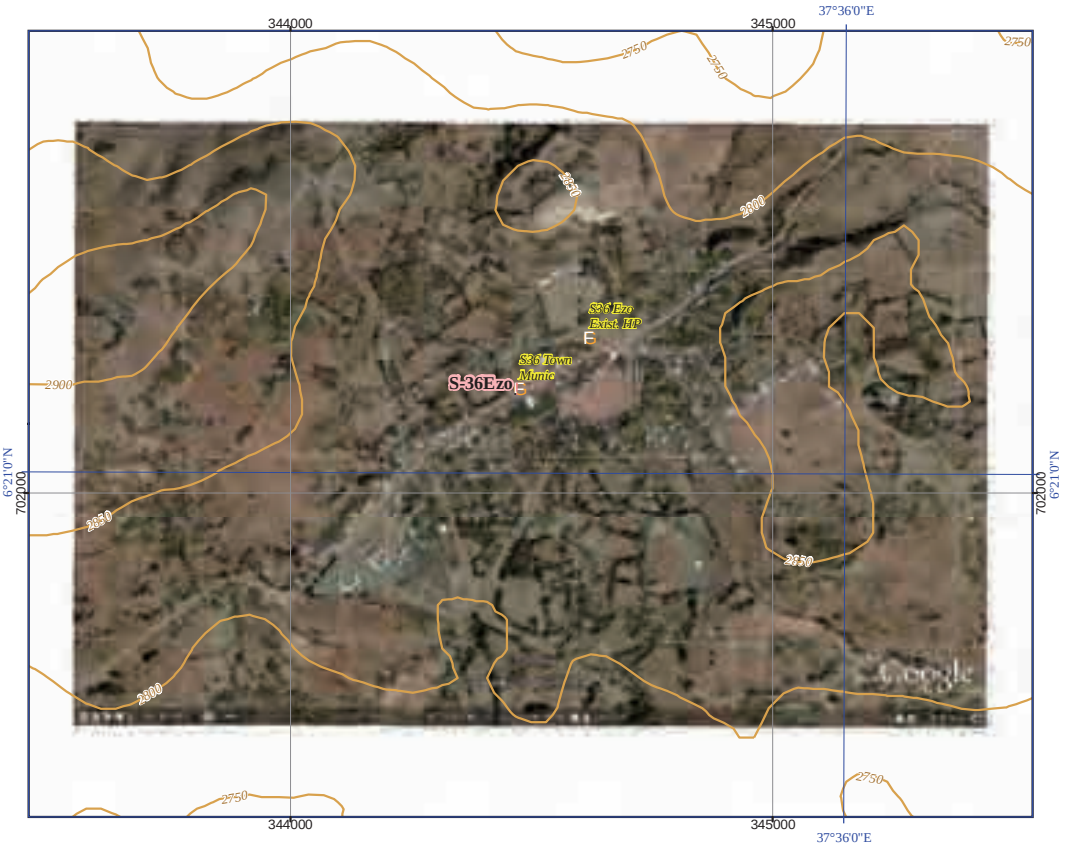
S-36 Ezo

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure (Well)	
	07-02 Finalcial			
	Management		Not grasped	!
	Rate of water tarrif collection		Not grasped	!
	Personnel expenses		free	!
	Shortage of budget to execute operation & maintenace		Shortage water	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the slope of mountain.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		0%	
	(0m3*5PF+0m3*0HC+0m3*0BC)=0m3/day 0m3/20Lpcd.= 0persons 0persons / 783 population = 0%			
	Current Water Coverage (%) (by data of water source product))		0%	
	((0L)*3600sec.*8hrs)=0L/day 0/20Lcd=???persos 0persons/1822population=0%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 47km from Arba Minch. (=14+33km from Arba Minch)			
13	Manpower Capability of Water Supply Management by Water Office (point)		3	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	World Vision			
17	Main Ethnic Group		Gamo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Drug store	
	-2 Nearest other facilities from Town	km	15	
	-3 Main patients of water born diseases	persons / year	Mararia 169	
			Typhoid 86	
			Others 700	
19	Main economic activities		Trade, Waving, Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
		Mr. Afework Teshager Kebele administrator mob. 0916853298		
		Mr. Tariku Masa Ezo Town water committee member no telephone		

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-36 Ezo



データ 7.3　南部諸民族州の小都市プロファイル

S-37 Dorze

	SNNPR					29 / 52	
	Name of small town	**:**		**Dorze**		**S- 37**	
	Name of Woreda	**:**		**Chencha**		**SW- 27**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	547	709	1,256	
	Woreda	male / female / total	by Census 2007	51,307	60,373	111,680	
	percentage of Town in Woreda					1.1%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	342151	684810	2,466	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no. / Well*2nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	See below memo			
	04-03 Method of water draw		Pump, Gravity	Gravity / Pump			
	04-04 Pump Spec.		Type, Yield	Gravity / Hand pump			
	04-05 Power source for motorized pump		Type, Kva	nil. / Manual			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	06:00-12:00, 14:00-18:00 (10hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1980 (Spring) / 2006 (Handpump)			
	05-02 Financial of implementation		Donor's name	NGO (Not grasped name)			
	05-03 Name of implementation (Project name)			Dorse town water supply project			
	05-04 Intake Type			Spring / Well (shallow well)			
	05-05 Intake No.			1 / 2			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, ??", 800m (Spring)			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER (Spring)			
	05-11 Water reserver No.		no.	1no. (Spring)			
	05-12 Water reserver Capacity		m3	10m3 Spring)			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	Not grasped (Spring)			
	05-16 Power to distribute		Pressure, Gravity	Gravity (Spring)			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	1			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	2			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	0.14m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee (Established on 2008)			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Woreda			
	06-03 Number of thechnical staff			nil.			!
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			!
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	Free			!
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Chencha			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Parts of Handpump			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Not grasped			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-37 Dorze

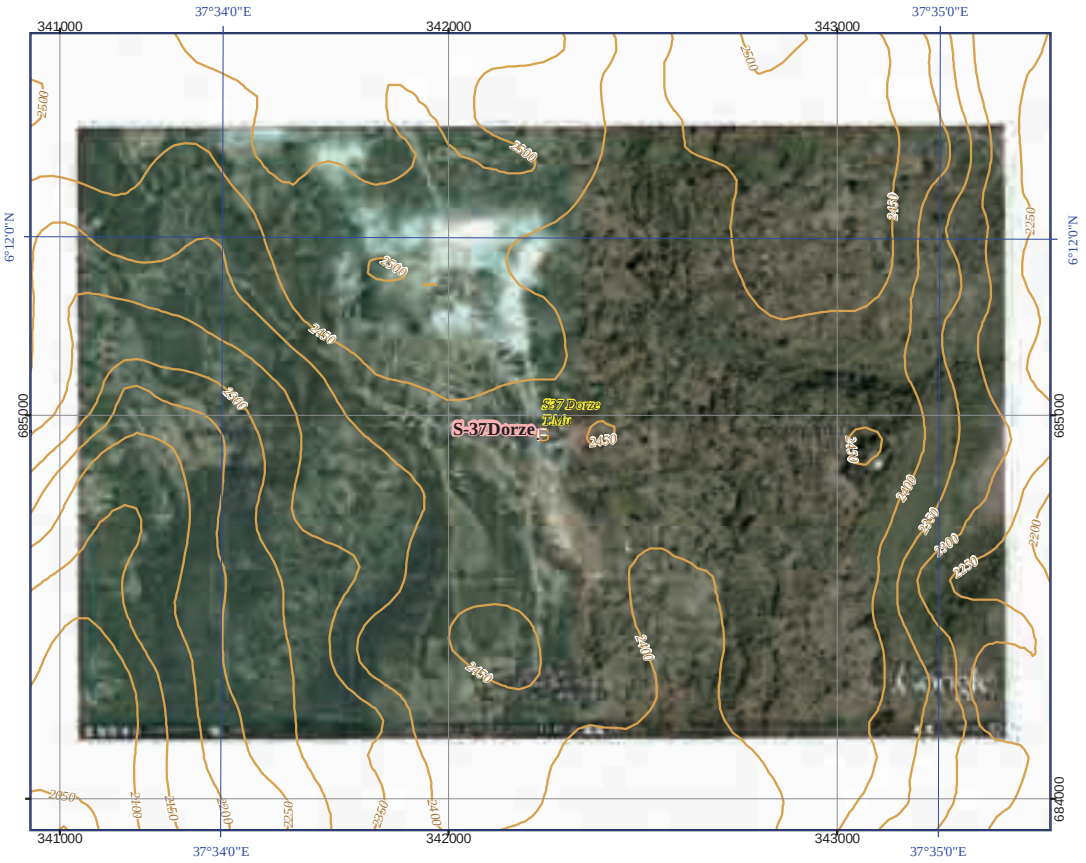
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Not grasped	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			0.6%
	(0.14m3*1PF+0m3*0HC+0m3*0BC)=0.14m3/day 0.14m3/20Lpcd.=7persons 7persons /1,256population = 0.6%			
	Current Water Coverage (%) (by data of water source product))			?? %
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=???persos ???persons/1256population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 26km from Arba Minch. (=14+12km from Arba Minch)			
13	Manpower Capability of Water Supply Management by Water Office (point)			5
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Gamo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center	
	-2 Nearest other facilities from Town	km	7	
	-3 Main patients of water born diseases	persons / year	Thyroid	600
			Dysentery	180
			Malaria	15
19	Main economic activities		Waving, Trade, Farming	
20	Particular comments :			
	Water committee, established on 2008, has plan correction water fee for O&M which to be done in future.			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
		Mr. Kanko Ketema Kebele chairman 0910439007		
		Mr. Wondwossen Beke;le Land resources Adm. Of the town 0912486420		

Memo (Town sketch …etc.) :

04-02 Well spec.
Spring ; Not grasped
Well No.1; Established on 2006 Depth GL-52m / casing dia. ??"/ SWL GL-??m / ??L/sec.
Well No.2; Established on 2006 Depth GL-37m / casing dia. ??"/ SWL GL-??m / ??L/sec.

データ 7.3　南部諸民族州の小都市プロファイル

S-37 Dorze



データ 7.3　南部諸民族州の小都市プロファイル

S-38 Kele

	SNNPR					30 / 52	
	Name of small town	**:**		**Kele**		**S- 38**	
	Name of Woreda	**:**		**Amaro Special**		**SW- 28**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		4,733	3,899	8,632
	Woreda	male / female / total	by Census 2007		75,289	74,095	149,384
	percentage of Town in Woreda						5.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		377988	644892	1,648
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Spring*5nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		nil.		
	04-03 Methor of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source		Type, Kva		nil.		
	04-06 Durartion of water draw		daily hours, time		12hours /day (P.F.), 24hours (Private)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2000 / 2003		
	05-02 Financial of implementation		Donor's name		UNICEF, Agri servise (NGO)		
	05-03 Name of implementation				Kele water project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				5		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		See below memo		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*2nos. (Serge&Reservoir Tank)		
	05-12 Water reserver Capacity		m3		GR50m3*2nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		21		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4 FC*16PF, 3FC*4PF, 2FC*1PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		0.587m3/day		
	05-21 Number of House Connection (HC)				600		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.23m3/day		
	05-23 Number of Business Conection (BC)				10		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		School, Hotel, Health Cen		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.33m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply servse		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Woreda		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Plumbing		
	06-05 Number of the financial staff				7		
	06-06 Principal works of financial staff				Water meter reading, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House connecti		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.5 birr/20L		
	House connection		Birr/m3		1.5(0~5m3), 1.75(6~10m3), 2.0(11~30m3), 2.5(30~)		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		9,583birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Kelle		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Region to borrow heavy tools		
	06-13 Principal serious repair with 5-10 years				Broken pipes by land slide		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water supply service office		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-38 Kele

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	Poor design of pipe network (dia.)	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		shall be rised water tariff	
	Personnel expenses		Not grasped	
	Shortage of budget to execute operation & maintenace		Not grasped	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasped	
	Change in industry	increase factory, Trading …etc.	Not grasped	
	Human conflict	Ethnic, Administrative …etc	Often	!
	07-04 Other technical specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Slope of ridge, rolling, up and down			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		89%	
	(0.587m3*21PF+0.23m3*600HC+0.33m3*10BC)=153.6m3/day 153.6m3/20Lpcd.= 7,681 persons 7,681persons / 8,632 population			
	Current Water Coverage (%) (by data of water source product))		??%	
	((??L+??L+??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos ???persons/8632population=??%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / C	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Sub Grade road 35km from Asphalt road of Dila. (=64+35km from Dila)			
13	Manpower Capability of Water Supply Management by Water Office (point)		16	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities. There are some risks of troubles, conflicts with neighborhoods for development of water sources.			
16	Other Donors, NGO's			
	UNICEF, Agri servise (NGO)			
17	Main Ethnic Group		Kole	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	165	
	-3 Main patients of water born diseases	persons / year	Mararia 2,500	
			Typhoid 1,000	
			Dysentery 50	
			others 1,500	
19	Main economic activities		Trade, Waving, Farming, Livestock	
20	Particular comments :			
	There are conflict of ethic in village area around Kele Town.			!
	This small town is a priority of tranquility for public safety.			
21	Remarks :			

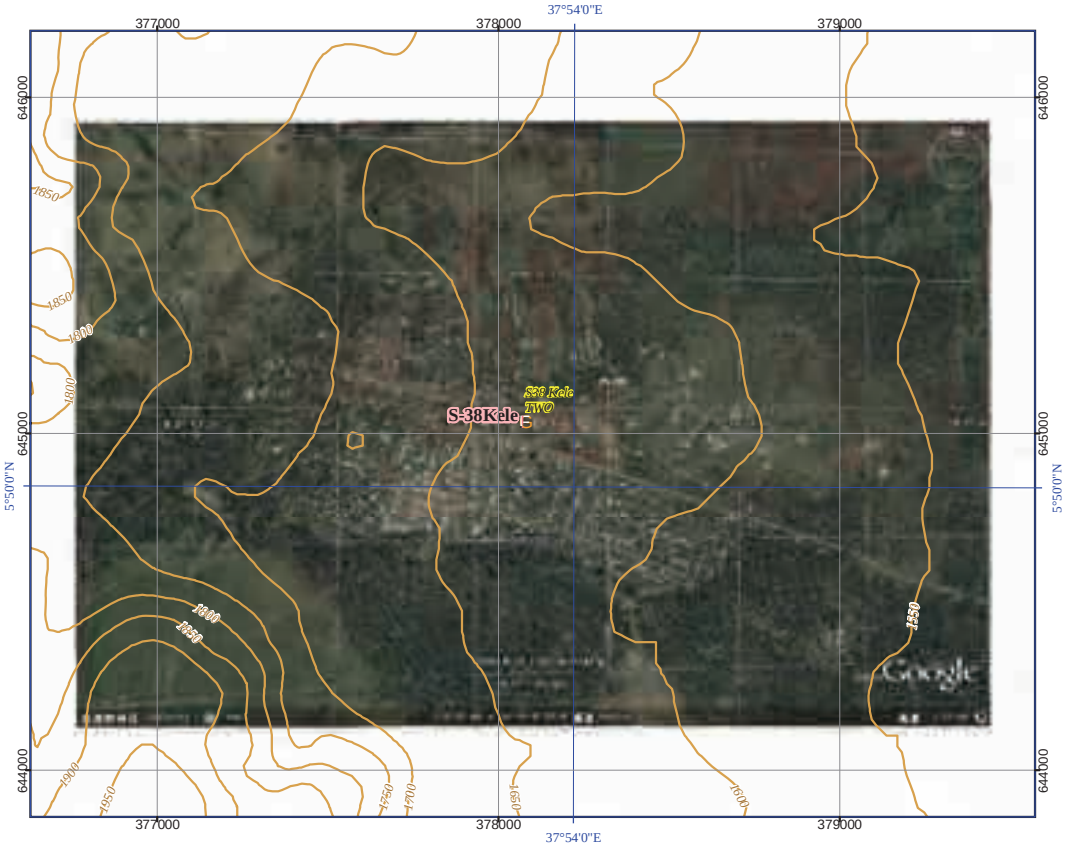
Memo (Town sketch …etc.) :

05-06 Conveyance Type (Water source ~ Reservoir)			
GIP ND-2*1/2=500m	GIP ND-1*1/2"=1,500m		
GIP ND-2"=2,500m	GIP ND-1"=4,000m	Total= 4,500m	

05-15 Distribution Type			
GIP ND-4"=45m	GIP ND-2"=1,500m	GIP ND-1"=1,500m	
GIP ND-3"=800m	GIP ND-1*1/2"=2,200m	GIP ND-3/4"=800m	
GIP ND-2*1/2=700m	GIP ND-1*1/4"=1,000m	Total= 8,545m	

データ 7.3　南部諸民族州の小都市プロファイル

S-38 Kele



データ 7.3　南部諸民族州の小都市プロファイル

S-39 Soyama

	SNNPR					31 / 52	
	Name of small town	**:**		**Soyama**		**S- 39**	
	Name of Woreda	**:**		**Burji Special**		**SW- 29**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	3,051	3,217	6,268	
	Woreda	male / female / total	by Census 2007	27,643	28,880	56,523	
	percentage of Town in Woreda					11.1%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	373669	606300	1,902	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Spring*3nos.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L	nil.			
	04-03 Methor of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source		Type, Kva	nil.			
	04-06 Durartion of water draw		daily hours, time	06:00~11:00 /day shifting 12PF			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1996			
	05-02 Financial of implementation		Donor's name	Ethiopia Hiwot Chrch			
	05-03 Name of implementation			Soyama water project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			3 nos.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 8,000m			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	GR*3nos.			
	05-12 Water reserver Capacity		m3	GR50m3*1no., GR25m3*2nos.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	14			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	1.33m3/day			
	05-21 Number of House Connection (HC)			7 (Public organization)			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	Not Grasp			
	05-23 Number of Business Conection (BC)			Not Grasp			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov., Hotel, School, Health center			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.2m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Town water supply servse			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Woreda			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Plumbing, Water meter reading			
	06-05 Number of the financial staff			8			
	06-06 Principal works of financial staff			Water meter reading			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1 birr/20L (5.0birr/m3)			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	Not Grasp			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Dila, Soyama, Amaro			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda			
	06-13 Principal serious repair with 5-10 years			Generator broken for old well (Abandon)			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Region, Donor			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-39 Soyama

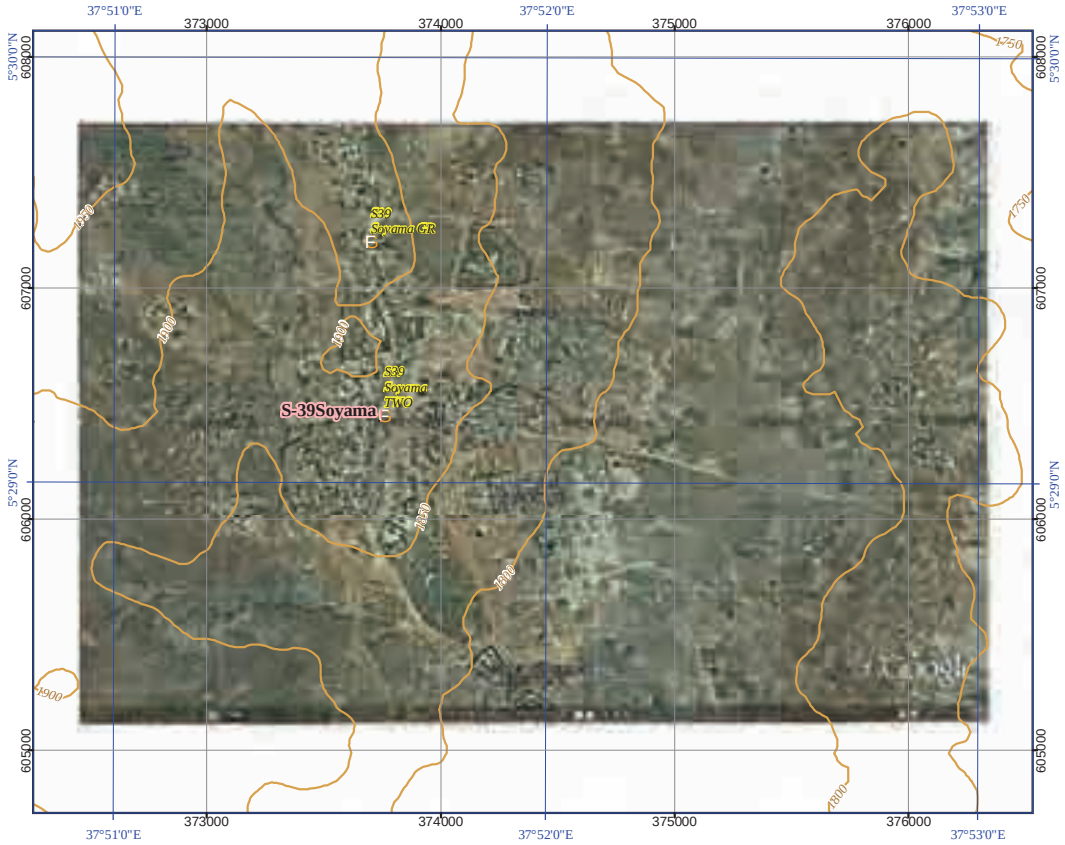
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water correction is not efficiency.	
	Water supply facility	Decrepit, leakage, design failure …etc.	Poor design of pipe network	
	07-02 Finalcial			
	Management		Personal authority by Municipality	
	Rate of water tarrif collection		Shall be revised water tari	
	Personnel expenses		Not Grasp	
	Shortage of budget to execute operation & maintenace		Not Grasp	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not Grasp	
	Change in industry	increase factory, Trading …etc.	Not Grasp	
	Human conflict	Ethnic, Administrative …etc	Often	!
	07-04 Other technical specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Slope of ridge, rolling, up and down			
09	Necessary Institution (Facility, Material)			
	Spring source which has high yield are unprotected, can be added to the system			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		?? %	
	(1.33m3*14PF+??m3*7HC+0.2m3*4BC)/20Lpcd.= ??? persons ???persons/4,659 population =??%			
	Current Water Coverage (%) (by data of water source product))		1.2%	
	(1.33+0.2)m3/day 1.53m3/20Lcd=765persos 765persons/6268population=1.2%			
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		C / D	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Sub Grade road 85km from Asphalt road of Dila. (=64+85km from Dila)			
13	Manpower Capability of Water Supply Management by Water Office (point)		13	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the ridge, construction works is required some ingenuity. There are some risks of troubles, conflicts with neighborhoods for development of water sources.			
16	Other Donors, NGO's			
	Ethiopia Hiwot Chrch (NGO)			
17	Main Ethnic Group		Burji	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	224	
	-3 Main patients of water born diseases	persons / year	Mararia 2,570	
			Diarrhea 1,550	
			Typhoid 1,200	
			Dysentery 770	
			others 2,570	
19	Main economic activities		Farming, Trade, Waving	
20	Particular comments :			
	There are conflict of ethic in village area around Soyama Town.			!
	This small town is a priority of tranquility for public safety.			
21	Remarks :			

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP ND-3"=1,500m	GIP ND-2"=4,250m	GIP ND-1"=800m	
GIP ND-2*1/2=1,500m	GIP ND-1*1/2"=1,460m	Total= 9.510m	

データ 7.3　南部諸民族州の小都市プロファイル

S-39 Soyama



データ 7.3　南部諸民族州の小都市プロファイル

S-41 Segen

	SNNPR					32 / 52	
	Name of small town	**:**		**Segen**		**S- 41**	
	Name of Woreda	**:**		**Konso Special**		**SW- 30**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		1,833	1,793	3,626
	Woreda	male / female / total	by Census 2007		113,353	121,634	234,987
	percentage of Town in Woreda						1.5%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		338910	617582	1,628
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Well		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasped		!
	04-03 Method of water draw		Pump, Gravity		Not grasped		!
	04-04 Pump Spec.		Type, Yield		Not grasped		!
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec., Standby generator		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		6hrs/day		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1981		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Segen town water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2*1/2", 1,500m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		50m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		2		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		13m3/day		
	05-21 Number of House Connection (HC)				153		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.266m3/day		
	05-23 Number of Business Conection (BC)				15		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.				
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.66m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Segen water supply service		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Municipality		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				Not grasp		
	06-06 Principal works of financial staff				Not grasp		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1birr/20L		
	House connection		Birr/m3		5.0birr/m3		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		9,000birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Arba Minch		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc.		Pipes&fittings, Generator parts		
	06-12 Method in case of serious repair		by Regional office, Private company …etc.		Region		
	06-13 Principal serious repair with 5-10 years				Broken generator & pump		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Municipality		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-41 Segen

07	Problem of actual town water supply			
	07-01 Technical		Water shortage	
	Water source	Quantity, Quality …etc.	Design failure, Leakage from pipe lines	
	Water supply facility	Decrepit, leakage, design failure …etc.		
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		Low	
	Personnel expenses		Low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increase Town people and villagers	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			106%
	(13m3*2PF+0.266m3*153HC+0.66m3*15BC)=76.6m3/day 34.1m3/20Lpcd.=3,830persons 3,830persons/3,626population=106%			
	Current Water Coverage (%) (by data of water source product))			?? %
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=???persos ???persons/3626population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / C
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 42km from Konso. (=25+ 17km from Konso)			
13	Manpower Capability of Water Supply Management by Water Office (point)			6
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Konso	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	67	
	-3 Main patients of water born diseases	persons / year	Mararia	3,624
			Dysentery	3,360
			Typhoid	1,824
			others	768
19	Main economic activities		Trade, Farming	
20	Particular comments :			
21	Remarks :			
		Mr. Endalkachew Besha Kebelechairman Mob. -------		
		Mr. Tezera Tefera Minicipal Casher 0912992534		
		Mr. Gezhagn Dinku Storeman Mob. 0920989749		

Memo (Town sketch …etc.) :

05-15 Distribution Type				
GIP 2"=676m	GIP 1*1/4"=2,708m	GIP 3/4"=700m		
GIP 1*1/2"=50m	GIP 1"=474m		Total L=4,608m	

データ 7.3　南部諸民族州の小都市プロファイル

S-41 Segen

データ 7.3　南部諸民族州の小都市プロファイル

S-42 Gidole

	SNNPR					33 / 52	
	Name of small town	**:**		**Gidole**		**S- 42**	
	Name of Woreda	**:**		**Darashe Special**		**SW- 31**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		6,497	6,679	13,176
	Woreda	male / female / total	by Census 2007		70,076	72,602	142,678
	percentage of Town in Woreda						9.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		319680	624237	2,066
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Spring*2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		0.5L/sec. ea.　(Total 1.0L/sec.)		
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		No.1 24hrs,　No.2 06:00-09:00		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1970 / 1994		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Tililo&Kamo development project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				2nos.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		PVC, 3", 3,000m		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		2nos.		
	05-12 Water reserver Capacity		m3		50m3*1no., 41m3*1no.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below memo		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		23		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6FC*6PF, 4FC*8PF, 2FC*9PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		0.06m3/day		
	05-21 Number of House Connection (HC)				486		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.166m3/day		
	05-23 Number of Business Conection (BC)				12		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Not grasped		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.633m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Gidole town water　supply service		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Woreda		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Plumbing		
	06-05 Number of the financial staff				4		
	06-06 Principal works of financial staff				Water meter read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		3.0birr/month/household		
	House connection		Birr/m3		1.0birr/m3		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		2,500birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Arba Minch		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Mr. Mohamed Surur Land adm. Coordinator Mob. 0910040236,		
	06-13 Principal serious repair with 5-10 years				Broken pipes (PVC)		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Municipality		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-42 Gidole

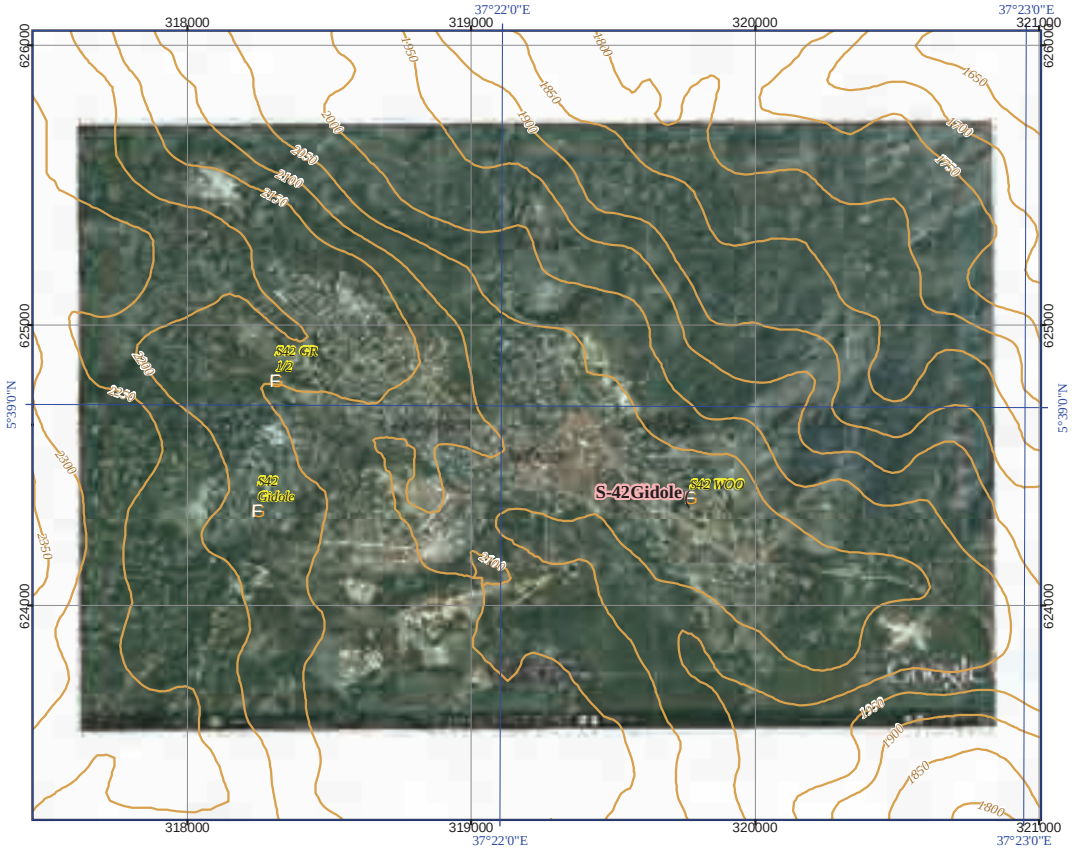
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Water shortage (decreased water yield)	
	Water supply facility	Decrepit, leakage, design failure …etc.	Not grasped	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		low	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	nil.	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Rugged land with mountainous srround			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			34%
	(0.06m3*23PF+0.166m3*486HC+0.633m3*12BC)=89.7m3/day 89.7m3/20Lpcd.= 4,485persons 4,485persons / 13,176population = 34%			
	Current Water Coverage (%) (by data of water source product))			33%
	((0.5L+0.5L)*3600sec.*24hrs)=86400L/day 86400/20Lcd=4320persos 4320persons/13176population=33%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Base course 42km from Konso. (=25+ 17km from Konso)			
13	Manpower Capability of Water Supply Management by Water Office (point)			11
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Derashe. Amhara	
18	Health conditions			
	-1 Medical facilities in Town		Hospital, Health Center, Private clinic, Drug s	
	-2 Nearest other facilities from Town	km		
	-3 Main patients of water born diseases	persons / year	Mararia	8,818
			Dysentery	4,969
			Typhoid	555
19	Main economic activities		Trade, Waving, others	
20	Particular comments :			
	Town population is more than 13,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
	Mr. Adane Setota Woreda water res. Office WSS process owner Mob. 0916037401/ 0467740318			
	Mr. Shita Shio H/Gidole Town WS Service Mob. 0916881233			

Memo (Town sketch …etc.) :

05-15 Distribution Type			
GIP 3"=1,500m	GIP 1*1"=400m		
GIP 2"=3,100m	GIP 1*1/2"=300m	Total L=5,300m	

データ 7.3　南部諸民族州の小都市プロファイル

S-42 Gidole



データ 7.3　南部諸民族州の小都市プロファイル

S-43 Kibat

	SNNPR					34 / 52	
	Name of small town	**:**		**Kibat**		**S- 43**	
	Name of Woreda	**:**		**Silti**		**SW- 32**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,917	2,759	5,676
	Woreda	male / female / total	by Census 2007		87,583	89,740	177,323
	percentage of Town in Woreda						3.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		426149	887107	2,108
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		see below memo		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source		Type, Kva		Commercial Elec. / stand by Generator (broke		
	04-06 Durartion of water draw		daily hours, time		07:00-13:00, 15:00-23:00 (14hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				nil.		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1985		
	05-02 Financial of implementation		Donor's name		Contral government		
	05-03 Name of implementation				Kibat town water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP & PVC, 2"~3", 6,264m (see below)		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR、ER		
	05-11 Water reserver No.		no.		GR*2now., ER*4nos.		
	05-12 Water reserver Capacity		m3		GR 50m3*2nos., ER 10m3*4nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 1"~3", 15,620m (see below)		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry, Pipes		
	05-18 Number of water point (Public Faucet, PF)		no.		16		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6, 4 nos.		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		3.05m3		
	05-21 Number of House Connection (HC)				553		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		4.52m3/day		
	05-23 Number of Business Conection (BC)				33		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		see below (Total 34 BC)		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		52.8L.day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply centre		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Regional government		
	06-03 Number of thechnical staff				5		
	06-04 Principal works of technical staff				Pump operation, plumbing		
	06-05 Number of the financial staff				5		
	06-06 Principal works of financial staff				Water meter counting, Billing		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Poinat, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1 birr/20L		
	House connection		Birr/m3		see below		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		14,000 bir,month.		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Butajira		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipe and Fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zonal, Regional office		
	06-13 Principal serious repair with 5-10 years				Water supply service office own.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Burned pump motor		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-43 Kibat

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water quantity	
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure	
	07-02 Finalcial			
	Management		High fuel cost	
	Rate of water tarrif collection			
	Personnel expenses			
	Shortage of budget to execute operation & maintenace			
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increase population	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Accessibility ; Kibat town is located along national road (Asphalt pavement), where is bottom slope on montain.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		176%	!
	(3.05m3*16PF+4.52*33HC+0.052m3*34BC)=199.7m3/day 199.7m3/20Lpcd.=9986persons 9986 persons/5676population=176%			
	Current Water Coverage (%) (by data of water source product))		??%	
	((??L+??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos ???persons/5676population=??%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 13km from Butajira. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		18	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	12	
	-3 Main patients of water born diseases	persons / year	Dysentery	7,000
			Malaria	5,000
			Typhoid	500
19	Main economic activities		Trade, Farming	
20	Particular comments :			
	The watersupply facility has been relatively good managed by the Woreda water office and this office collects water fee for public faucets and private water connections. Morale of operators of the pump station is high.			
21	Remarks :			
	(1) Written records, even if it is by hand			
	(2) The manager knows about the service, and is active in financial management.			
	(3) ~ see below			

データ 7.3　南部諸民族州の小都市プロファイル

S-43 Kibat

Memo (Town sketch …etc.) :

04-02 Well spec.

Well No.1; Estbsh on 1985 GL-119.1m / Casing dia.6" / SWL GL-55.3m / ??L/sec. / 14kw

Well No.2; Estbsh on 1985 GL-172.6m / Casing dia.6" / SWL GL-50.0m / ??L/sec. / 18kw / with stand by generator 23.5kva (broken)

05-06 Conveyance pipe (GIP)

Well No.1	GIP, 3"=1,337m
Well No.2	3"= 3,417m, 2"=1,510m

05-15 Distribution pipe (GIP, PVC)

3" = 600m　　1*1/2"= 4,084m　　PVC 1*1/2"= 2,000m

2*1/2"= 1,400m　　1"= 1,600m

2"= 6,236m

05-24 Type of business connection

School*5, Gov.*13, Health Cntr.*1, Mosque*4, Chrch*3, Shop*8

Total 34

06-05 Water tariff

0~5m3 = 3.25birr/m3　　11~30m3 = 3.75birr/m3

6~10m3 = 3.50birr/m3　　31m3~ = 4.00birr/m3

Water meter lease ;

Dia. 1/2" = 3.0birr/month　　Dia. 1*1/4" = 7.0birr/month

Dia. 3/4" = 4.0birr/month　　Dia. 1*1/2" = 8.0birr/month

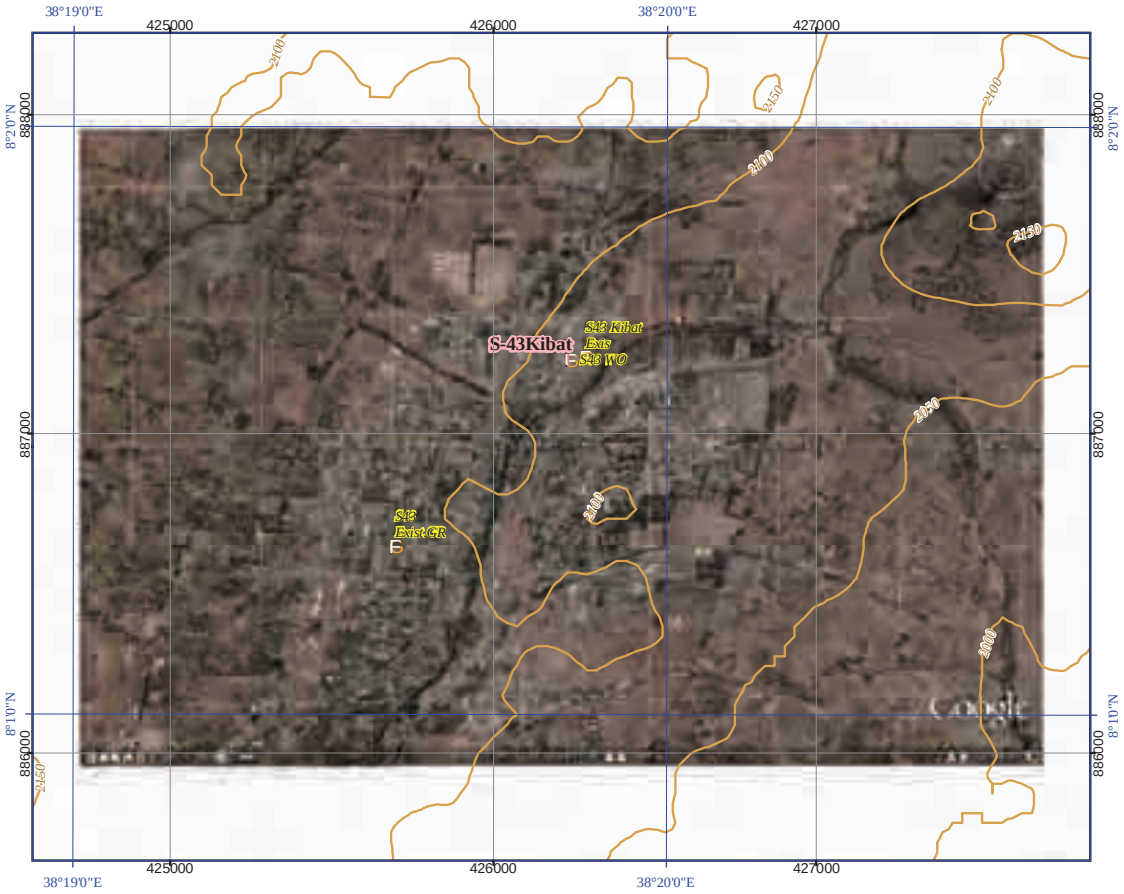
Dia. 1" = 5.0birr/month　　Dia. 2" = 12.0birr/month

10 Remarks

(3) The 2 assistants: one has information on water supply facilities written in his notebook; the other has written records where he can search for information on income, water consumption, list of service users.

(4) Separate shed as own storage for the parts and fuel

(5) The negative point: financially weak by their own admission, expenditures exceed income. (Speculating on the possible motives, the other towns up to now use water points as “cash cows” placing one water seller in each water point. Kibet, on the contrary, has privatized water points, which may induce contract private companies to under-report water consumption at water points. Water consumption at each water point appears to be low, even though this may be due to the high number of water points).



データ 7.3　南部諸民族州の小都市プロファイル

S-44 Alkeso

	SNNPR					35 / 52	
	Name of small town	**:**	**Alkeso**			**S- 44**	
	Name of Woreda	**:**	**Silti**			**SW- 32**	
	Name of Zone	**:**	**Silte**			**SZ- 08**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	506	522	1,028	
	Woreda	male / female / total	by Census 2007	87,583	89,740	177,323	
	percentage of Town in Woreda					0.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	415670	875249	2,283	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Well * 1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-182m, 6*5/8", GL-91.5m, 5L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump (3.9kw)			
	04-05 Power source for motorized pump		Type, Kva	Commercial Elec. With Standy Generator 37.5kva			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	12:00~15:30, 20:00~23:30 (7hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1999			
	05-02 Financial of implementation		Donor's name	SNNPR			
	05-03 Name of implementation (Project name)			Alkeso 01 water supply pr			
	05-04 Intake Type			Well			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 30m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1 no.			
	05-12 Water reserver Capacity		m3	50m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	See below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	12 (2/12 are not function)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6FC*7PF, 2FC*5PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	6m3/day			
	05-21 Number of House Connection (HC)			93			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.67m3/day			
	05-23 Number of Business Conection (BC)			19			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	School*1, Mosque*4, Café*14			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.83m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Alkeso water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community Based Organization			
	06-03 Number of thechnical staff			2			
	06-04 Principal works of technical staff			Pump operation, Plumbin			
	06-05 Number of the financial staff			10			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L			
	House connection		Birr/m3	3.0birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	4,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Addis Ababa, Butajira, Worabel			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pipes&Fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Zone			
	06-13 Principal serious repair with 5-10 years			Pump control panel			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Community			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-44 Alkeso

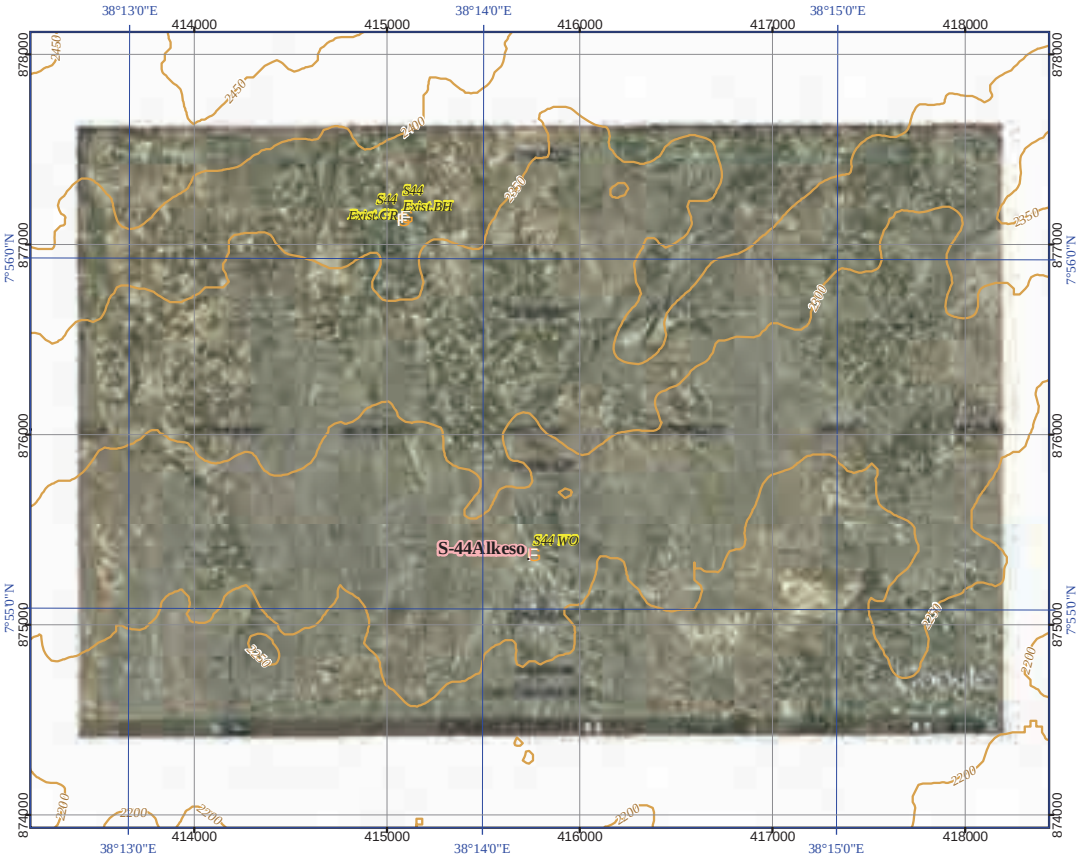
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	!
	Water supply facility	Decrepit, leakage, design failure …etc.	Leakage from pipe lines	
	07-02 Finalcial			
	Management		Skill of staff	
	Rate of water tarrif collection		Delay bill correction	
	Personnel expenses		nil.	
	Shortage of budget to execute operation & maintenace		Shortage of budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasp	
	Change in industry	increase factory, Trading …etc.	Not grasp	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Slope of mountatin			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		672%	!
	(6m3*10PF+0.67m3*93HC+0.83m3*19BC)=138.1m3/day 138.1m3/20Lpcd.=6,905persons 6,905persons/1,028population=672%			
	Current Water Coverage (%) (by data of water source product))		700%	!
	((5L)*3600sec.*8hrs)=144000L/day 144000/20Lcd=7200persos 7200persons/1028population=700%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached	A / B	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Asphalt road 29km from Butajira. * Refer to Chapter 5 "Table 5-7: Categories of accessibili			
13	Manpower Capability of Water Supply Management by Water Office (point)		15	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Health post	
	-2 Nearest other facilities from Town	km	75	
	-3 Main patients of water born diseases	persons / year	Mararia 200	
			Typhoid 120	
19	Main economic activities		Trade, Farming, others	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			

Memo (Town sketch …etc.) :

05-15 Distribution Type		
GIP 2*1/2"=2,500m	PVC 1*1/2"=1,110m	
GIP 2"=2,280m	PVC 1"= 1,210m	Total L=7,100m

データ 7.3　南部諸民族州の小都市プロファイル

S-44 Alkeso



データ 7.3　南部諸民族州の小都市プロファイル

S-46 Tora

	SNNPR					36 / 52	
	Name of small town	**:**		**Tora**		**S- 46**	
	Name of Woreda	**:**		**Lanifaro (Lanifuro)**		**SW- 33**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		4,896	4,267	9,163
	Woreda	male / female / total	by Census 2007		58,834	57,257	116,091
	percentage of Town in Woreda						7.9%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		436358	868558	1,997
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Well*2nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-=240m / 251m, Dia.6"/6", GL-213/??m		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec. (Unstable)		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00-12:00, 13:30-22:30 (15hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1996		
	05-02 Financial of implementation		Donor's name		UNICEF		
	05-03 Name of implementation (Project name)				Tora town water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				2		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		PVC, 3", 400m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*3nos.		
	05-12 Water reserver Capacity		m3		GR 25m3*1no., GR 10m3*2nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 1"~2*1/2", 4,900m (see below)		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry, Pipe		
	05-18 Number of water point (Public Faucet, PF)		no.		12 (6 nos. broken)		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6 / 4		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		5m3/day		
	05-21 Number of House Connection (HC)				364		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		66L/day		
	05-23 Number of Business Conection (BC)				11		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		School*1, Gov.*5, Health Cntre*1, Mosque*4		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		100L/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Community water supply service		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community Based Organization (CBO)		
	06-03 Number of thechnical staff				3		
	06-04 Principal works of technical staff				Pump operation, plumbing		
	06-05 Number of the financial staff				9		
	06-06 Principal works of financial staff				Water meter rading, Billig		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House Connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.3 birr/30L		
	House connection		Birr/m3		7.5 birr/m3		
	Business connection		Birr/m3		ditto		
	06-09 Average monthly income by water tariff		Birr/month		14,000 birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Addis Ababa, Butajira		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, pipe fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Notify Woreda < Zone < Regional		
	06-13 Principal serious repair with 5-10 years				Burned pump motor		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee own fund		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-46 Tora

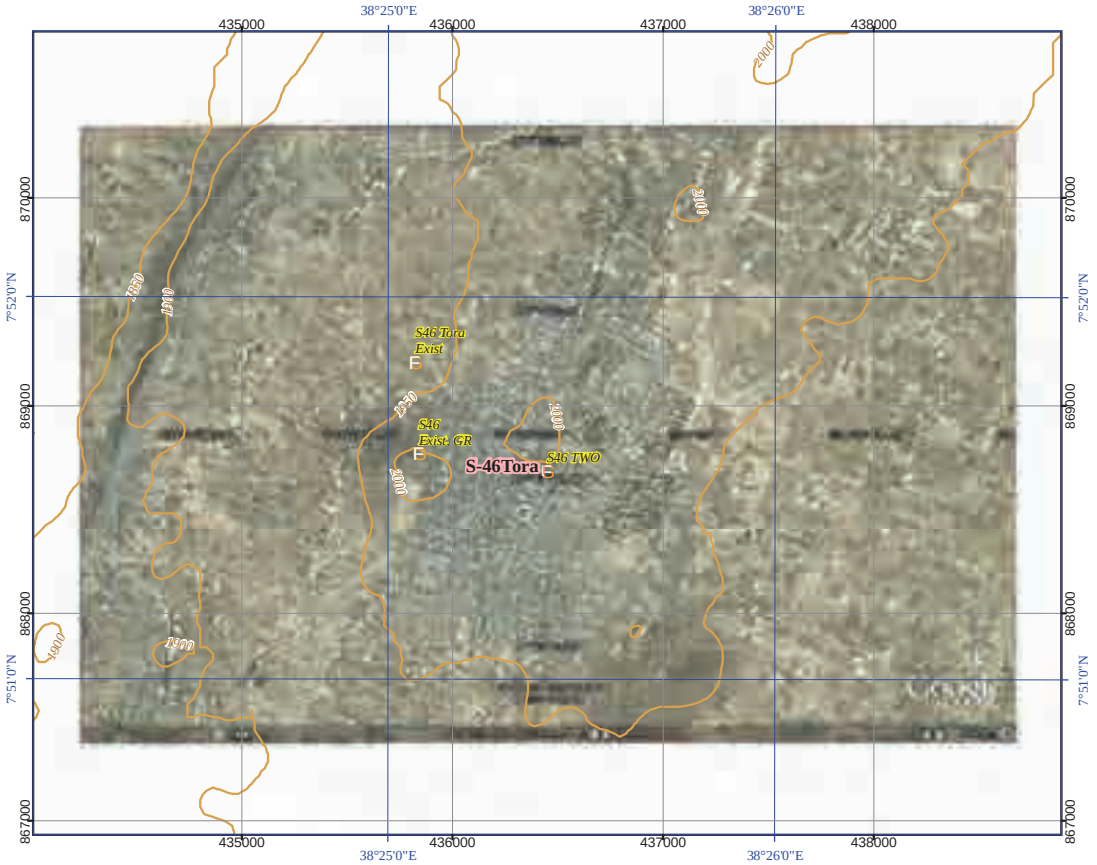
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shrtage water quantity		
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure		
	07-02 Finalcial				
	Management		Delay of payment from Customers		
	Rate of water tarrif collection		Tariff rate		
	Personnel expenses				
	Shortage of budget to execute operation & maintenace				
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	coming from other village		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			30%	
	(5m3*6PF+0.066m3*364HC+0.1m3*11BC)=55.1m3/day 55.1m3/20Lpcd.=2755persons 2755 persons/9163population=30%				
	Current Water Coverage (%) (by data of water source product))			??%	
	((??L+??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos ???persons/9163population=??%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / C	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 58km from Butajira. * Refer to Chapter 5 "Table 5-7: Categories of ac				
13	Manpower Capability of Water Supply Management by Water Office (point)			10	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Silte		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store, Health Post		
	-2 Nearest other facilities from Town	km	48		
	-3 Main patients of water born diseases	persons / year	Mararia	11,000	
			Typhoid	1,440	
			Diarrheal	1,080	
			Dysentery	720	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
	The watersupply facility has been relatively good managed by the Water office and this office collects water fee for public faucets and private water connections. However, acknowredgement of the specifications of the facilityof the sstaff is low.				
21	Remarks :				
	The Water Committee does not even have own office, no written documents, they do not even know when the Committee was established (the present Committee has been there for 2 years).				

Memo (Town sketch …etc.) :

05-15 Distribution pipe (GIP)	
2*1/2" =350m	1"= 500m
2" =100m	
1*1/2" = 3,950m	

データ 7.3　南部諸民族州の小都市プロファイル

S-46 Tora



データ 7.3　南部諸民族州の小都市プロファイル

	SNNPR					37 / 52	
	Name of small town	**:**		**Mito**		**S- 47**	
	Name of Woreda	**:**		**Lanifaro (Lanifuro)**		**SW- 33**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		1,714	1,563	3,277
	Woreda	male / female / total	by Census 2007		58,834	57,257	116,091
	percentage of Town in Woreda						2.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		429240	848987	1,718
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well 1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield				
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Generator		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		17hrs.		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1981		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Mito 01 kebele water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2", 500m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		38m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length				
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		6		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4FC*3PF, 2FC*2PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		13m3/day		
	05-21 Number of House Connection (HC)				218		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.5m3/day (=16m3/30days)		
	05-23 Number of Business Conection (BC)				6		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.				
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		2.7m3/day (=80m3/30days)		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Mito water development		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pomp operation		
	06-05 Number of the financial staff				Not grasped		!
	06-06 Principal works of financial staff				Not grasped		!
	06-07 Categories of water tariff		W.Point, House Connection…etc.				
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.25birr/20L		
	House connection		Birr/m3		Not grasped		!
	Business connection		Birr/m3		Not grasped		!
	06-09 Average monthly income by water tariff		Birr/month		28,000birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Addis Ababa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Region		
	06-13 Principal serious repair with 5-10 years				Generator broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

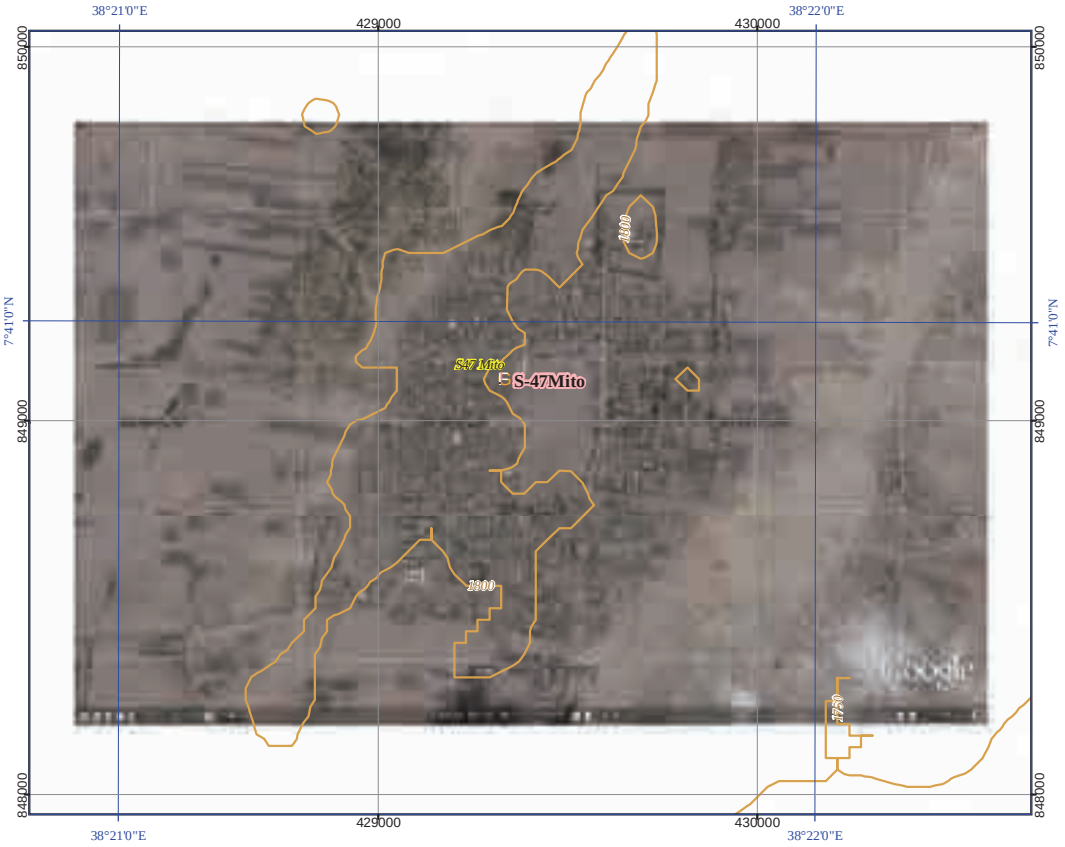
S-47 Mito

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure	
	07-02 Finalcial			
	Management		Cost of fule for ganarator	
	Rate of water tarrif collection		low	
	Personnel expenses		Not grasped	!
	Shortage of budget to execute operation & maintenace			
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	coming from villagers	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	!
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		285%	
	(13m3*6PF+0.5m3*218HC+2.7m3*6BC)=203.2m3/day 203.2m3/20Lpcd.=10,160persons 10,160persons/3277population=285%			
	Current Water Coverage (%) (by data of water source product))		?? %	
	((??L)*3600sec.*8hrs)=???L/day ???/20Lcd=???persos ???persons/3277population=???%			
11	Water Potential (A / B / C / D / E)		B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		C / C	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 68km from Butajira (=38+30km) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		6	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	50	
	-3 Main patients of water born diseases	persons / year	Mararia 3,600	
19	Main economic activities		Trade, Farming	
20	Particular comments :			
21	Remarks :			
		Mr. Mohamed Surur Land adm. Coordinator Mob. 0910040236,		
		Mr. Dejene Geremew Land dev`t expert mob. 0910965332		
		Mr. Muktar Ahemed Mob. 0920972920		

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-47 Mito



データ 7.3　南部諸民族州の小都市プロファイル

S-48 Dalocha

	SNNPR			**-**	38 / 52		
	Name of small town	**:**	**Dalocha**		**S- 48**		
	Name of Woreda	**:**	**Dalocha**		**SW- 34**		
	Name of Zone	**:**	**Silte**		**SZ- 08**		
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	3,635	3,389	7,024	
	Woreda	male / female / total	by Census 2007	45,069	44,963	90,032	
	percentage of Town in Woreda					7.8%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	416683	861330	1,957	
03	Town Status			Woreda Capital			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L	(4L & 8L/sec. Dry / Rainy season)			
	04-03 Methor of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Motorized pump (16L/sec.)			
	04-05 Power source		Type, Kva	Commercial Elec. + standby generator 63kva			
	04-06 Durartion of water draw		daily hours, time	1hr./3hour *24hrs (Total 8hrs.)			
	04-07 Water quality		Iron, Fluoride …etc.	Fluoride (within WHO limit)			
	04-08 Other technical specimen			nil.			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1997			
	05-02 Financial of implementation		Donor's name	Action Aid (DWWDP)			
	05-03 Name of implementation			Dalocha Women Water Development Project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, ND6", L=500m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	GR			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	300m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	GIP, ND4", L=4,000m			
	05-14 Power to transmit		Pressure, Gravity	Gravity			
	05-15 Distribution Type		Pipe material, length	see below memo			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry （Kiosk system）			
	05-18 Number of water point (Public Faucet, PF)		no.	7nos.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4nos.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	7.5m3/day			
	05-21 Number of House Connection (HC)			380			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	0.067m3/day (13l/c/d)			
	05-23 Number of Business Conection (BC)			58			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	see below memo			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.333m3/day			
	05-26 Other technical specimen			Water supply area is not only Dalocha town. For Dalocha woreda			
06	Operation and Maintenace						
	06-01 Organization's name			Womens water development assosiation			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization (CBO)			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			Pump operation, plumbing			
	06-05 Number of the financial staff			11 (Incl. 7 Kiosk staff)			
	06-06 Principal works of financial staff			Water meter read, Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Popint, House connection			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.25birr/40L			
	House connection		Birr/m3	4.5 birr/m3 (free for water meter lease)			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	10,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Butajira, Warabe, Addis Ababa			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Filter for Generator			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Woreda, Zone, Regional			
	06-13 Principal serious repair with 5-10 years			Diversion of spring			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	above organization, NGO, Region			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-48 Dalocha

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Need Separate Reservoir,additional net	
	Water supply facility	Decrepit, leakage, design failure …etc.	work & public water points	
	07-02 Finalcial			
	Management			
	Rate of water tarrif collection			
	Personnel expenses			
	Shortage of budget to execute operation & maintenace			
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	population increase	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			69%
	(7.5m3*7PF+0.067m3*380HC+0.333m3*58BC)=97.3m3/day 97.3m3/20Lpcd.= 4,865 persons 4,865persons / 7,024 population = 6			
	Current Water Coverage (%) (by data of water source product))			369%
	((6L)*3600sec.*24hrs)=518400L/day 518400/20Lcd=25920persos 25920persons/7024population=369%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		C / B
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Asphalt & Sub grade 48km from Butajira (=38+10km) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			16
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, however, it may be required high technology water treatment facility to remove Fluoride. The small town is on the hills, construction works is required some ingenuities arround water sources.			
16	Other Donors, NGO's			
	Action Aid			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store	
	-2 Nearest other facilities from Town	km	50	
	-3 Main patients of water born diseases	persons / year	Mararia	20,898
			Dysentery	1,362
			Typhoid	740
			other	1,744
19	Main economic activities		Trade, Livestock, Farming	
20	Particular comments :			
	In accordance with the result of water quality survey, this area has higher effects Fluoride. Therefore, it is difficult to develop good water quality around this area.			
21	Remarks :		Ato Eyasu Kergeba	
	Interviewee : Mr Shita Mohammed Project Coordinator, Action Aid)		Ato Dereje Mamo Mobile 0916116711	
			Ato Sheyich Delgeba Mobile 0916839863	

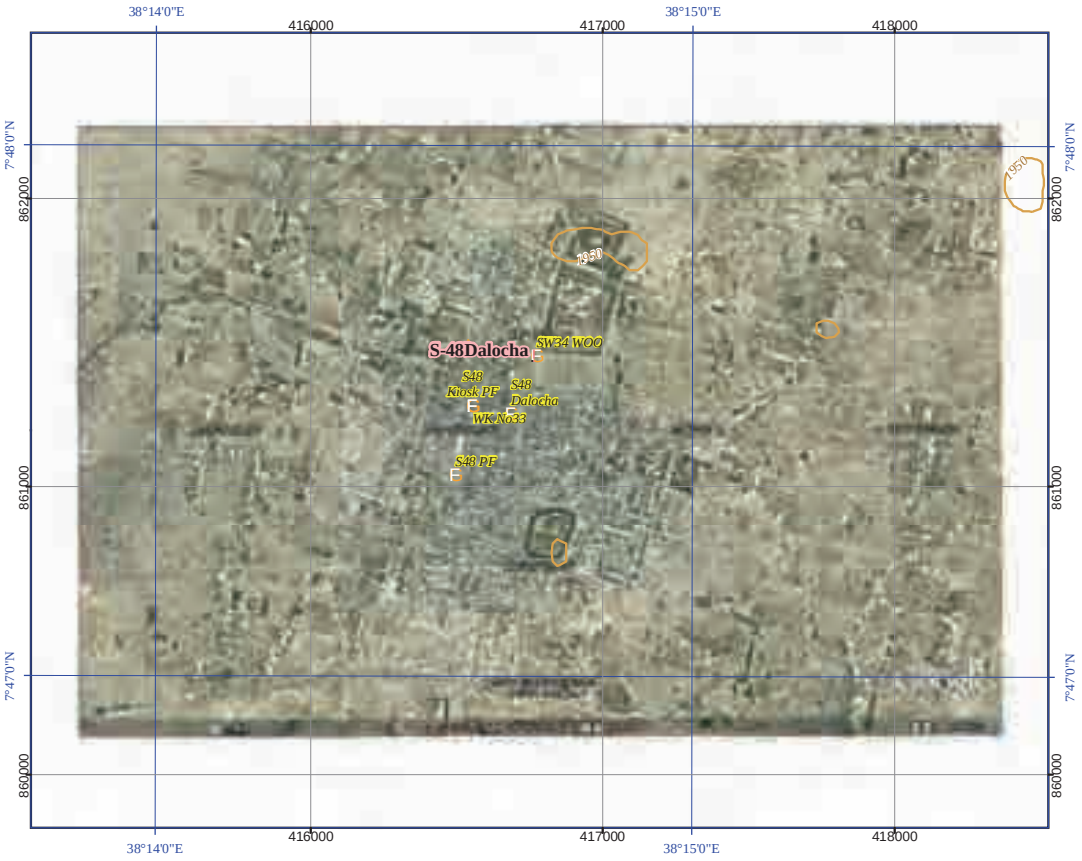
Memo (Town sketch …etc.) :

05-15 Distribution Type	
GIP ND=2*1/2" 1,000m	GIP NG=1*1/2" 3,000m
GIP ND=2" 2,000m	Total 6,000m

05-24 Type of Business Connection (BC)
Gov. office * 11, School * 3, Church * 8, Health center * 1, Health post * 4, Hotel & Others * 31 Total 58

データ 7.3　南部諸民族州の小都市プロファイル

S-48 Dalocha



データ 7.3　南部諸民族州の小都市プロファイル

S-49 Alem Gebeya

	SNNPR					40 / 52	
	Name of small town	**:**		**Alem Gebeya**		**S- 49**	
	Name of Woreda	**:**		**Sankura**		**SW- 35**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,018	1,638	3,656
	Woreda	male / female / total	by Census 2007		42,459	42,248	84,707
	percentage of Town in Woreda						4.3%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		409074	836119	1,718
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL=168m, 6*5/8", GL-??m, ??L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump (15kw)		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00-10:00, 17:00-19:00 (6hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2003		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Alem Gebeya town water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2*1/2"*1,000m, 2"*300m (Total 1,200m)		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		2nos.		
	05-12 Water reserver Capacity		m3		8m3*2nos.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		PVC, 3", 900m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Monsonry		
	05-18 Number of water point (Public Faucet, PF)		no.		5		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		1.4m3/day		
	05-21 Number of House Connection (HC)				109		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.94m3/day		
	05-23 Number of Business Conection (BC)				7		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		Gov., School, Mosque, Church		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		1.36m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water commitie		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				6		
	06-06 Principal works of financial staff				Water meter read, Bill, Water sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point, House connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.2birr/20L		
	House connection		Birr/m3		5.0birr/m3		
	Business connection		Birr/m3		Free		
	06-09 Average monthly income by water tariff		Birr/month		23,740birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda, Zone, Region		
	06-13 Principal serious repair with 5-10 years				Not grasped		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		SNNPR, Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-49 Alem Gebeya

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not grasped		
	Shortage of budget to execute operation & maintenace		Not grasped		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc	Increase villagers, school, Gov.office		
	Change in industry	increase factory, Trading …etc	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			163%	!
	(1.4m3*5PF+0.94m3*109HC+1.36m3*7BC)=118.98m3/day 118.98m3/20Lpcd.= 5,949persons 5,949persons / 3,656 population = 163%				
	Current Water Coverage (%) (by data of water source product))			?? %	
	((??L)*3600sec.*8hrs)=???L/day ???/20Lcd=???persos ???persons/3656population=???%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	Under construction of road	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 46km from Hosaina. (=18+28km) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			9	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources. The existing pipe lines are necessary to repair and maintenance, however, water source and water reservoir tank can be use continiusly.				
16	Other Donors, NGO's				
	EU&Christian Aid				
17	Main Ethnic Group		Silte, Amhara		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Health post		
	-2 Nearest other facilities from Town	km	76		
	-3 Main patients of water born diseases	persons / year	Mararia	4,888	
			Typhoid	150	
			Diarrhea	40	
			Dysentery	10	
19	Main economic activities		Trade, Farming		
20	Particular comments :				
21	Remarks :				
		Mr. Sefedin Kedir Woreda water office head, Mob.0913743051			
		Mr. Ashenafi Shegadi Electromicanic Mob. 0910063745			
		Mr. Alemayehu Gettu woreda water office Expert Mob. 0916268925			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-49 Alem Gebeya

データ 7.3　南部諸民族州の小都市プロファイル

S-51 Mazoria

	SNNPR					40 / 52	
	Name of small town	**:**		**Mazoria**		**S- 51**	
	Name of Woreda	**:**		**Sankura**		**SW- 35**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		1,294	1,436	2,730
	Woreda	male / female / total	by Census 2007		42,459	42,248	84,707
	percentage of Town in Woreda						3.2%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		403911	823298	1,829
03	Town Status				Kebere Association		
04	Water Source						
	04-01 Water source		Type, No.		Well *1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-130m, 6*5/8", GK-??m, 2.5L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Commercial elec.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		08:00-08:26, 15:00-15:26 (52min./day)		!
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2010		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Redina water supply project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2", 700m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		4m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 2", 1,806m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		4 (2 function)		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		3.8m3/day		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Mazoria watger supply system		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				2		
	06-06 Principal works of financial staff				Wate sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.3birr/20L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		3,250birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Addis Ababa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipefittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Donors		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

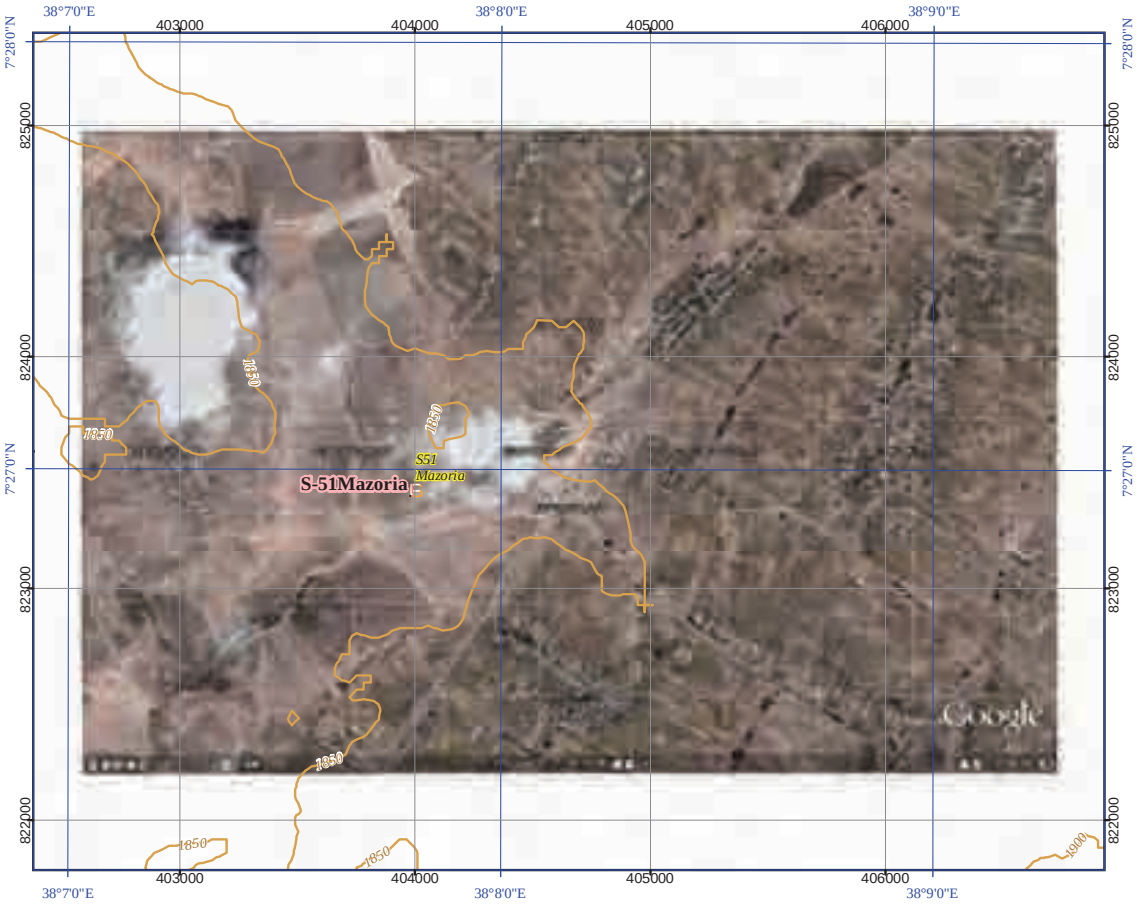
S-51 Mazoria

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Water shortage		
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (Tank capacity)		
	07-02 Finalcial				
	Management				
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		low		
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the flat area.				
09	Necessary Institution (Facility, Material)				
	Duration of pump operation may be extended to 8 hours.				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			14%	
	(3.8m3*2PF+0m3*0HC+0m3*0BC)=7.60m3/day 7.60m3/20Lpcd.= 380persons 380persons / 2,730 population = 14%				
	Current Water Coverage (%) (by data of water source product))			132%	!
	((2.5L)*3600sec.*8hrs)=72000L/day 72000/20Lcd=3600persos 3600persons/2730population=131%				
11	Water Potential (A / B / C / D / E)			A	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access is Asphalt & Sub grade road from Hosaina. (=28+20km) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			6	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, however, construction works is required some ingenuities arround water sources.				
16	Other Donors, NGO's				
	EU&Christian Aid				
17	Main Ethnic Group		Silte		
18	Health conditions				
	-1 Medical facilities in Town		Health post		
	-2 Nearest other facilities from Town	km	70		
	-3 Main patients of water born diseases	persons / year	Mararia	1,000	
			Diarrhea	900	
			Dysentery	400	
			Typhoid	314	
19	Main economic activities		Trade, Farming, Livestock		
20	Particular comments :				
	Current operation time is less than 1 hour.				
21	Remarks :				
		Mr. Bilcha Bargicho Resedant Mob. 0916122069			
		Mr. Mohammed Haji Kemal Water committee chair man Mob. 0920988591			
		Mr. Lalamo Yasin operator 0910191134			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-51 Mazoria



データ 7.3　南部諸民族州の小都市プロファイル

S-52 Bilbareg

	SNNPR					41 / 52	
	Name of small town	**:**	**Bilbareg (Wilbareg)**			**S- 52**	
	Name of Woreda	**:**	**Wilbareg**			**SW- 36**	
	Name of Zone	**:**	**Silte**			**SZ- 08**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	1,146	1,051	2,197	
	Woreda	male / female / total	by Census 2007	38,282	41,689	79,971	
	percentage of Town in Woreda					2.7%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	403219	855693	2,004	
03	Town Status			Woreda Capital			
04	Water Source						
	04-01 Water source		Type, No.	Well*1no.			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	GL-92m, 6:5/8", GL-26m, 1.2L/sec.			
	04-03 Method of water draw		Pump, Gravity	Pump			
	04-04 Pump Spec.		Type, Yield	Mono-lift-Pump			
	04-05 Power source for motorized pump		Type, Kva	Single sylinder Diesel Engine			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	08:00~10:00, 13:30~15:30, 17:00~19:00 (6hrs./day)			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1983			
	05-02 Financial of implementation		Donor's name	Kale Hiwot Chrch			
	05-03 Name of implementation (Project name)			Wirbaleg Town Water Supply Project			
	05-04 Intake Type			Well			
	05-05 Intake No.			1 no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, ??", 220m			
	05-07 Power to convey		Pressure, Gravity	Pressure			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER, Steel Tank			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	8.0m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 2"*30m, 1*1/2"*200m			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	2 nos. (1/2 is not functioned)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	6			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	4m3/day			
	05-21 Number of House Connection (HC)			15			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	2.0m3/day			
	05-23 Number of Business Conection (BC)			1			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	Gov. (Woreda Office)			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	0.1m3/day			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water committee			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organiz			
	06-03 Number of thechnical staff			1			
	06-04 Principal works of technical staff			Pump operation, Water m			
	06-05 Number of the financial staff			1			
	06-06 Principal works of financial staff			Bill			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. Point, House connecti			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.15birr/20L			
	House connection		Birr/m3	4.50birr/m3			
	Business connection		Birr/m3	ditto			
	06-09 Average monthly income by water tariff		Birr/month	3,000birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.				
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Town, Woreda, Zone			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	Parts of Mono-lift-pump			
	06-13 Principal serious repair with 5-10 years			Woreda, Zone, Region			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Engine broken			
	06-15 Other technical specimen			Municipality			

データ 7.3　南部諸民族州の小都市プロファイル

S-52 Bilbareg

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Watger shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure (Pipe lines)	
	07-02 Finalcial			
	Management			
	Rate of water tarrif collection		Shortage of staff	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage of budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	Increse town population	
	Change in industry	increase factory, Trading …etc.	Not grasp	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	South of mountain range slopping flat land			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			78%
	(4m3*1PF+2m3*15HC+0.1m3*1BC)=34.1m3/day 34.1m3/20Lpcd.= 1,705persons 1,705persons / 2,197 population = 78%			
	Current Water Coverage (%) (by data of water source product))			79%
	((1.2L)*3600sec.*8hrs)=34560L/day 345600/20Lcd=1728persos 1728persons/2197population=79%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / C
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is asphalt paved 53km from Butajira. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			9
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities.			
16	Other Donors, NGO's			
	EU&Christian Aid "Wulbareg and Snakura Waredas Water Supply, Health and Environmental Development Project"			
	Jan 2008 ~ Dec. 2010			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	65	
	-3 Main patients of water born diseases	persons / year	Mararia	4,269
			Typhoid	3,396
			Dysentery	3,244
			Diarrhea	2,986
			Dysentery	3,931
19	Main economic activities		Trade, Farming, Waving	
20	Particular comments :			
21	Remarks :	Yekesi Said Water committee Chaiman	Mobile:- 0916345746	
		Mubarik Nasir Woreda water off. Mechnic	Mobile:- 0910812409	
		Shemsu Sultan Minning expert	Mobile :- 0916839084	

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-52 Bilbareg

データ 7.3　南部諸民族州の小都市プロファイル

S-53 H. Gebeya

	SNNPR					42 / 52	
	Name of small town	**:**		**Hamus Gabeya (Bamo)**		**S- 53**	
	Name of Woreda	**:**		**Meskan**		**SW- 02**	
	Name of Zone	**:**		**Gurage**		**SZ- 01**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,088	2,064	4,152
	Woreda	male / female / total	by Census 2007		78,393	81,491	159,884
	percentage of Town in Woreda						2.6%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		444381	898358	1,839
03	Town Status				Kebele Association		
04	Water Source						
	04-01 Water source		Type, No.		BH Well * 3nos.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasped		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Hand pump		
	04-05 Power source for motorized pump		Type, Kva		Manual		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:30-09:00, 11:00-14:00, 16:00-18:00 (7.5hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2001		
	05-02 Financial of implementation		Donor's name		Kale Hiowt Catholic church		
	05-03 Name of implementation (Project name)				Hamus-Gebeya water project		
	05-04 Intake Type				Shallow well		
	05-05 Intake No.				3nos.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		nil.		
	05-07 Power to convey		Pressure, Gravity		nil.		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		nil.		
	05-11 Water reserver No.		no.		nil.		
	05-12 Water reserver Capacity		m3		nil.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		nil.		
	05-16 Power to distribute		Pressure, Gravity		nil.		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		nil.		
	05-18 Number of water point (Public Faucet, PF)		no.		3nos. (Hand Pumps)		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.				
	05-20 Average of daily water consumption at a water point (PF)		m3/day		6m3. (Hand Pump)		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water committee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organizartion		
	06-03 Number of thechnical staff				nil		
	06-04 Principal works of technical staff				nil		
	06-05 Number of the financial staff				nil		
	06-06 Principal works of financial staff				nil		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point (Hand pump)		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		12birr/year/household		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		230birr/month (2,760birr/year)		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Butajira		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Parts of Hand pump		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				Pump broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

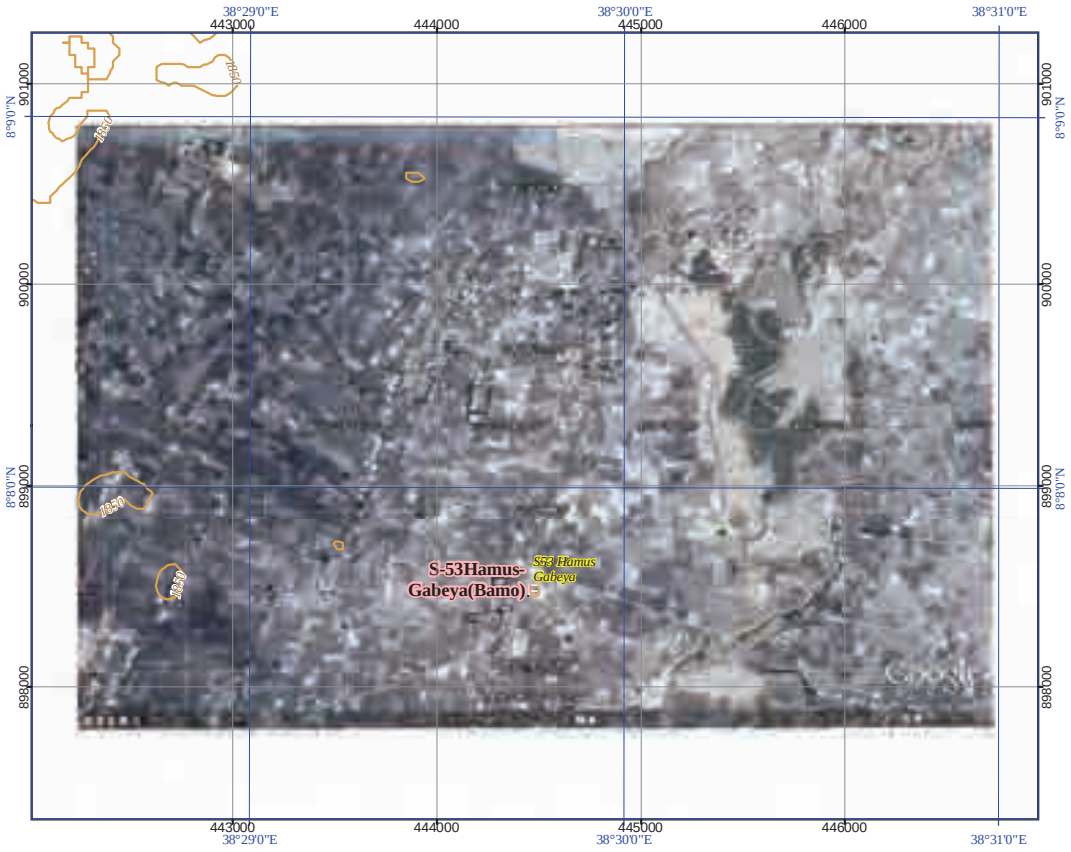
S-53 H. Gebeya

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shortage water		
	Water supply facility	Decrepit, leakage, design failure …etc.	no network		
	07-02 Finalcial				
	Management		Not organized staff		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		Not grasped		
	Shortage of budget to execute operation & maintenace		Not grasped		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	nil.		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc	nil.		
	07-04 Other specimen				
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			22%	
	(6m3*3PF+0m3*0HC+0m3*0BC)=18m3/day 18m3/20Lpcd.=900persons 900persons/4,152population=22%				
	Current Water Coverage (%) (by data of water source product))			?? %	
	((??L)*3600sec.*8hrs)=??L/day ??/20Lcd=??persos ??persons/4152population=??%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade 18km from Butajira. (=13+5 from Burajira)				
13	Manpower Capability of Water Supply Management by Water Office (point)			5	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Meskan Gurage, Merego		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Health post		
	-2 Nearest other facilities from Town	km	15		
	-3 Main patients of water born diseases	persons / year	Mararia	1,500	
			Diarrhea	500	
			Dysentery	200	
			Typhoid	100	
			others	200	
19	Main economic activities		Farming, Trade		
20	Particular comments :				
21	Remarks :				
		Mr. Tigist Mengistu Dev`t Agent	0916-691-513		
		Mr. Sebrala Ahemed Chair person			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-53 H. Gebeya



データ 7.3　南部諸民族州の小都市プロファイル

S-54 Hirkofofo

	SNNPR					43 / 52	
	Name of small town	**:**		**Hirkofofo**		**S- 54**	
	Name of Woreda	**:**		**Shashago**		**SW- 05**	
	Name of Zone	**:**		**Hadiya**		**SZ- 02**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		1,334	1,256	2,590
	Woreda	male / female / total	by Census 2007		51,777	50,687	102,464
	percentage of Town in Woreda						2.5%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		384570	820680	1,896
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Well * 1no. (shallow well)		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasped		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Hand Pump		
	04-05 Power source for motorized pump		Type, Kva		Manual		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00-13:00, 15:00-18:00 (10hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2008		
	05-02 Financial of implementation		Donor's name		UNICEF		
	05-03 Name of implementation (Project name)				Hirko water project		
	05-04 Intake Type				Well (Shallow well)		
	05-05 Intake No.				1no. (Hand pump)		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		nil.		
	05-07 Power to convey		Pressure, Gravity		nil.		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		nil.		
	05-11 Water reserver No.		no.		nil.		
	05-12 Water reserver Capacity		m3		nil.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		nil.		
	05-16 Power to distribute		Pressure, Gravity		nil.		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		nil.		
	05-18 Number of water point (Public Faucet, PF)		no.		nil.		
	05-19 Number of faucet at a water point (Public Faucet, PF		no.		nil.		
	05-20 Average of daily water consumption at a water point		m3/day		nil.		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Hirko water system		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				nil.		
	06-06 Principal works of financial staff				nil.		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point (Hand pump)		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		1.0birr/month /household		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		300birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Woreda		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Hand pump parts (Seal, o-ring)		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

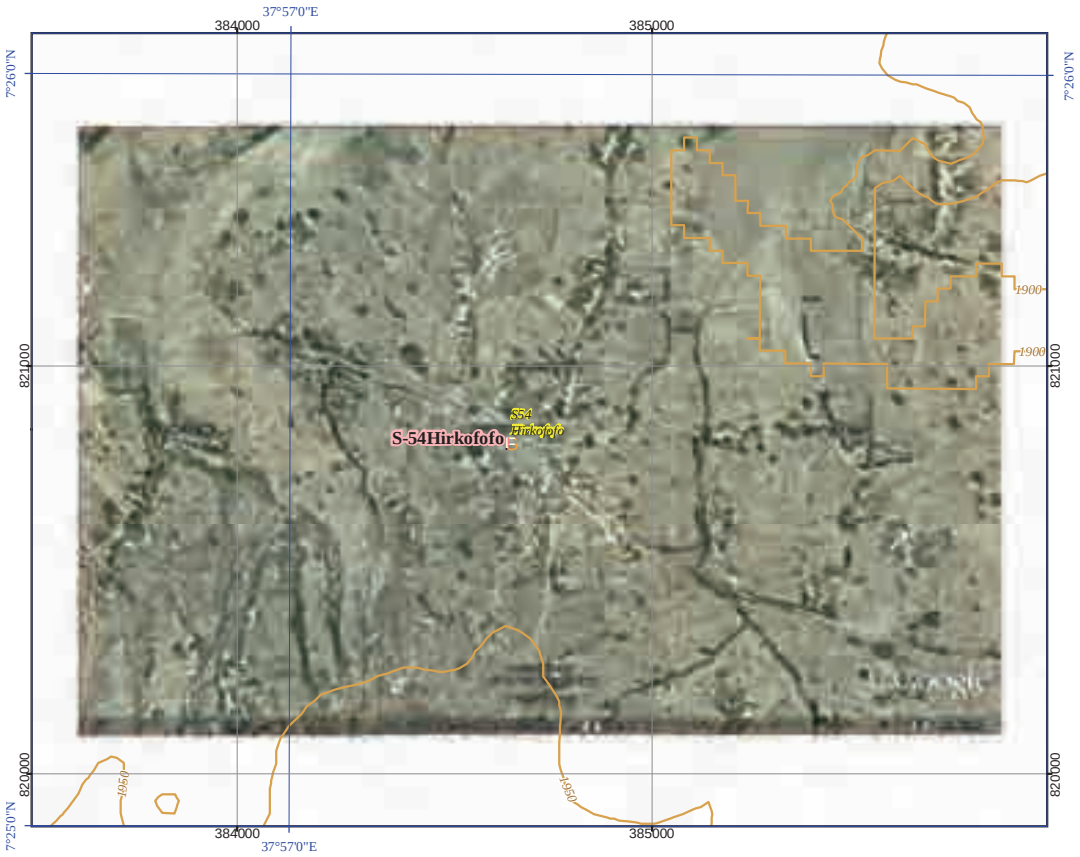
S-54 Hirkofofo

07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.	Shortage water		
	Water supply facility	Decrepit, leakage, design failure …etc.	Design failure		
	07-02 Finalcial				
	Management		Not grasped		
	Rate of water tarrif collection		Not grasped		
	Personnel expenses		low		
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M		
	07-03 Other incidental, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	coming from villagers		
	Change in industry	increase factory, Trading …etc.	nil.		
	Human conflict	Ethnic, Administrative …etc.	nil.		
	07-04 Other specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town is on the flat area				
09	Necessary Institution (Facility, Material)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			12%	
	(6m3*1PF+0m3*0HC+0m3*0BC)=6m3/day 6m3/20Lpcd.=300persons 300persons/2,590population=12%				
	Current Water Coverage (%) (by water product at wells and/or springs)			?? %	
	(?L.sec.*3600sec.*24hrs)=??L/day ??/20Lcd=??persos ??persons/2590population=??%				
11	Water Potential (A / B / C / D / E)			B	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			D / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is Sub grade road (only dry season) 22km from Hosaina through S07 Lisana				
13	Manpower Capability of Water Supply Management by Water Office (point)			4	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.				
16	Other Donors, NGO's				
17	Main Ethnic Group		Hadiya		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km	81		
	-3 Main patients of water born diseases	persons / year	Mararia	1,976	
			Dysentery	1,700	
			Diarrhea	1,450	
			Typhoid	600	
			others	1,200	
19	Main economic activities		Trade, Farming, Livestock		
20	Particular comments :				
	This small town is a priority of improvement of accessibilityfor operation & maintenance.				
21	Remarks :				
	Access from Hosaina is unpaved road. (Maddy during rainy season)				
	Ato Abdulkadir Mohamed Woreda water supply process owner Mob. 0916731236				

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-54 Hirkofofo



データ 7.3　南部諸民族州の小都市プロファイル

S-55 Meyita Mazoria

	SNNPR					44 / 52	
	Name of small town	**:**		**Weyira Mazoria**		**S- 55**	
	Name of Woreda	**:**		**Misrak Badawocho**		**SW- 06**	
	Name of Zone	**:**		**Hadiya**		**SZ- 02**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		4,215	4,131	8,346
	Woreda	male / female / total	by Census 2007		72,354	72,833	145,187
	percentage of Town in Woreda						5.7%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		384678	793963	2,028
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Well * 1		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		see below memo		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorizes pump		
	04-05 Power source for motorized pump		Type, Kva		Generator 35kva (broken)		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		not functioned since 2005		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen				nil.		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1983		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation (Project name)				Weriya Mazoria Water Supply Project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP 2" L=600m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		ER		
	05-11 Water reserver No.		no.		1 no.		
	05-12 Water reserver Capacity		m3		4m3.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		-		
	05-14 Power to transmit		Pressure, Gravity		-		
	05-15 Distribution Type		Pipe material, length		GIP / 2"~3/4" / L=1,000m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mosonry		
	05-18 Number of water point (Public Faucet, PF)		no.		1		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		not functioned		
	05-21 Number of House Connection (HC)				36		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		not functioned		
	05-23 Number of Business Conection (BC)				2		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		School*1 / Chrch *1		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		not functioned		
	05-26 Other technical specimen				nil.		
06	Operation and Maintenace						
	06-01 Organization's name				Town water supply office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Town		
	06-03 Number of thechnical staff				(1)		
	06-04 Principal works of technical staff				(Pump operation)		
	06-05 Number of the financial staff				(4)		
	06-06 Principal works of financial staff				(Water meter count, Bill …etc.)		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House Connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		(0.2birr/20L)		
	House connection		Birr/m3		(8.0birr/m3)		
	Business connection		Birr/m3		(8.0birr/m3)		
	06-09 Average monthly income by water tariff		Birr/month		1,460 (17,520birr/year)		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sheshemane, Sodo, Awas,		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Filter for GE, Water Meter, Pipe fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Regional office		
	06-13 Principal serious repair with 5-10 years				Generaor broken		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Local Investingation Grant (by Gov.)		
	06-15 Other technical specimen				Lack of degin		

データ 7.3　南部諸民族州の小都市プロファイル

S-55 Meyita Mazoria

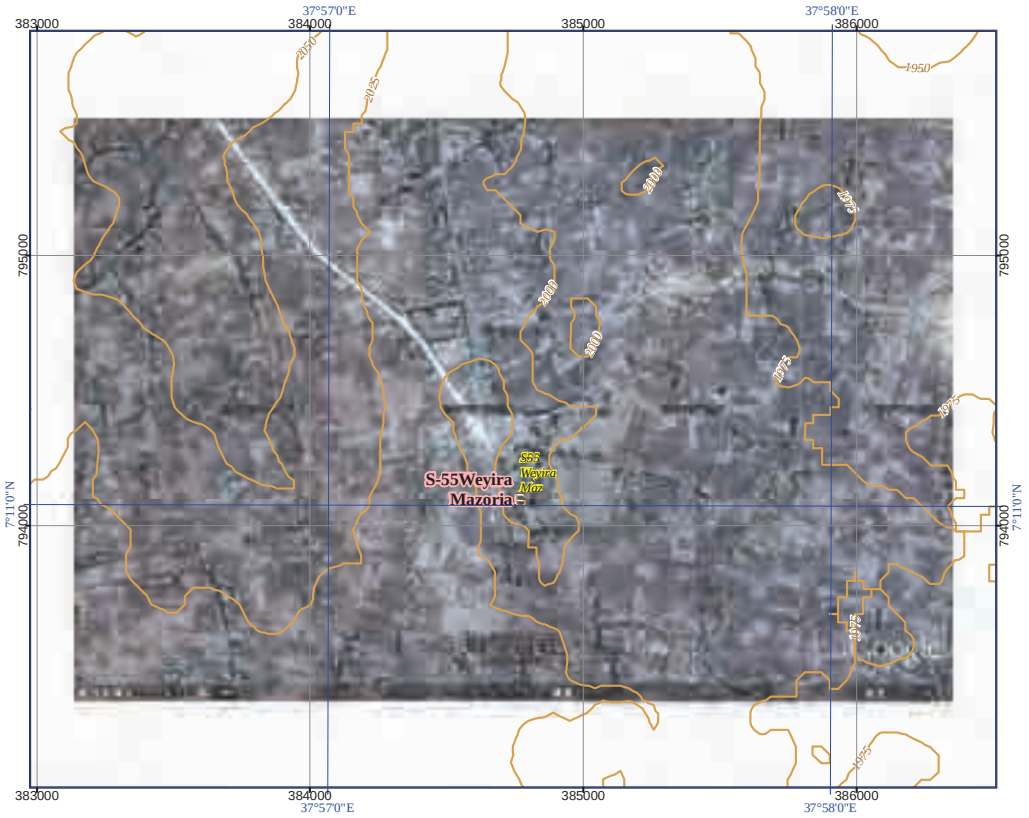
07	Problem of actual town water supply			
	07-01 Technical		Not functioned whole sys	
	Water source	Quantity, Quality …etc.	No response	
	Water supply facility	Decrepit, leakage, design failure …etc	Generator was broken	
	07-02 Finalcial			
	Management		Not functioned whole sys	
	Rate of water tarrif collection		No response	
	Personnel expenses		No response	
	Shortage of budget to execute operation & maintenace		No income	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	No response	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		No response	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town : Flat area along asphalt road			
09	Necessary Institution (Facility, Material)			
	Generator repair and/or connection commercial elec. Line for power source of Motorized pump			
	Adopt new Elevated reservoir			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			0 %
	Current Water Coverage (%) (by data of water source product))			39%
	((2.25L)*3600sec.*8hrs)=64800L/day 64800/20Lcd=3240persos 3240persons/8346population=39%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			A / B
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road from Sodo & Sheshemane is asphalt paved. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			12
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Hadiya	
18	Health conditions			
	-1 Medical facilities in Town		Health post	
	-2 Nearest other facilities from Town	km	55	
	-3 Main patients of water born diseases	persons / year	Diarrhea	2,058
			Malaria	503
			Typhoid	482
			Dysentery	192
			others	79
19	Main economic activities		Farming	
20	Particular comments :			
	The eixisting water supply facility has not been operated sonce 2005 due to decrepit of this facility. Therefore, water supply condition for the residents is serious.			
21	Remarks :			

Memo (Town sketch …etc.) :

04-02 Well spec.	
Well No.1; Established on 1983 / Depth GL-236m / casing dia. 8"/ SWL GL-??m /2.0~2.5L/sec.	

データ 7.3　南部諸民族州の小都市プロファイル

S-55 Meyita Mazoria



データ 7.3　南部諸民族州の小都市プロファイル

S-56 Biloya

	SNNPR					45 / 52	
	Name of small town	**:**		**Biloya**		**S- 56**	
	Name of Woreda	**:**		**Kochore**		**SW- 20**	
	Name of Zone	**:**		**Gedeo**		**SZ- 05**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,194	2,290	4,484
	Woreda	male / female / total	by Census 2007		65,235	66,183	131,418
	percentage of Town in Woreda						3.4%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		405405	669769	1,965
03	Town Status				Town Administration		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Not grasp		
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		06:00~09:00, 15:00~17:00 (5hrs/day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1991		
	05-02 Financial of implementation		Donor's name		Gedo Development Association (GDA)		
	05-03 Name of implementation (Project name)				Biloya Water Supply Project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 1*1/2", 500m		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		1m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		Not grasped		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Monsonry		
	05-18 Number of water point (Public Faucet, PF)		no.		2		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2m3/day		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water committee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				3		
	06-06 Principal works of financial staff				Water sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		15birr/year/household		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		300birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Yirga Chafe		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipe&Fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

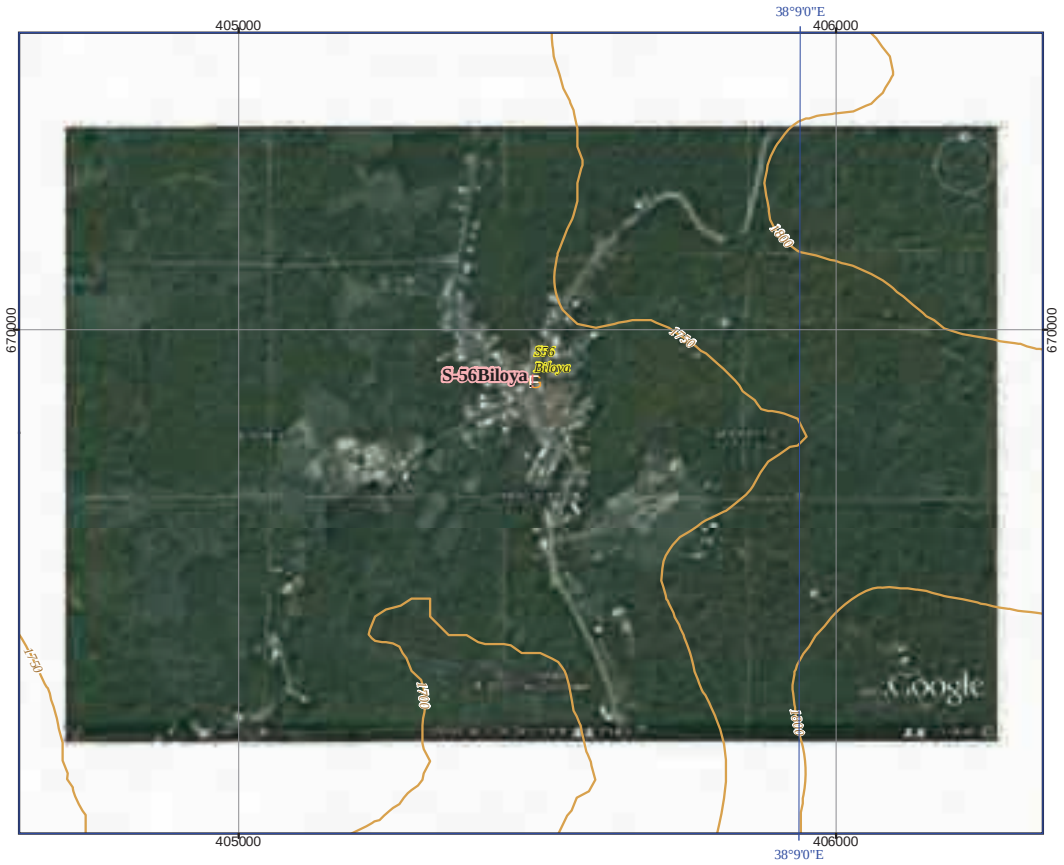
S-56 Biloya

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shrtage water source	
	Water supply facility	Decrepit, leakage, design failure …etc	Leakage from pipe lines	
	07-02 Finalcial			
	Management		Lack of skilled manpower	
	Rate of water tarrif collection		Not grasp	
	Personnel expenses		Not grasp	
	Shortage of budget to execute operation & maintenace		Not grasp	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	nil.	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Slope of mountatin			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			4%
	(2.0m3*2PF+0m3*0HC+0m3*0BC)=4.0m3/day 4.0m3/20Lpcd.= 200persons 200persons / 4,484 population = 4%			
	Current Water Coverage (%) (by data of water source product))			?? %
	((??L)*3600sec.*24hrs)=??L/day ??/20Lcd=??persos ??persons/4484population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		C / C
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Asphalt & Sub grade (Maddy in wet season) 53km from Dila. (45+8km from Dila)			
13	Manpower Capability of Water Supply Management by Water Office (point)			8
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Gedeo	
18	Health conditions			
	-1 Medical facilities in Town		Health post	
	-2 Nearest other facilities from Town	km	54	
	-3 Main patients of water born diseases	persons / year	Mararia	100
			Diarrhea	80
			Cholera	75
			Diarrhea	60
			Typhoid	55
19	Main economic activities		Farming, Trade	
20	Particular comments :			
	The existing water supply facility was constructed by NGOon 1991. This facility has 1 spring as water source which is not staible by seasonal water product. Hence, this facility can not supply enougth amount of water.			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-56 Biloya



データ 7.3　南部諸民族州の小都市プロファイル

S-57 Chorso Mazoria

	SNNPR					46 / 52	
	Name of small town	**:**		**Chorso Mazoria**		**S- 57**	
	Name of Woreda	**:**		**Gedeb**		**SW- 21**	
	Name of Zone	**:**		**Gedeo**		**SZ- 05**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR			8,500	
	Woreda	male / female / total	by Census 2007	73,480	73,252	146,732	
	percentage of Town in Woreda					5.8%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	418355	665767	2,445	
03	Town Status			Municipality			
04	Water Source						
	04-01 Water source		Type, No.	Well*3nos, Spring*1no. (0.5L/sec or less)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L	see below memo			
	04-03 Methor of water draw		Pump, Gravity	Manual, Graviry (Spring On-spot)			
	04-04 Pump Spec.		Type, Yield	Hand pump			
	04-05 Power source		Type, Kva	nil.			
	04-06 Durartion of water draw		daily hours, time	see below memo			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen			nil.			
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1998 / 2005			
	05-02 Financial of implementation		Donor's name	IRC			
	05-03 Name of implementation			Choriso Mazoria water project			
	05-04 Intake Type			Well, Spring			
	05-05 Intake No.			Well*3 nos., Spring*1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	PVC 10m for On-spot			
	05-07 Power to convey		Pressure, Gravity	Gravity for On-spot			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry of On-spot			
	05-18 Number of water point (Public Faucet, PF)		no.	1 (Hand pump) , 1 (On-spot)			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	1 (Hand pump) , 2 (On-spot)			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	1.6m3/day (Hand Pump), 43m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen			nil.			
06	Operation and Maintenace						
	06-01 Organization's name			Water commitie			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Committee			
	06-03 Number of thechnical staff			4			
	06-04 Principal works of technical staff			Repair			
	06-05 Number of the financial staff			1			
	06-06 Principal works of financial staff			Cash correction			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W.Point (Hand pump)			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	0.1birr/20L + 6.0 birr/year/household			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	100birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Dila			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Piston, Coupling of Hand pumps			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	No answer			
	06-13 Principal serious repair with 5-10 years			No answer			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Woreda, Zone			
	06-15 Other technical specimen			nil.			

データ 7.3　南部諸民族州の小都市プロファイル

S-57 Chorso Mazoria

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	No answer	
	Water supply facility	Decrepit, leakage, design failure …etc.	Lack of skilled manpower and repair tools	
	07-02 Finalcial			
	Management		No answer	
	Rate of water tarrif collection		No answer	
	Personnel expenses		No answer	
	Shortage of budget to execute operation & maintenace		No answer	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	No answer	
	Change in industry	increase factory, Trading …etc.	No answer	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other technical specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is top of ridge gently.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		26%	
	(1.6m3*1HP+43.0m3*1SP)=44.6m3/day 44.6m3/20Lpcd.= 2230 persons 2230 persons / 8500 population = 8%			
	Current Water Coverage (%) (by data of water source product))		%	
11	Water Potential (A / B / C / D / E)		C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / C	
	Town along the Asphalt road A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt road 59km from Dila. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)		9	
	Staff of water committee does not grasp datail of Hand pumps (Manufacturer, type …etc.)			
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the gentle slope, construction work is not difficult.			
16	Other Donors, NGO's			
17	Main Ethnic Group		Gedeo, Oromo	
18	Health conditions			
	-1 Medical facilities in Town		Health post	
	-2 Nearest other facilities from Town	km	63	
	-3 Main patients of water born diseases	persons / year	Dysentery	200
			Typhoid	150
			Diarrhea	127
19	Main economic activities		Farming, Trade, Waving, Livestock	
20	Particular comments :			
	The eixisting water supply facility has three Hand-pumps (2of them are out of order) and 1 spring source (On-spot). Hence, this facility can not supply enougth amount of water for the residents. New water supply faicility have a high beneficial effect.			
21	Remarks :			

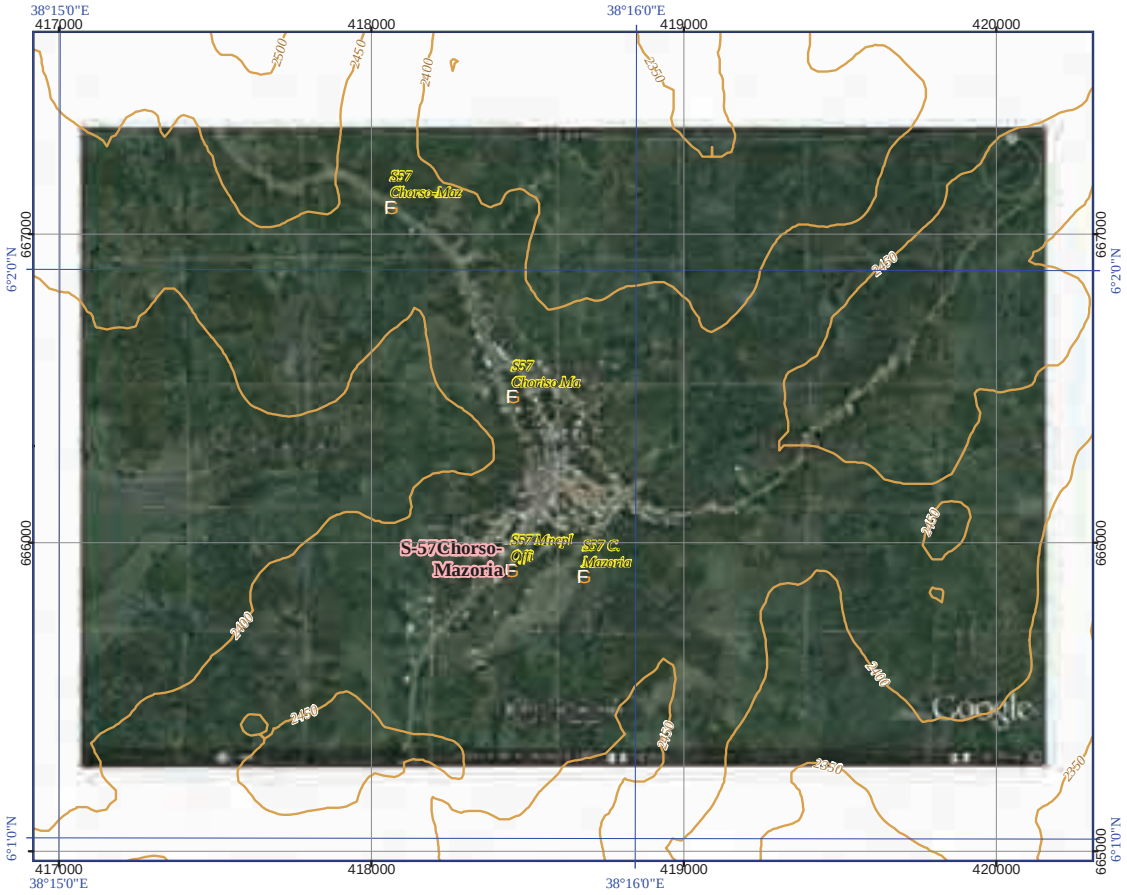
Memo (Town sketch …etc.) :

04-02 Well spec.		
Well No.1; Estbsh on 1998	GL-51m / Casing dia.4" / SWL GL-??m / ??L/sec.	
Well No.2; Estbsh on 1998	GL-??m / Casing dia.4" / SWL GL-??m / ??L/sec.	Not Function
Well No.3; Estbsh on 2005	GL-??m / Casing dia.4" / SWL GL-??m / ??L/sec.	Not Function

04-06 Durartion of water draw	
Hand pump 07:00~09:00, 17:00~18:00 (3hrs/day)	On-Spot 07:00~18:00 (11hrs/day)

データ 7.3　南部諸民族州の小都市プロファイル

S-57 Chorso Mazoria



データ 7.3　南部諸民族州の小都市プロファイル

S-58 Shento

	SNNPR					47 / 52	
	Name of small town	**:**		**Shento**		**S- 58**	
	Name of Woreda	**:**		**Damot Pulasa**		**SW- 37**	
	Name of Zone	**:**		**Wolayita**		**SZ- 06**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,759	2,586	5,345
	Woreda	male / female / total	by Census 2007		52,962	55,121	108,083
	percentage of Town in Woreda						4.9%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		373639	776639	1,966
03	Town Status				Woreda Capital		
04	Water Source						
	04-01 Water source		Type, No.		Hamd Pump * 4nos. / Onspot Dist. Pipe form Aboka Kebele		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		Hand Dug Well (ID600RC Ring) / ?		
	04-03 Method of water draw		Pump, Gravity		Manual / Pressure		
	04-04 Pump Spec.		Type, Yield		Hand pump (Afridev) / Motorized Well Pump		
	04-05 Power source for motorized pump		Type, Kva		nil. / Generator		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		HP 08:00~09:00 / Pipe line is not functioned		
	04-07 Water quality		Iron, Fluoride …etc.		Good / Good		
	04-08 Other technical specimen				above 04-06 time is limited because of HP Well's yield is little (800L/well)		
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1990 (HP) / 2001 (Pipe line)		
	05-02 Financial of implementation		Donor's name		NGO Oxfam (HP) / SNNPR (Pipe Line)		
	05-03 Name of implementation (Project name)				Shiento water project		
	05-04 Intake Type				Hand Dug Well (HP) / Deep Well (Pipe line)		
	05-05 Intake No.				4 (HP) / 1 at Abota Kebele		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		nil. / GIP, 2", 5,000m fm. Abota town		
	05-07 Power to convey		Pressure, Gravity		nil. / Pressure fm. Abota Kebele		
	05-08 Water treatment		Disinfection, Iron …etc.		nil. / nil.		
	05-09 Water treatment capacity		m3/day		nil. / nil.		
	05-10 Water reserver type		Type		nil. / ER (Steel)		
	05-11 Water reserver No.		no.		nil. / 1no.		
	05-12 Water reserver Capacity		m3		nil. / 4m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil. / nil.		
	05-14 Power to transmit		Pressure, Gravity		nil. / nil.		
	05-15 Distribution Type		Pipe material, length		nil. / On-Spot (below ER)		
	05-16 Power to distribute		Pressure, Gravity		nil. / Gravity (On-Spot)		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		nil. / Masonry		
	05-18 Number of water point (Public Faucet, PF)		no.		nil. / 1no. / 3 New PF under construction by SNNPR		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		nil. / 6nos. / 4nos. (new)		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		0.8m3/H.P / 12m3/day/On-spot (Not function)		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen				see below 16 Particular comments		
06	Operation and Maintenace						
	06-01 Organization's name				Woreda Water Office		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Woreda		
	06-03 Number of thechnical staff				6		
	06-04 Principal works of technical staff				Maintenance & Repair of Hand Pumps		
	06-05 Number of the financial staff				8		
	06-06 Principal works of financial staff				Administration		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point (Hand pump) / On-spot		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1 birr/20L H.P. / 0.5 birr/20L On-spot		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		480 ~600birr (H.P) / 6,300~9,000birr (On-spot)		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Sodo, A.Minch, Awasa		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Rising pipe (PVC), Lot for Hand Pumps		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zonal office		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Woreda Water Office		
	06-15 Other technical specimen				Woreda Water Office has been established 3 years ago.		

データ 7.3　南部諸民族州の小都市プロファイル

S-58 Shento

07	Problem of actual town water supply			
	07-01 Technical		Low skill of thechnical staff.	
	Water source	Quantity, Quality …etc.	Water shortage	
	Water supply facility	Decrepit, leakage, design failure …etc.	see below 16 Particular comments	
	07-02 Finalcial			
	Management		All Document and Records before establish Wareda Water Office which were lost.	
	Rate of water tarrif collection			
	Personnel expenses			
	Shortage of budget to execute operation & maintenace			
	07-03 Other incidental, Special specimen		No Transportation (Motor bike …etc.)	
	Increase in population to consume water	coming from other towns, villages …etc.	Coming from villages to correct water	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen		nil.	
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Shento town is on flat ground.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		13%	!
	(0.8m3*3HP+12m3*1PF)=14.4m3/day 14.4m3/20Lpcd.= 720 persons 720 persons / 5345population = 13%			
	Current Water Coverage (%) (by data of water source product))		??%	
	((??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos ???persons/5345population=??%			
11	Water Potential (A / B / C / D / E)		E	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		E / E	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Base course 16km from Sodo & 9km from Buditi.			
13	Manpower Capability of Water Supply Management by Water Office (point)		15	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Welayta	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Health post, Drug store	
	-2 Nearest other facilities from Town	km	28	
	-3 Main patients of water born diseases	persons / year	Mararia 600	
			Typhoid 350	
			Dysentery 150	
19	Main economic activities		Trade, Farming, Waving	
20	Particular comments :			
	Water supply of On-spot facilities which distrubuted fm Abota Kebele has been suspended due to Generator broken since Dec.2010.			
	New Public faucet (3nos.) are under construction by SNNPR, which PF to be distributed othe Kebele by pipe line.			!
21	Remarks :			
	Out of the study area. The eixisting water supply facility has four Hand-pumps (2of them are out of order) and one public faucet which is distributed by pipes from other town. Water amount of these Hand-pumps became low due to low down of gournd water level (1~2hours per day) and Spring facility (On-spot) is out of order. Hence, this facility can not supply enougth amount of water for the residents. New water supply faicility have a high beneficial effect.			

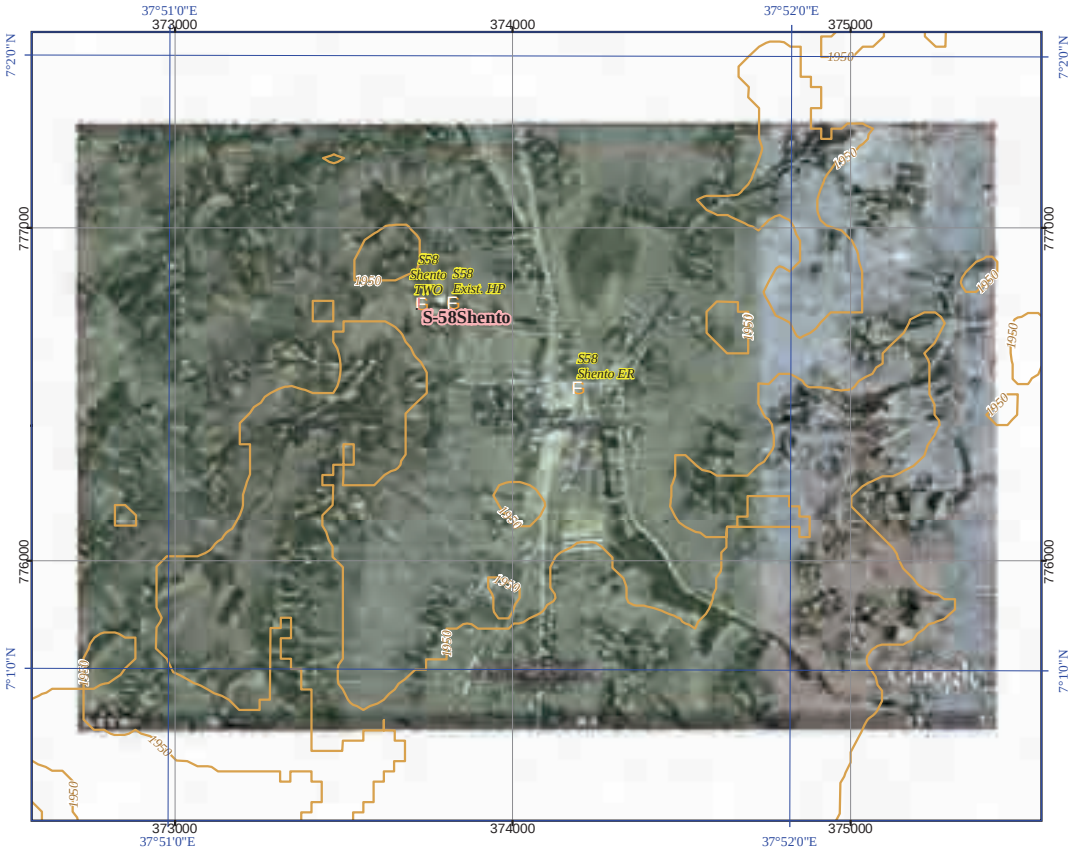
Memo (Town sketch …etc.) :

04-01 & 02 Water source & Well spec.	
Well No.1; Estbsh on 1990 GL-30m / Conc. Caisson ID=600mm H=1,000mm / SWL GL-??m / HP Silinder depth GL-29.6&29.0m	!
Well No.2; Estbsh on 1990 GL-30m / Conc. Caisson ID=600mm H=1,000mm / SWL GL-??m / HP Silinder depth GL-29.6&29.0m	!
Well No.3; Estbsh on 1990 GL-24m / Conc. Caisson ID=600mm H=1,000mm / SWL GL-??m / HP Silinder depth GL-23.6&23.0m	!
Well No.4; Estbsh on 1990 GL-21m / Conc. Caisson ID=600mm H=1,000mm / SWL GL-??m / HP Silinder depth GL-23.6&23.0m	!
Distribution pipe from Abota town ; Esblsh on 2010 Current condition is not functioned (out of order Generator for well pump)	

06-08 Water tariff rate	
Residence buy water (2.0birr/20L) from Water saler who are coming from Doditi town 12km.	

データ 7.3　南部諸民族州の小都市プロファイル

S-58 Shento



データ 7.3　南部諸民族州の小都市プロファイル

S-59 Dalbo Atowa

	SNNPR					48 / 52	
	Name of small town	**:**		**Dalbo Atowa**		**S- 59**	
	Name of Woreda	**:**		**Sodo Zuria**		**SW- 38**	
	Name of Zone	**:**		**Wolayita**		**SZ- 06**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR			4,772	
	Woreda	male / female / total	by Census 2007	80,525	83,246	163,771	
	percentage of Town in Woreda					2.9%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	370680	762721	2,144	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Spring*1no. (5km Tabala spring)			
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield	Not grasped			
	04-03 Method of water draw		Pump, Gravity	Gravity			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source for motorized pump		Type, Kva	nil.			
	04-06 Durartion of water draw (Operation hours)		daily hours, time	24hors.			
	04-07 Water quality		Iron, Fluoride …etc.	Good			
	04-08 Other technical specimen			Spring source is shared with other towns			!
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	1996			
	05-02 Financial of implementation		Donor's name	World Vision			
	05-03 Name of implementation (Project name)			Dalbo water supply project			
	05-04 Intake Type			Spring			
	05-05 Intake No.			1no.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	GIP, 3", 5,000m			
	05-07 Power to convey		Pressure, Gravity	Gravity			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	ER			
	05-11 Water reserver No.		no.	1no.			
	05-12 Water reserver Capacity		m3	10m3			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	GIP, 3"*1,000m, 1"*1/2*1,000m (Total 2,000m)			
	05-16 Power to distribute		Pressure, Gravity	Gravity			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	Mansonry			
	05-18 Number of water point (Public Faucet, PF)		no.	2			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	4FC*1PF, 2FC*1PF			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	3m3/day			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			Water commitie			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	Community based organization			
	06-03 Number of thechnical staff			2			
	06-04 Principal works of technical staff			Plumbing			
	06-05 Number of the financial staff			2			
	06-06 Principal works of financial staff			Water sale at PF			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	W. point			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	1birr/week/Household			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	1,200birr/month			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	Sodo			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	Pupes&fittings			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			Woreda			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	Water committee			
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

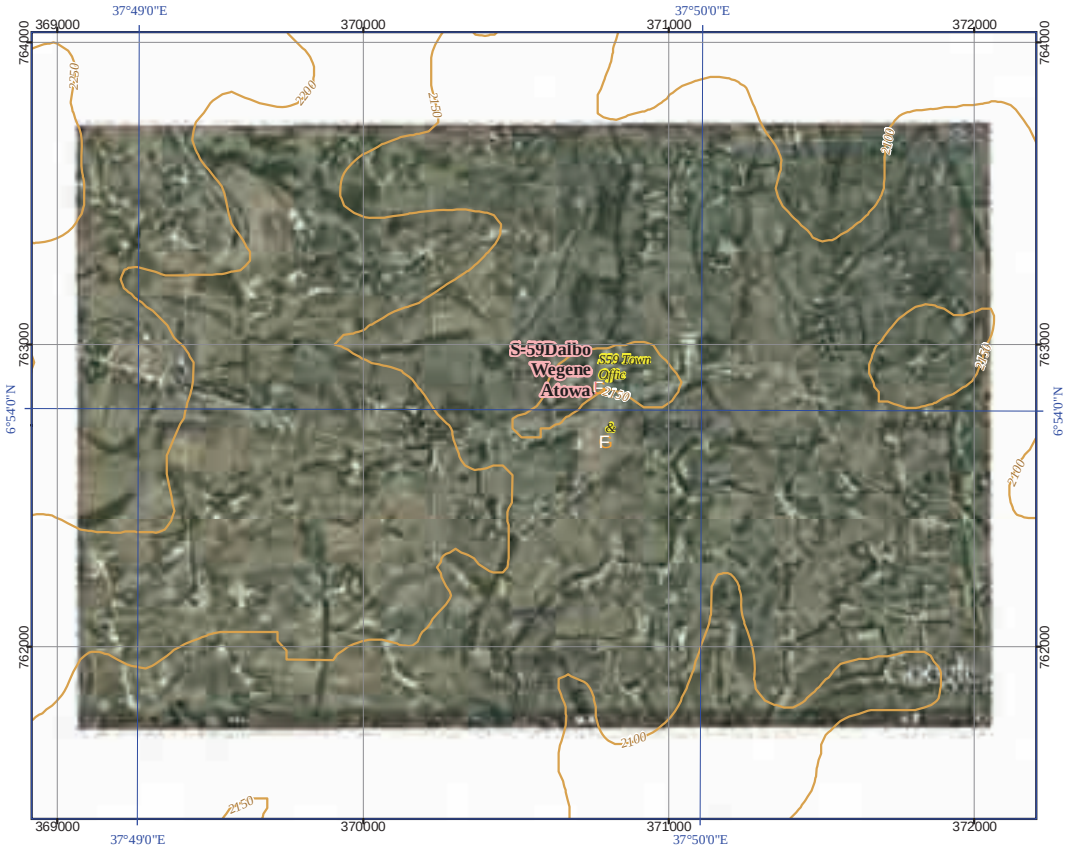
S-59 Dalbo Atowa

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Wate r shortage	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure	
	07-02 Finalcial			
	Management		Not grasped	
	Rate of water tarrif collection		low	
	Personnel expenses		low	
	Shortage of budget to execute operation & maintenace		Shortage budget for O&M	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	nil.	
	Change in industry	increase factory, Trading …etc	nil.	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on flat area			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)		6%	!
	(3m3*2PF+0m3*0HC+0m3*0BC)=6.0m3/day 6.0m3/20Lpcd.= 300persons 300persons / 4,772 population = 6%			
	Current Water Coverage (%) (by data of water source product))		0%	
	((??L)*3600sec.*8hrs)=???L/day ???/20Lcd=???persos ???persons/4772population=???%			
11	Water Potential (A / B / C / D / E)		A	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / A	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Asphalt & Sub grade road 9km from Sodo. (=7.5+1.5km from Sodo)			
13	Manpower Capability of Water Supply Management by Water Office (point)		10	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Refer to the Chapter 6			
17	Main Ethnic Group		Welayta, Amhara	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic, Health post	
	-2 Nearest other facilities from Town	km	13	
	-3 Main patients of water born diseases	persons / year	Dysentery 15	
19	Main economic activities		Trade, Farming, Livestock, Waving	
20	Particular comments :			
	The eixisting water supply facility is one spring (On-spot) where is located adjacent town and constructed by NGO on 1996. This facility can not supply enougth amount of water for whole residents due to lack of capacity and decrept. Hence, New water supply faicility have a high beneficial effect.			
21	Remarks :			
		Mr. Mesfin Belete Kebele Chairman Mob. 0910069888		
		Mr. Pawlos Gizaw Water committee Chairman 0911077805		
		Mr. Kebede Uchile Water committee casher 0916832893		

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-59 Dalbo Atowa



データ 7.3　南部諸民族州の小都市プロファイル

S-60 Lanite

	SNNPR					49 / 52	
	Name of small town	**:**		**Lanite**		**S- 60**	
	Name of Woreda	**:**		**Arba Minch Zuria**		**SW- 39**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		3,566	3,655	7,221
	Woreda	male / female / total	by Census 2007		82,751	82,929	165,680
	percentage of Town in Woreda						4.4%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		350026	678098	1,198
03	Town Status				Kebele Adiministration		
04	Water Source						
	04-01 Water source		Type, No.		Well*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L		GL-100m / 6" / SWL GL-?? m		
	04-03 Methor of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump (15kw)		
	04-05 Power source		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw		daily hours, time		07:00-12:00, 15:00-19:00 (9hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1998 / 2008		
	05-02 Financial of implementation		Donor's name		SNNPR		
	05-03 Name of implementation				Lanite water project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1 no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 3", 1,500m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		GR*1no.		
	05-12 Water reserver Capacity		m3		GR50m3*1no.		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		4,640m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		7 (+4 public shower)		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		4FC*3PF, 2FC*4PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		1.3m3/day		
	05-21 Number of House Connection (HC)				105		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		0.143m3/day		
	05-23 Number of Business Conection (BC)				10		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		School*3, Chrch*5, Health Ctr*2		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		0.51m3/day		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water comitee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community Based Organization		
	06-03 Number of thechnical staff				2		
	06-04 Principal works of technical staff				Pump operation, Plumbing		
	06-05 Number of the financial staff				8		
	06-06 Principal works of financial staff				Water mater read, Bill		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point, House, Buisiness Connection		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1 birr/20L		
	House connection		Birr/m3		0~10m3=3.0birr/m3, 10m3~=3.5birr/m3		
	Business connection		Birr/m3		0~10m3=3.0birr/m3, 10m3~=4.0birr/m3		
	06-09 Average monthly income by water tariff		Birr/month		2,500birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Arba Minch		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Water meter, Pipes&fittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone, Region		
	06-13 Principal serious repair with 5-10 years				Pump burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Region		

データ 7.3　南部諸民族州の小都市プロファイル

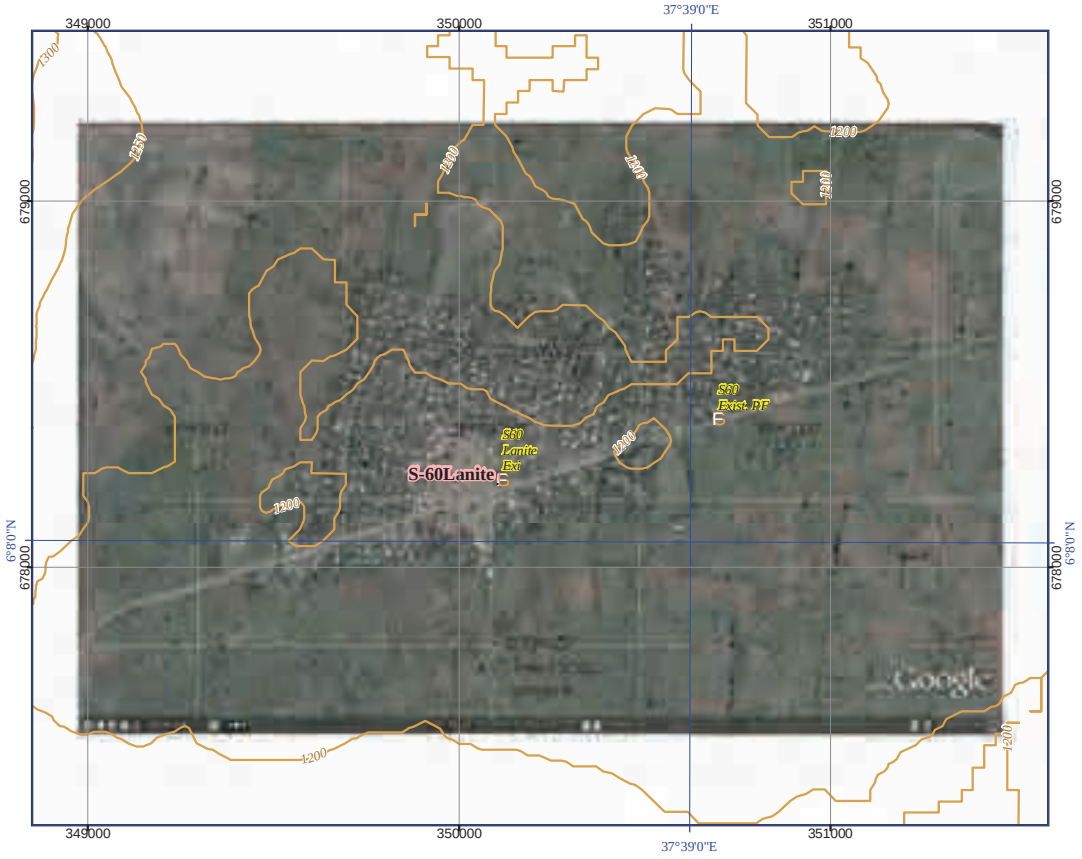
S-60 Lanite

	06-15 Other technical specimen			
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Not grasp	
	Water supply facility	Decrepit, leakage, design failure …etc.	Lack of design of pipe network	
	07-02 Finalcial			
	Management		Shortage skkiled staff (Tech.&Admin.)	
	Rate of water tarrif collection		Rate of water fee collection is low	
	Personnel expenses		Low	
	Shortage of budget to execute operation & maintenace		Unpaid water fee of Health center	
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc.	normal	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc.	nil.	
	07-04 Other technical specimen			
08	Geographical condition	(Slope on mountaion, bottom of valley, Top of ridge …etc.)		
	Flat area (An alluvial area beside of Abaya Lake)			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			24%
	(1.3m3*11PF+0.143m3*105HC+0.51m3*10BC)=34.4m3 34.4m3/20Lpcd.= 1720persons 1720persons/7,221population =24%			
	Current Water Coverage (%) (by data of water source product))			??%
	((??L)*3600sec.*??hrs)=???L/day ???/20Lcd=???persos ???persons/7221population=??%			
11	Water Potential (A / B / C / D / E)			C
12	Accessibility (A / B / C / D / E)	A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		A / A
		A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m		
	Access road is Asphalt road 23km from Arba Minch * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			16
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	No Donors, NGO			
17	Main Ethnic Group		Gamo	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	16	
	-3 Main patients of water born diseases	persons / year	Mararia	700
			Typhoid	500
19	Main economic activities		Farming	
20	Particular comments :			
21	Remarks :			

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-60 Lanite



データ 7.3　南部諸民族州の小都市プロファイル

S-61 Gewada

	SNNPR					50 / 52	
	Name of small town	**:**		**Gewada**		**S- 61**	
	Name of Woreda	**:**		**Konso Special**		**SW- 30**	
	Name of Zone	**:**		**Gamo Gofa**		**SZ- 07**	
	Profile items			**Profile**			**!**
01	Population						
	Town	male / female / total	by SNNPR	?	?	8,400	
	Woreda	male / female / total	by Census 2007	113,353	121,634	234,987	
	percentage of Town in Woreda					3.6%	
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.	304567	600363	1,612	
03	Town Status			Town Administration			
04	Water Source						
	04-01 Water source		Type, No.	Surface water, small river			
	04-02 Well spec.		Denth., Casing Dia., S.W.L	nil.			
	04-03 Methor of water draw		Pump, Gravity	nil.			
	04-04 Pump Spec.		Type, Yield	nil.			
	04-05 Power source		Type, Kva	nil. (No elec. For Town)			
	04-06 Durartion of water draw		daily hours, time	nil.			
	04-07 Water quality		Iron, Fluoride …etc.	Not grasped			
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)	nil.			
	05-02 Financial of implementation		Donor's name	nil.			
	05-03 Name of implementation			nil.			
	05-04 Intake Type			nil.			
	05-05 Intake No.			nil.			
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length	nil.			
	05-07 Power to convey		Pressure, Gravity	nil.			
	05-08 Water treatment		Disinfection, Iron …etc.	nil.			
	05-09 Water treatment capacity		m3/day	nil.			
	05-10 Water reserver type		Type	nil.			
	05-11 Water reserver No.		no.	nil.			
	05-12 Water reserver Capacity		m3	nil.			
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length	nil.			
	05-14 Power to transmit		Pressure, Gravity	nil.			
	05-15 Distribution Type		Pipe material, length	nil.			
	05-16 Power to distribute		Pressure, Gravity	nil.			
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.	nil.			
	05-18 Number of water point (Public Faucet, PF)		no.	nil.			
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.	nil.			
	05-20 Average of daily water consumption at a water point (PF)		m3/day	nil.			
	05-21 Number of House Connection (HC)			nil.			
	05-22 Average of daily water consumption of House Connection(HC)		m3/day	nil.			
	05-23 Number of Business Conection (BC)			nil.			
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.	nil.			
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day	nil.			
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name			nil.			
	06-02 Type of organization		Regional, Zone, Enterprice…etc.	nil.			
	06-03 Number of thechnical staff			nil.			
	06-04 Principal works of technical staff			nil.			
	06-05 Number of the financial staff			nil.			
	06-06 Principal works of financial staff			nil.			
	06-07 Categories of water tariff		W.Point, House Connection…etc.	nil.			
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L	nil.			
	House connection		Birr/m3	nil.			
	Business connection		Birr/m3	nil.			
	06-09 Average monthly income by water tariff		Birr/month	nil.			
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.	nil.			
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc	nil.			
	06-12 Method in case of serious repair		by Regional office, Private company …etc	nil.			
	06-13 Principal serious repair with 5-10 years			nil.			
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.	nil.			

データ 7.3　南部諸民族州の小都市プロファイル

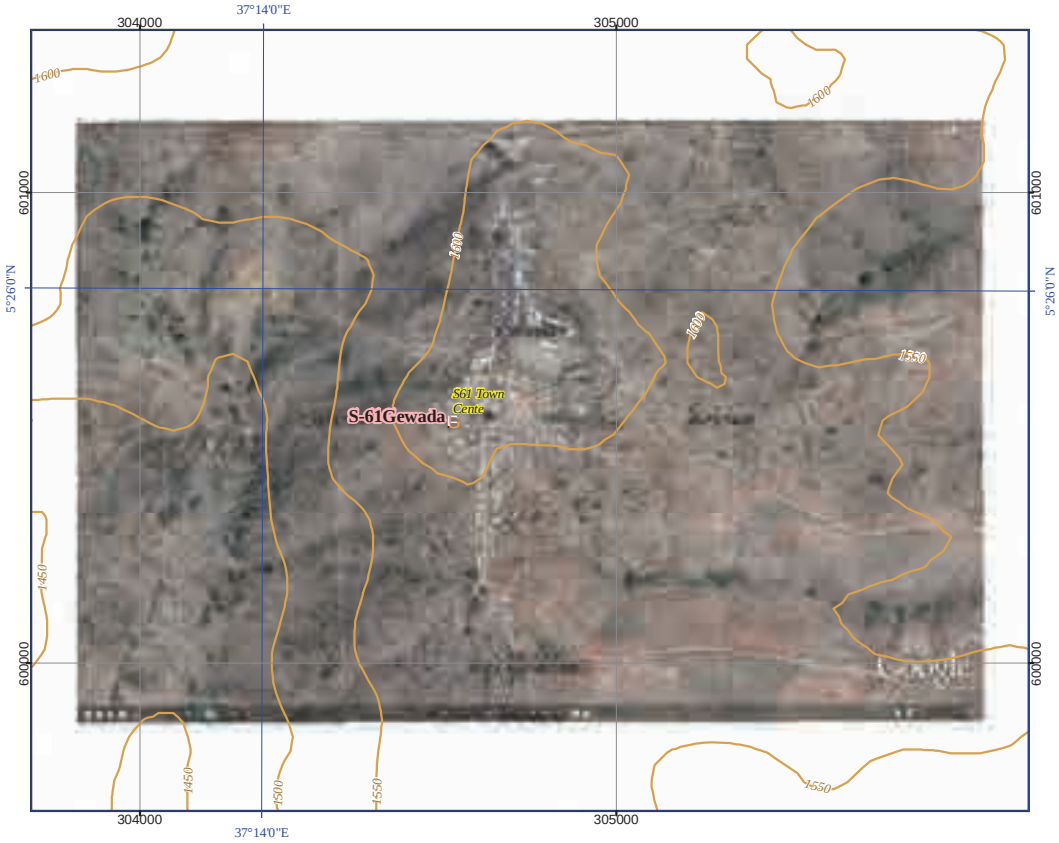
S-61 Gewada

	06-15 Other technical specimen				
07	Problem of actual town water supply				
	07-01 Technical				
	Water source	Quantity, Quality …etc.			
	Water supply facility	Decrepit, leakage, design failure …etc.	nil.		
	07-02 Finalcial				
	Management		nil.		
	Rate of water tarrif collection		nil.		
	Personnel expenses		nil.		
	Shortage of budget to execute operation & maintenace		nil.		
	07-03 Other incidential, Special specimen				
	Increase in population to consume water	coming from other towns, villages …etc.	Not grasp		
	Change in industry	increase factory, Trading …etc.	Not grasp		
	Human conflict	Ethnic, Administrative …etc	Not grasp		
	07-04 Other technical specimen				
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)				
	Town : Slope of ridge, rolling, up and down				
09	Necessary Institution (Facility, Material)				
	Water source (well) with pump + Convayance Pipe line + Reservoir Tank + Distribution piple lines + Water point (Public Faucets)				
	Refer to Chapter 4 "Table 4.7"				
10	Current Water Coverage (%) (by water consumption at faucets)			0%	!
	Current Water Coverage (%) (by data of water source product))			0%	
11	Water Potential (A / B / C / D / E)			C	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			C / D	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m				
	Access road is Asphalt & Sub Grade 36km Konso. (=30km+6km) * Refer to Chapter 5 "Table 5-7: Categories of accessibility"				
13	Manpower Capability of Water Supply Management by Water Office (point)			0	
14	Dgree of urgency (A / B / C / D / E)				
	Refer to Chapter 5 & 7				
15	New Water Supply Plan				
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the hills, construction works is required some ingenuities arround water sources.				
16	Other Donors, NGO's				
	No donnors, NGO				
17	Main Ethnic Group		Ale, Gewada		
18	Health conditions				
	-1 Medical facilities in Town		Health Center, Private clinic, Drug store		
	-2 Nearest other facilities from Town	km			
	-3 Main patients of water born diseases	persons / year	Mararia	2,500	
			Typhoid	2,000	
			Dysentery	1,000	
			others	1,500	
19	Main economic activities		Farming		
20	Particular comments :				
	This small town is a priority of improvement of accessibilityfor operation & maintenance. Collection of water fee from residents is quite difficult in term of their income amount.				
21	Remarks :				

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-61 Gewada



データ 7.3　南部諸民族州の小都市プロファイル

	SNNPR					51 / 52	
	Name of small town	**:**		**Usada**		**S- 62**	
	Name of Woreda	**:**		**Silti**		**SW- 32**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		2,306	2,164	4,470
	Woreda	male / female / total	by Census 2007		87,583	89,740	177,323
	percentage of Town in Woreda						2.5%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		441600	875629	2,040
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Well*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		GL-234m, 6*5/8", GL-??m, 3.4L/sec.		
	04-03 Method of water draw		Pump, Gravity		Pump		
	04-04 Pump Spec.		Type, Yield		Motorized pump		
	04-05 Power source for motorized pump		Type, Kva		Commercial Elec.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		08:00~14:00 (6hrs./day)		
	04-07 Water quality		Iron, Fluoride …etc.		Floride		!
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		1999		
	05-02 Financial of implementation		Donor's name		SNNPR, Girarbe Ledikma		
	05-03 Name of implementation (Project name)				Dure Sidist Water Supply Project		
	05-04 Intake Type				Well		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 2", 2,000m		
	05-07 Power to convey		Pressure, Gravity		Pressure		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		100m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		See below		
	05-16 Power to distribute		Pressure, Gravity		See below memo		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Manosonry		
	05-18 Number of water point (Public Faucet, PF)		no.		7		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6FC*2PF, 4FC*5PF		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		2.4m3/day		!
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Water committee		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				1		
	06-04 Principal works of technical staff				Pump operation		
	06-05 Number of the financial staff				2		
	06-06 Principal works of financial staff				Water sale at Water point		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. Point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.25birr/25L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		7,000birr/month		!
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Butajira		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipe pittings		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Zone		
	06-13 Principal serious repair with 5-10 years				Pump burned		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		Water committee		
	06-15 Other technical specimen						

データ 7.3　南部諸民族州の小都市プロファイル

S-62 Usada

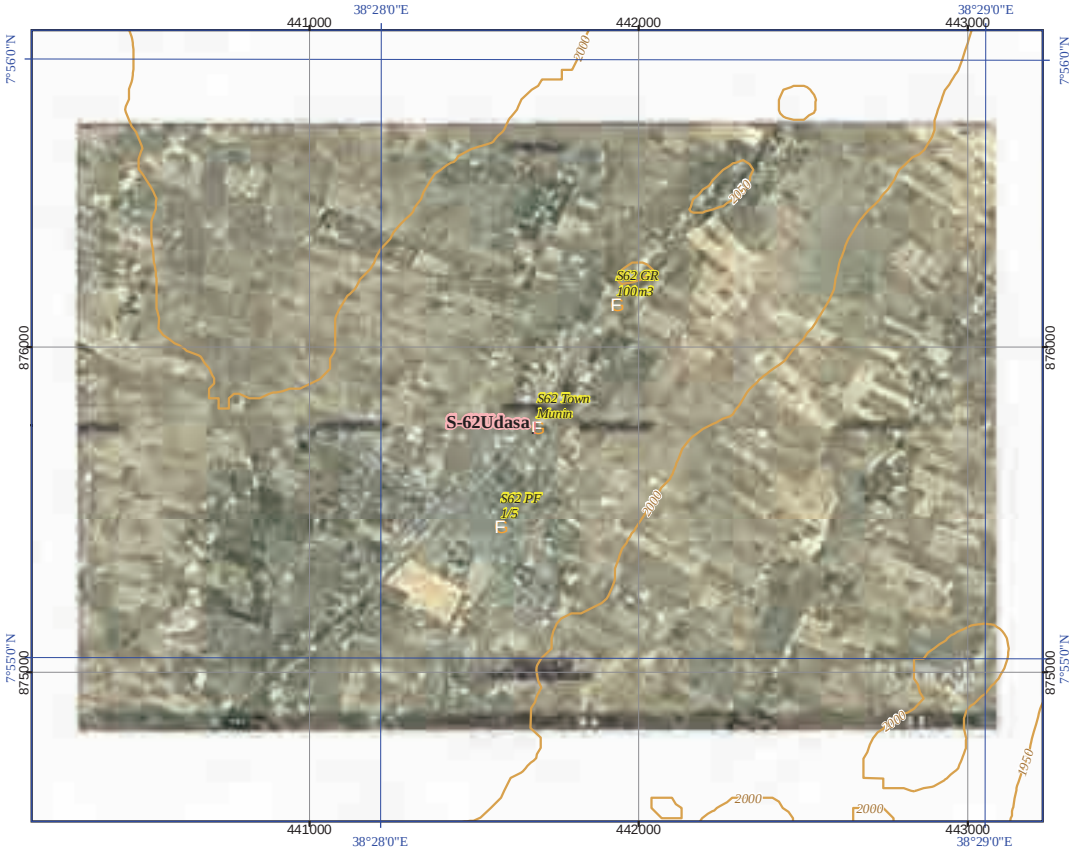
07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shrtage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure (elevation)	
	07-02 Finalcial			
	Management		Not grasp	
	Rate of water tarrif collection		Not grasp	
	Personnel expenses		Not grasp	
	Shortage of budget to execute operation & maintenace		Shourtage budget for O&M	
	07-03 Other incidental, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Coming from villagers	
	Change in industry	increase factory, Trading …etc	Increase wheat trading	
	Human conflict	Ethnic, Administrative …etc	nil.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Flat area, slightly lifted towards south.			
09	Necessary Institution (Facility, Material)			
	Refer to Chapter 4 "Table 4.7"			
10	Current Water Coverage (%) (by water consumption at faucets)			20%
	(2.5m3*7PF+0m3*0HC+0m3*0BC)=17.5m3/day 17.5m3/20Lpcd.= 875persons 875persons / 4,470 population = 20%			
	Current Water Coverage (%) (by data of water source product))			110%
	((3.4L)*3600sec.*8hrs)=97920L/day 97920/20Lcd=4896persos 4896persons/4470population=110%			
11	Water Potential (A / B / C / D / E)			B
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached			B / B
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access road is Sub Grade 37km from Butajira. * Refer to Chapter 5 "Table 5-7: Categories of accessibility"			
13	Manpower Capability of Water Supply Management by Water Office (point)			6
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	nil.			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Private clinic, Drug store, Health Post	
	-2 Nearest other facilities from Town	km	35	
	-3 Main patients of water born diseases	persons / year	Mararia	400
19	Main economic activities		Farming, Trade	
20	Particular comments :			
21	Remarks :			
		Mr. Shemsu Aman	0913-796-601	
		Mr. Fichago Nuri Chairman	0911-341-721	
		Mr. Seman Yasin Water saleman	0920099-392	

Memo (Town sketch …etc.) :

05-15 Distribution Type		
GIP 3"=2,600m	PVC 1"=249m	
GIP 2"=300m	Total L=3,149m	

データ 7.3　南部諸民族州の小都市プロファイル

S-62 Usada



データ 7.3　南部諸民族州の小都市プロファイル

S-63 Kawakoto

	SNNPR					52 / 52	
	Name of small town	**:**		**Kawakoto**		**S- 63**	
	Name of Woreda	**:**		**Alicho Wuriro**		**SW- 40**	
	Name of Zone	**:**		**Silte**		**SZ- 08**	
	Profile items				**Profile**		**!**
01	Population						
	Town	male / female / total	by SNNPR		447	336	783
	Woreda	male / female / total	by Census 2007		42,024	50,445	92,469
	percentage of Town in Woreda						0.8%
02	Town Coordination	UTM (Adindan)	Easting / Northig / Alt.		413574	885422	1,718
03	Town Status				Municipality		
04	Water Source						
	04-01 Water source		Type, No.		Spring*1no.		
	04-02 Well spec.		Depth., Casing Dia., S.W.L, Yield		0.18L/sec.		
	04-03 Method of water draw		Pump, Gravity		Gravity		
	04-04 Pump Spec.		Type, Yield		nil.		
	04-05 Power source for motorized pump		Type, Kva		nil.		
	04-06 Durartion of water draw (Operation hours)		daily hours, time		09:00-11:00 (2hrs./day)		!
	04-07 Water quality		Iron, Fluoride …etc.		Good		
	04-08 Other technical specimen						
05	Existing Water Supply Facilities						
	05-01 Established year		(Gregorian calendar)		2008		
	05-02 Financial of implementation		Donor's name		Action Aid (NGO)		
	05-03 Name of implementation (Project name)				Anchule water project		
	05-04 Intake Type				Spring		
	05-05 Intake No.				1no.		
	05-06 Conveyance Type (Water source ~ Reservoir)		Pipe material, length		GIP, 1*1/2", ??m		
	05-07 Power to convey		Pressure, Gravity		Gravity		
	05-08 Water treatment		Disinfection, Iron …etc.		nil.		
	05-09 Water treatment capacity		m3/day		nil.		
	05-10 Water reserver type		Type		GR		
	05-11 Water reserver No.		no.		1no.		
	05-12 Water reserver Capacity		m3		5m3		
	05-13 Transmission Type (Booster pump Stn. ~ Reservoir)		Pipe material, length		nil.		
	05-14 Power to transmit		Pressure, Gravity		nil.		
	05-15 Distribution Type		Pipe material, length		GIP, 1"*2m+1*1/2"*12m Total 14m		
	05-16 Power to distribute		Pressure, Gravity		Gravity		
	05-17 Structure Type of water point (Public Faucet, PF)		RC, Masonry, Pipe …etc.		Mansonry		
	05-18 Number of water point (Public Faucet, PF)		no.		1		
	05-19 Number of faucet at a water point (Public Faucet, PF)		no.		6		
	05-20 Average of daily water consumption at a water point (PF)		m3/day		4.2m3/day		
	05-21 Number of House Connection (HC)				nil.		
	05-22 Average of daily water consumption of House Connection(HC)		m3/day		nil.		
	05-23 Number of Business Conection (BC)				nil.		
	05-24 Type of Business Connection (BC)		Factory, School, Gov. office, Hospital …etc.		nil.		
	05-25 Average of daily water consumption of Business Connection (BC)		m3/day		nil.		
	05-26 Other technical specimen						
06	Operation and Maintenace						
	06-01 Organization's name				Kawakoto kebele water supply		
	06-02 Type of organization		Regional, Zone, Enterprice…etc.		Community based organization		
	06-03 Number of thechnical staff				nil.		
	06-04 Principal works of technical staff				nil.		
	06-05 Number of the financial staff				1		
	06-06 Principal works of financial staff				water sale		
	06-07 Categories of water tariff		W.Point, House Connection…etc.		W. point		
	06-08 Water tariff rate						
	Water point (Public faucet)		Birr/L, 20L		0.1birr/20L		
	House connection		Birr/m3		nil.		
	Business connection		Birr/m3		nil.		
	06-09 Average monthly income by water tariff		Birr/month		700birr/month		
	06-10 Procurement of spare parts		at Town, Zonal Cap. Reg. Cap. …etc.		Woreda		
	06-11 Principal spare parts		Oil filter, Fuel filter, Pipes …etc		Pipefitting, water meter		
	06-12 Method in case of serious repair		by Regional office, Private company …etc		Woreda		
	06-13 Principal serious repair with 5-10 years				nil.		
	06-14 Fund for above 6-09, 6-10		by Organization, Gov., Donors …etc.		nil.		
	06-15 Other technical specimen				Water committee		

データ 7.3　南部諸民族州の小都市プロファイル

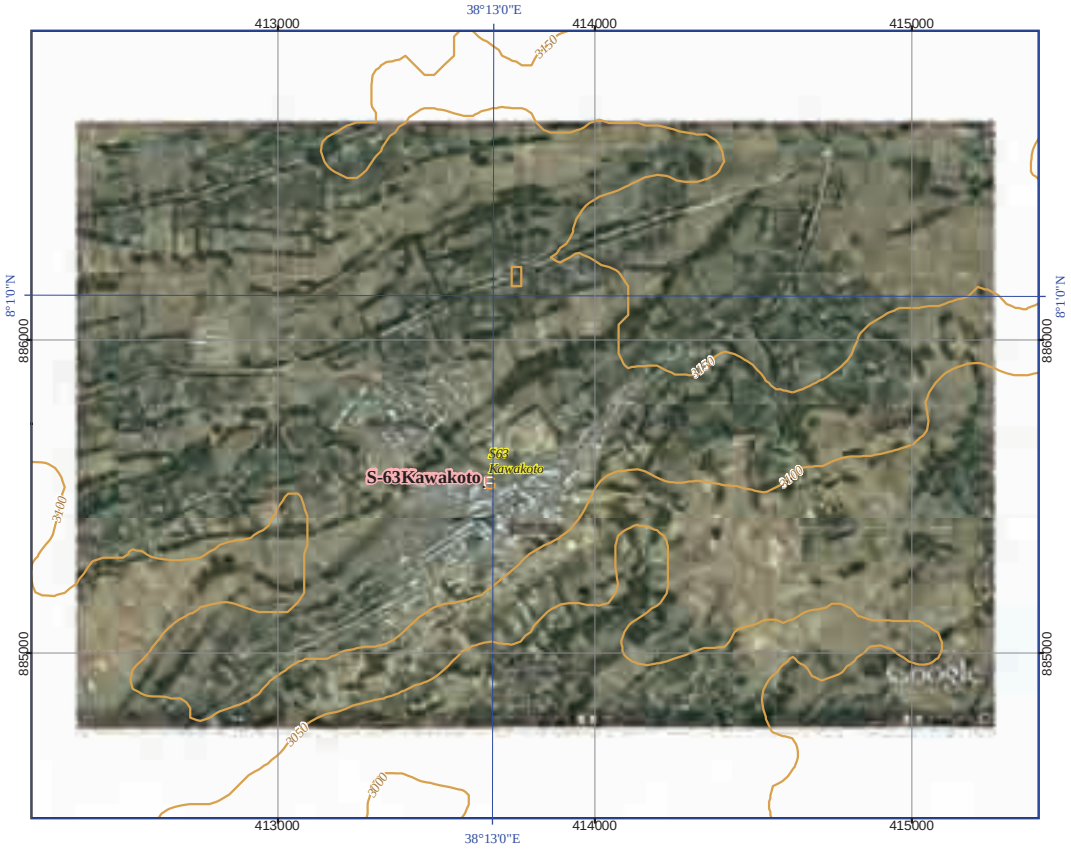
S-63 Kawakoto

07	Problem of actual town water supply			
	07-01 Technical			
	Water source	Quantity, Quality …etc.	Shortage water	
	Water supply facility	Decrepit, leakage, design failure …etc	Design failure	
	07-02 Finalcial			
	Management		Not grasped	!
	Rate of water tarrif collection		ok	!
	Personnel expenses		free	!
	Shortage of budget to execute operation & maintenace		Shortage water	!
	07-03 Other incidential, Special specimen			
	Increase in population to consume water	coming from other towns, villages …etc	Gov. employees, Students	
	Change in industry	increase factory, Trading …etc.	nil.	
	Human conflict	Ethnic, Administrative …etc	ni.	
	07-04 Other specimen			
08	Geographical condition (Slope on mountaion, bottom of valley, Top of ridge …etc.)			
	Town is on the flat area.			
09	Necessary Institution (Facility, Material)			
	Additional reservoir tank for 20m3*1no. (example ; 20Lcd*800persons=16m3, 30Lcd*800=24m3)			
	Additional Water points & distribution pipe lines. (1-2 Water points)			
10	Current Water Coverage (%) (by water consumption at faucets)		27%	
	(4.2m3*1PF+0m3*0HC+0m3*0BC)=4.20m3/day 4.20m3/20Lpcd.= 210persons 210persons / 783 population = 27%			
	Current Water Coverage (%) (by data of water source product))		99%	
	((0.18L)*3600sec.*24hrs)=15552L/day 15552/20Lcd=777persos 777persons/783population=99%			
11	Water Potential (A / B / C / D / E)		A	
12	Accessibility (A / B / C / D / E) A=Asphalt/B=Base Course/C=Sub Grade/D=Only Dry Season/E=Not Approached		B / B	
	A=Road Width > 6m /B= >3~6m / C= 1~3m / D= <1m			
	Access is Asphalt & Sub grade road 48km from Butajira. (=23+25km from Butajira)			
13	Manpower Capability of Water Supply Management by Water Office (point)		7	
14	Dgree of urgency (A / B / C / D / E)			
	Refer to Chapter 5 & 7			
15	New Water Supply Plan			
	The facility can be designed in an Ethiopian standard, whichis not required more advanced technology. The small town is on the generally flat terrains, construction work is not difficult.			
16	Other Donors, NGO's			
	Not grasped			
17	Main Ethnic Group		Silte	
18	Health conditions			
	-1 Medical facilities in Town		Health Center, Private clinic	
	-2 Nearest other facilities from Town	km	64	
	-3 Main patients of water born diseases	persons / year	Dysentery 1,400	
			Typhoid 802	
19	Main economic activities		Farming	
20	Particular comments :			
	Town population is less than 2,000 persons in accordance with list of the candidate small towns.			
21	Remarks :			
		Mr. Abdela Musteffa Water & mines process owner Mob. 09163927		
		Mr. Nursie Hillil Water committee chair person Mob. 0910142273		

Memo (Town sketch …etc.) :

データ 7.3　南部諸民族州の小都市プロファイル

S-63 Kawakoto



データ 7.4　82小都市の給水施設規模と概算事業費 (1/3)

SNNPRS （52 towns）							Town population		Tube well		Pump		Generator		Generator House		Convayance pipe line		Water Reservoir tank		Transmission pipe line		Distribution pipe line		Public faucets		Implementation cost	Project cost (Incl. consulting service)	Water coverage (2010)	Out of water coverage	Population	Beneficiary population* (2015)	Beneficiary ratio (2015)
No.	Zone		Woreda		Small Town		Q'ty		Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Total	Q'ty	Cost			20lpcd	100－Water coverage			
							2010	2015																			①	②	③	④	⑤	⑥	⑦
							Persons		nos.	$	nos.	$	nos.	$	nos.	$	m	$	nos.	$	m	$	m	$	nos.	$	US＄	US＄		=100%-③		=④×⑤	=⑥÷⑤
1	SZ-01	Gurage	SW-01	Sodo	S-01	Buei (BH)	6,961	8,188	1	$18,987	1	$13,007	1	$34,325	1	$14,504	1,140	$194,920	1	$12,922	3,800	$245,266	11,400	$167,227	23	$18,508	$1,079,500	$1,403,350	149%	-49%	8,188	-4,012	-49%
2	SZ-01	Gurage	SW-01	Sodo	S-02	Kela (SP&BH)	3,519	4,139	1	$18,987	1	$13,007	1	$34,325	1	$14,504	690	$117,978	1	$7,384	2,300	$148,451	6,900	$101,216	12	$9,356	$697,812	$907,155	81%	19%	4,139	786	19%
3	SZ-01	Gurage	SW-01	Sodo	S-03	Tiya (BH)	1,937	2,278	1	$18,987	1	$8,131	1	$26,039	1	$14,504	450	$76,942	1	$5,538	1,500	$96,816	4,500	$66,011	7	$5,149	$477,176	$620,329	54%	46%	2,278	1,043	46%
4	SZ-01	Gurage	SW-01	Sodo	S-04	Suten (BH)	1,298	1,527	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,080	$184,661	1	$3,692	1,800	$116,179	5,400	$79,213	4	$3,452	$783,780	$1,018,914	58%	42%	1,527	645	42%
5	SZ-01	Gurage	SW-03	Mareqo	S-06	Koshe (BH)	6,858	8,067	2	$50,633	2	$26,014	2	$68,649	2	$29,008	900	$153,884	1	$12,922	1,500	$96,816	4,500	$66,011	23	$18,235	$783,257	$1,018,234	94%	6%	8,067	484	6%
6	SZ-02	Hadiya	SW-04	Lemmo	S-07	Lisana(BH)	1,711	2,013	1	$25,316	1	$11,428	1	$44,188	1	$14,504	450	$76,942	1	$5,538	1,500	$96,816	4,500	$66,011	6	$4,550	$517,939	$673,321	283%	-183%	2,013	-3,684	-183%
7	SZ-02	Hadiya	SW-05	Shashago	S-09	Dosha (BH)	1,881	2,213	1	$18,987	1	$8,131	1	$26,039	1	$14,504	450	$76,942	1	$3,692	1,500	$96,816	4,500	$66,011	6	$5,002	$474,187	$616,443	10%	90%	2,213	2,001	90%
8	SZ-02	Hadiya	SW-07	Analemmo	S-11	Fonko (BH)	2,380	2,799	1	$25,316	1	$11,428	1	$44,188	1	$14,504	600	$102,589	1	$5,538	2,000	$129,088	6,000	$88,014	8	$6,327	$640,488	$832,635	139%	-39%	2,799	-1,092	-39%
9	SZ-02	Hadiya	SW-08	Mirab Badawocho	S-12	Wada (SP&BH)	2,113	2,485	1	$25,316	1	$11,428	1	$44,188	1	$14,504	510	$87,201	1	$5,538	1,700	$109,724	5,100	$74,812	7	$5,617	$567,493	$737,741	3%	97%	2,485	2,410	97%
10	SZ-03	Kembata Timbaro	SW-09	Anigacha	S-13	Anigacha (BH)	6811	8,011	1	$25,316	1	$13,186	1	$57,444	1	$14,504	1,050	$179,531	1	$12,922	3,500	$225,903	10,500	$154,025	23	$18,108	$1,051,410	$1,366,833	88%	12%	8,011	961	12%
11	SZ-03	Kembata Timbaro	SW-10	Kedia Gamela	S-14	Adilo (BH)	4,659	5,480	1	$25,316	1	$11,428	1	$44,188	1	$14,504	450	$76,942	1	$13,845	1,500	$96,816	4,500	$66,011	16	$12,387	$542,155	$704,801	16%	84%	5,480	4,603	84%
12	SZ-03	Kembata Timbaro	SW-11	Dayiboya	S-15	Daniboya (BH)	8,111	9,541	2	$50,633	2	$32,525	2	$114,889	2	$29,008	1,200	$205,179	2	$44,304	2,000	$129,088	6,000	$88,014	27	$21,566	$1,072,808	$1,394,651	42%	58%	9,541	5,534	58%
13	SZ-04	Sidama	SW-12	Shebedio	S-16	Leku (BH)	11,810	13,892	1	$12,658	1	$6,593	1	$26,039	1	$14,504	1,200	$205,179	1	$22,152	4,000	$258,175	12,000	$176,028	40	$31,401	$1,129,096	$1,467,824	157%	-57%	13,892	-7,918	-57%
14	SZ-04	Sidama	SW-13	Dara	S-17	Kebado (BH)	8,365	9,839	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,200	$205,179	1	$16,614	2,000	$129,088	6,000	$88,014	28	$22,240	$934,171	$1,214,422	20%	80%	9,839	7,871	80%
15	SZ-04	Sidama	SW-13	Dara	S-18	Teferi Kela (BH)	4,178	4,914	1	$18,987	1	$13,007	1	$34,325	1	$14,504	900	$153,884	1	$9,230	3,000	$193,631	9,000	$132,021	14	$11,108	$871,046	$1,132,360	40%	60%	4,914	2,948	60%
16	SZ-04	Sidama	SW-14	Gorche	S-19	Goreche (SP)	2986	3,512	1	$12,658	1	$6,593	1	$26,039	1	$14,504	450	$76,942	1	$5,538	1,500	$96,816	4,500	$66,011	10	$7,939	$469,559	$610,427	30%	70%	3,512	2,458	70%
17	SZ-04	Sidama	SW-15	Malga	S-20	Manicho (BH)	4,017	4,725	1	$12,658	1	$6,593	1	$26,039	1	$14,504	450	$76,942	1	$7,384	1,500	$96,816	4,500	$66,011	14	$10,680	$476,441	$619,373	2.5%	98%	4,725	4,607	98%
18	SZ-04	Sidama	SW-16	Wensho	S-21	Bokasa (Bokaso) (BH)	2,039	2,398	4	$75,949	4	$32,525	4	$104,157	4	$58,017	1,200	$205,179	1	$5,538	1,000	$64,544	3,000	$44,007	7	$5,420	$893,004	$1,160,906	5%	95%	2,398	2,278	95%
19	SZ-04	Sidama	SW-41	Alta Chuko	S-22	Chuko (BH)	8,884	10,450	2	$50,633	2	$26,371	2	$114,889	2	$29,008	3,000	$512,947	1	$16,614	5,000	$322,719	15,000	$220,036	30	$23,621	$1,975,257	$2,567,834	1113%	-1013%	10,450	-105,859	-1013%
20	SZ-04	Sidama	SW-18	Wendo Genet	S-23	Chuko	14,626	17,204	4	$75,949	4	$52,743	4	$229,777	4	$58,017	4,200	$718,126	1	$27,690	3,500	$225,903	10,500	$154,025	49	$38,888	$2,371,677	$3,083,180	58%	42%	17,204	7,226	42%
21	SZ-04	Sidama	SW-18	Wendo Genet	S-24	Ela (Kela) (SP)	5,259	6,186	2	$37,975	2	$13,186	2	$52,079	2	$29,008	600	$102,589	1	$11,076	1,000	$64,544	3,000	$44,007	18	$13,983	$552,670	$718,471	194%	-94%	6,186	-5,815	-94%
22	SZ-05	Gedeo	SW-20	Kochore	S-27	Fiseha Genet (BH)	4,189	4,927	4	$75,949	4	$52,028	4	$137,298	4	$58,017	3,600	$615,536	1	$9,230	3,000	$193,631	9,000	$132,021	14	$11,137	$1,927,273	$2,505,454	33%	67%	4,927	3,301	67%
23	SZ-05	Gedeo	SW-21	Gedeb	S-28	Gedeb (BH)	10,021	11,787	4	$75,949	4	$45,710	4	$176,752	4	$58,017	3,600	$615,536	1	$18,460	3,000	$193,631	9,000	$132,021	34	$26,643	$2,014,081	$2,618,305	8%	92%	11,787	10,844	92%
24	SZ-06	Wolayita	SW-23	Humbo	S-30	Tabela (Humbo)(SP)	6,246	7,347	2	$25,316	2	$16,262	2	$52,079	2	$29,008	2,100	$359,063	1	$12,922	3,500	$225,903	10,500	$154,025	21	$16,607	$1,336,779	$1,737,813	36%	64%	7,347	4,702	64%
25	SZ-06	Wolayita	SW-24	Deguna Fanigo	S-32	Dimtu (SP)	1,702	2,002	2	$37,975	2	$16,262	2	$52,079	2	$29,008	600	$102,589	1	$5,538	1,000	$64,544	3,000	$44,007	6	$4,525	$534,792	$695,229	51%	49%	2,002	986	49%
26	SZ-07	Gamo Gofa	SW-26	Mirab Abaya	S-34	Birbir (BH)	5,831	6,859	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,500	$256,473	1	$11,076	2,500	$161,359	7,500	$110,018	20	$15,504	$1,074,115	$1,396,350	229%	-129%	6,859	-8,848	-129%
27	SZ-07	Gamo Gofa	SW-27	Chencha	S-35	Chenicha (SP&BH)	10,223	12,025	2	$37,975	2	$22,855	2	$88,376	2	$29,008	2,040	$348,804	1	$18,460	3,400	$219,449	10,200	$149,624	34	$27,181	$1,412,599	$1,836,378	33%	67%	12,025	8,057	67%
28	SZ-07	Gamo Gofa	SW-27	Chencha	S-36	Ezo (BH)	1,822	2,143	4	$75,949	4	$32,525	4	$104,157	4	$58,017	960	$164,143	1	$3,692	800	$51,635	2,400	$35,206	6	$4,844	$795,252	$1,033,828	0%	100%	2,143	2,143	100%
29	SZ-07	Gamo Gofa	SW-27	Chencha	S-37	Dorze (BH&SP)	1,256	1,477	2	$37,975	2	$16,262	2	$52,079	2	$29,008	360	$61,554	1	$3,692	600	$38,726	1,800	$26,404	4	$3,339	$403,558	$524,626	1%	99%	1,477	1,462	99%
30	SZ-07	Gamo Gofa	SW-28	Amaro Special	S-38	Kele (SP)	8,632	10,153	4	$75,949	4	$45,710	4	$176,752	4	$58,017	1,800	$307,768	1	$16,614	1,500	$96,816	4,500	$66,011	29	$22,950	$1,299,880	$1,689,844	89%	11%	10,153	1,117	11%
31	SZ-07	Gamo Gofa	SW-29	Burji Special	S-39	Soyama (SP)	6,268	7,373	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,500	$256,473	1	$12,922	2,500	$161,359	7,500	$110,018	21	$16,666	$1,078,627	$1,402,215	1.2%	99%	7,373	7,283	99%
32	SZ-07	Gamo Gofa	SW-30	Konso Special	S-41	Segen (BH)	3,626	4,265	2	$37,975	2	$26,014	2	$68,649	2	$29,008	900	$153,884	1	$7,384	1,500	$96,816	4,500	$66,011	12	$9,641	$743,072	$965,993	106%	-6%	4,265	-256	-6%
33	SZ-07	Gamo Gofa	SW-31	Darashe Special	S-42	Gidole (SP)	13,176	15,498	4	$75,949	4	$32,525	4	$104,157	4	$58,017	3,000	$512,947	1	$23,998	2,500	$161,359	7,500	$110,018	44	$35,032	$1,671,003	$2,172,304	34%	66%	15,498	10,229	66%
34	SZ-08	Silite	SW-32	Siliti	S-43	Kibat (BH)	5,676	6,676	4	$101,266	4	$52,743	4	$229,777	4	$58,017	3,000	$512,947	2	$22,152	2,500	$161,359	7,500	$110,018	19	$15,090	$1,895,054	$2,463,570	187%	-87%	6,676	-5,808	-87%
35	SZ-08	Silite	SW-32	Siliti	S-44	Alkeso (BH)	1,028	1,209	1	$18,987	1	$6,593	1	$26,039	1	$14,504	750	$128,237	1	$3,692	2,500	$161,359	7,500	$110,018	3	$2,733	$708,244	$920,717	672%	-572%	1,209	-6,915	-572%

データ 7.4　82小都市の給水施設規模と概算事業費 (2/3)

36	SZ-08	Silite	SW-33	Lanifaro (Lanfuro)	S-46	Tora (BH)	9,163	10,778	4	$75,949	4	$45,710	4	$176,752	4	$58,017	3,360	$574,501	1	$16,614	2,800	$180,723	8,400	$123,220	31	$24,363	$1,913,772	$2,487,904	30%	70%	10,778	7,545	70%
37	SZ-08	Silite	SW-33	Lanifaro (Lanfuro)	S-47	Mito (BH)	3,277	3,855	2	$50,633	2	$26,014	2	$68,649	2	$29,008	1,200	$205,179	1	$11,076	2,000	$129,088	6,000	$88,014	11	$8,714	$924,562	$1,201,931	310%	-210%	3,855	-8,096	-210%
38	SZ-08	Silite	SW-34	Dalocha	S-48	Dalocha (SP)	7,024	8,262	1	$27,848	1	$13,186	1	$57,444	1	$14,504	810	$138,496	1	$12,922	2,700	$174,268	8,100	$118,819	24	$18,675	$864,244	$1,123,517	69%	31%	8,262	2,561	31%
39	SZ-08	Silite	SW-35	Sankura	S-49	Alem Gebeya (BH)	3,656	4,300	2	$75,949	2	$32,525	2	$114,889	2	$29,008	1,500	$256,473	1	$11,076	2,500	$161,359	7,500	$110,018	12	$9,720	$1,201,526	$1,561,984	163%	-63%	4,300	-2,709	-63%
40	SZ-08	Silite	SW-35	Sankura	S-51	Mazoria (BH)	2,730	3,211	1	$18,987	1	$6,593	1	$26,039	1	$14,504	360	$61,554	1	$8,307	1,200	$77,453	3,600	$52,809	9	$7,258	$410,255	$533,332	14%	86%	3,211	2,761	86%
41	SZ-08	Silite	SW-36	Wilbareg	S-52	Wilbareg (Bilbareg) (BH)	2,197	2,584	2	$37,975	2	$13,186	2	$52,079	2	$29,008	1,200	$205,179	1	$5,538	2,000	$129,088	6,000	$88,014	7	$5,841	$848,860	$1,103,518	78%	22%	2,584	568	22%
42	SZ-01	Gurage	SW-02	Meskan	S-53	Hamus-Gabeya(Bamo)(BH)	4,152	4,884	2	$50,633	2	$16,262	2	$52,079	2	$29,008	480	$82,072	1	$13,845	800	$51,635	2,400	$35,206	14	$11,040	$512,669	$666,470	22%	78%	4,884	3,825	78%
43	SZ-02	Hadiya	SW-05	Shashago	S-54	Hirkofofo (BH)	2,590	3,047	2	$50,633	2	$22,855	2	$88,376	2	$29,008	300	$51,295	1	$8,307	500	$32,272	1,500	$22,004	9	$6,887	$467,455	$607,692	12%	88%	3,047	2,694	88%
44	SZ-02	Hadiya	SW-06	Misrak Badawocho	S-55	Weyira Mazoria (BH)	8,346	9,817	2	$50,633	2	$32,525	2	$114,889	2	$29,008	900	$153,884	2	$49,842	1,500	$96,816	4,500	$66,011	28	$22,190	$923,696	$1,200,805	0%	100%	9,817	9,817	100%
45	SZ-05	Gedeo	SW-20	Kochore	S-56	Biloya (SP)	4,484	5,274	4	$75,949	4	$52,028	4	$137,298	4	$58,017	1,560	$266,732	1	$9,230	1,300	$83,907	3,900	$57,209	15	$11,921	$1,128,438	$1,466,970	4%	96%	5,274	5,063	96%
46	SZ-05	Gedeo	SW-21	Gedeb	S-57	Chorso-Mazoria (BH&SP)	8500	9,998	2	$37,975	2	$22,855	2	$88,376	2	$29,008	1,200	$205,179	1	$16,614	2,000	$129,088	6,000	$88,014	29	$22,599	$959,562	$1,247,431	26%	74%	9,998	7,399	74%
47	SZ-06	Wolayita	SW-37	Damot Pulasa	S-58	Shento (BH)	5,345	6,287	1	$25,316	1	$16,262	1	$57,444	1	$14,504	540	$92,330	1	$16,614	1,800	$116,179	5,400	$79,213	18	$14,211	$648,112	$842,545	13%	87%	6,287	5,470	87%
48	SZ-06	Wolayita	SW-38	Sodo Zuria	S-59	Dalbo ~~Wegene~~ Atowa (SP)	4,772	5,613	2	$25,316	2	$16,262	2	$52,079	2	$29,008	900	$153,884	1	$13,845	1,500	$96,816	4,500	$66,011	16	$12,688	$698,863	$908,522	6%	94%	5,613	5,276	94%
49	SZ-07	Gamo Gofa	SW-39	Arba Minch Zuria	S-60	Lanite (BH)	7,221	8,494	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,080	$184,661	1	$14,768	1,800	$116,179	5,400	$79,213	24	$19,200	$863,500	$1,122,550	24%	76%	8,494	6,455	76%
50	SZ-07	Gamo Gofa	SW-30	Konso Special	S-61	Gewada (nil.)	5,967	7,019	5	$94,937	5	$65,035	5	$171,623	5	$72,521	1,500	$256,473	2	$22,152	1,000	$64,544	3,000	$44,007	20	$15,866	$1,210,736	$1,573,957	0%	100%	7,019	7,019	100%
51	SZ-08	Silite	SW-32	Siliti	S-62	Udasa (BH)	4,470	5,258	1	$18,987	1	$13,007	1	$34,325	1	$14,504	600	$102,589	1	$13,845	2,000	$129,088	6,000	$88,014	15	$11,885	$639,367	$831,177	20%	80%	5,258	4,206	80%
52	SZ-08	Silite	SW-40	Alicho wuriro	S-63	Kawakoto (SP)	783	921	1	$18,987	1	$6,593	1	$26,039	1	$14,504	540	$92,330	1	$2,769	1,800	$116,179	5,400	$79,213	3	$2,082	$538,045	$699,458	27%	73%	921	672	73%
SNNPRS Average							**5,284**	**6,215**	**2**	**$42,405**	**2**	**$23,154**	**2**	**$78,174**	**2**	**$30,124**	**1,268**	**$216,720**	**1**	**$12,940**	**2,060**	**$132,935**	**6,179**	**$90,638**	**18**	**$14,049**	**$961,710**	**$1,250,223**	**95%**	**-**	**6,215**	**-**	**-**
SNNPRS Total							**274,776**	**¥323,204**	108	**$2,205,063**	108	**$1,204,025**	108	**$4,065,055**	108	**$1,566,456**	**65,910**	**$11,269,445**	**56**	**$672,864**	**107,100**	**$6,912,638**	**321,300**	**$4,713,163**	**923**	**$730,570**	**$50,008,919**	**$65,011,594**	-	-	-	-	-

＊Note …⑥Negative values of Beneficiary population (2015) : Due to the water coverage caluculated based on the unit supply amount of 20lpcd, the coverage for 2010 exceeds 100%. The corresponding negative beneficially population values should be considered "zero".

データ 7.4　82小都市の給水施設規模と概算事業費 (3/3)

Oromia region (30 towns)						Town population		Tube well		Pump		Generator		Generator House		Convayance pipe line		Water Reservoir tank		Transmission pipe line		Distribution pipe line		Public faucets		Implementation cost	Project cost (Incl. consulting service)	Water coverage (2010)	Out of water coverage	Population	Beneficiary population (2015)	Beneficiary ratio (2015)
No.	Zone		Woreda		Small Town	Q'ty		Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	計	Q'ty	Cost			20lpcd	100－Water coverage			
						2010	2015		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$				Yen75,84/$	①	②	③	④	⑤	⑥	⑦
						Persons		nos.	$	nos.	$	nos.	$	nos.	$	m	$	nos.	$	m	$	m	$	nos.	$	US＄	US＄		=100%-③		=④×⑤	=⑥÷⑤
1	OZ-01	Arsi	OW-01	Hitosa	O-01	Iteya (SP)	14,239	16,749	1	$18,987	1	$6,593	1	$26,039	1	$14,504	1,650	$282,121	1	$25,844	5,500	$354,991	16,500	$242,039	48	$37,859	¥1,513,467	¥1,967,507	137%	-37%	16,749	-6,188	-37%
2	OZ-01	Arsi	OW-02	Ziway Dugda	O-02	Ogolcha (Agolcho)(BH)	4,759	5,598	1	$25,316	1	$8,131	1	$26,039	1	$14,504	1,050	$179,531	1	$9,230	3,500	$225,903	10,500	$154,025	16	$12,654	¥983,002	¥1,277,902	129%	-29%	5,598	-1,623	-29%
3	OZ-01	Arsi	OW-03	Tiyo	O-03	Gonde (SP)	4,350	5,117	1	$18,987	1	$11,428	1	$44,188	1	$14,504	1,200	$205,179	1	$9,230	4,000	$258,175	12,000	$176,028	15	$11,566	¥1,123,929	¥1,461,107	401%	-301%	5,117	-15,402	-301%
4	OZ-01	Arsi	OW-04	Digaluna Tijo	O-05	Kidame Digelu (SP)	1,780	2,094	1	$18,987	1	$8,131	1	$26,039	1	$14,504	540	$92,330	1	$5,538	1,800	$116,179	5,400	$79,213	6	$4,733	¥548,483	¥713,028	535%	-435%	2,094	-9,109	-435%
5	OZ-01	Arsi	OW-04	Digaluna Tijo	O-06	Sagure (SP)	10,926	12,852	2	$50,633	2	$32,525	2	$114,889	2	$29,008	1,200	$205,179	2	$60,918	2,000	$129,088	6,000	$88,014	37	$29,051	¥1,108,955	¥1,441,642	87%	13%	12,852	1,671	13%
6	OZ-01	Arsi	OW-05	Munesa	O-07	Kersa (SP)	9,916	11,664	4	$75,949	4	$52,028	4	$137,298	4	$58,017	5,400	$923,305	1	$18,460	4,500	$290,447	13,500	$198,032	33	$26,365	¥2,669,852	¥3,470,807	251%	-151%	11,664	-17,613	-151%
7	OZ-04	West Arsi	OW-20	Limana Bilbilo	O-09	Meraro (SP)	4,725	5,558	1	$18,987	1	$13,007	1	$26,039	1	$14,504	960	$164,143	1	$9,230	3,200	$206,540	9,600	$140,823	16	$12,563	¥908,756	¥1,181,382	17%	83%	5,558	4,613	83%
8	OZ-04	West Arsi	OW-08	Kofele	O-10	Kofele (BH)	14,401	16,939	5	$94,937	5	$81,312	5	$287,222	5	$72,521	7,500	$1,282,367	2	$83,070	5,000	$322,719	15,000	$220,036	48	$38,289	¥3,723,707	¥4,840,820	38%	62%	16,939	10,502	62%
9	OZ-01	Arsi	OW-03	Tiyo	O-11	Kulumsa (nil)	3,472	4,084	1	$18,987	1	$6,593	1	$26,039	1	$14,504	600	$102,589	1	$7,384	2,000	$129,088	6,000	$88,014	12	$9,231	¥603,646	¥784,739	12%	88%	4,084	3,594	88%
10	OZ-01	Arsi	OW-01	Hitosa	O-12	Boru Jawi (SP)	4,446	5,230	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,200	$205,179	1	$9,230	2,000	$129,088	6,000	$88,014	15	$11,822	¥907,468	¥1,179,708	37%	63%	5,230	3,295	63%
11	OZ-03	East Shewa	OW-16	Adami Tulu & Jido Kombolcha	O-20	Abosa (BH)	3,578	4,209	1	$18,987	1	$6,593	1	$26,039	1	$14,504	330	$56,424	1	$11,076	1,100	$70,998	3,300	$48,408	12	$9,514	¥393,816	¥511,960	31%	69%	4,209	2,904	69%
12	OZ-03	East Shewa	OW-16	Adami Tulu & Jido Kombolcha	O-22	Adami Tulu (BH)	8,166	9,605	4	$101,266	4	$65,049	4	$229,777	4	$58,017	4,200	$718,126	1	$14,768	3,500	$225,903	10,500	$154,025	27	$21,711	¥2,382,963	¥3,097,853	258%	-158%	9,605	-15,176	-158%
13	OZ-03	East Shewa	OW-16	Adami Tulu & Jido Kombolcha	O-28	Jido (BH)	2,659	3,128	1	$18,987	1	$11,428	1	$44,188	1	$14,504	540	$92,330	1	$8,307	1,800	$116,179	5,400	$79,213	9	$7,071	¥588,310	¥764,803	148%	-48%	3,128	-1,501	-48%
14	OZ-01	Arsi	OW-03	Tiyo	O-29	Katar Genet (nil.)	3,953	4,650	1	$25,316	1	$11,428	1	$44,188	1	$14,504	960	$164,143	1	$11,076	3,200	$206,540	9,600	$140,823	13	$10,511	¥942,793	¥1,225,631	0%	100%	4,650	4,650	100%
15	OZ-01	Arsi	OW-20	Limana Bilbilo	O-30	Lemo Sirba (SP)	5,590	6,575	2	$50,633	2	$22,855	2	$88,376	2	$29,008	1,500	$256,473	1	$11,076	2,500	$161,359	7,500	$110,018	19	$14,862	¥1,116,992	¥1,452,089	32%	68%	6,575	4,471	68%
16	OZ-02	Borena	OW-09	Teltele	O-31	Milami (BH)	4,510	5,305	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,260	$215,438	1	$13,845	2,100	$135,542	6,300	$92,415	15	$11,991	¥946,316	¥1,230,210	29%	71%	5,305	3,767	71%
17	OZ-02	Borena	OW-21	Bure Hara	O-32	Garaba (BH)	7,500	8,822	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,800	$307,768	1	$14,768	3,000	$193,631	9,000	$132,021	25	$19,941	¥1,244,664	¥1,618,064	148%	-48%	8,822	-4,235	-48%
18	OZ-02	Borena	OW-10	Yabelo	O-33	El Woyya(Wayya) (BH)	4,090	4,811	1	$18,987	1	$6,593	1	$26,039	1	$14,504	300	$51,295	1	$7,384	1,000	$64,544	3,000	$44,007	14	$10,875	¥366,342	¥476,245	7%	93%	4,811	4,474	93%
19	OZ-04	West Arsi	OW-22	Wondo	O-34	Bura (Busa) (BH)	5,112	6,013	2	$37,975	2	$13,186	2	$52,079	2	$29,008	1,500	$256,473	1	$9,230	2,500	$161,359	7,500	$110,018	17	$13,592	¥1,024,380	¥1,331,694	6%	94%	6,013	5,660	94%
20	OZ-03	East Shewa	OW-19	Adama	O-35	Awash Mercasa (BH)	10,200	11,998	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,800	$307,768	1	$18,460	3,000	$193,631	9,000	$132,021	34	$27,120	¥1,221,488	¥1,587,934	57%	43%	11,998	5,199	43%
21	OZ-03	East Shewa	OW-23	Bosat	O-36	Walanciti (BH)	11,260	13,245	5	$94,937	5	$40,656	5	$130,197	5	$72,521	9,750	$1,667,078	2	$60,918	6,500	$419,535	19,500	$286,046	38	$29,939	¥4,202,738	¥5,463,560	338%	-238%	13,245	-31,523	-238%
22	OZ-03	East Shewa	OW-23	Bosat	O-37	Doni (nil.)	4,164	4,898	1	$18,987	1	$8,131	1	$26,039	1	$14,504	600	$102,589	1	$13,845	2,000	$129,088	6,000	$88,014	14	$11,071	¥618,404	¥803,926	0%	100%	4,898	4,898	100%
23	OZ-03	East Shewa	OW-23	Bosat	O-38	Befa (Bofa) (BH)	7,040	8,281	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,620	$276,991	1	$19,383	2,700	$174,268	8,100	$118,819	24	$18,718	¥1,115,256	¥1,449,833	183%	-83%	8,281	-6,873	-83%
24	OZ-04	West Arsi	OW-22	Wondo	O-39	Intaye (nil.)	8,500	9,998	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,680	$287,250	1	$16,614	2,800	$180,723	8,400	$123,220	29	$22,599	¥1,148,595	¥1,493,174	0%	100%	9,998	9,998	100%
25	OZ-04	West Arsi	OW-08	Kofele	O-40	Kabate (BH)	4,146	4,877	2	$37,975	2	$13,186	2	$52,079	2	$29,008	1,080	$184,661	1	$13,845	1,800	$116,179	5,400	$79,213	14	$11,024	¥805,753	¥1,047,479	7%	93%	4,877	4,524	93%
26	OZ-04	West Arsi	OW-14	Sheshemane	O-41	Awasho-Dhanku (BH)	7,040	8,281	4	$75,949	4	$26,371	4	$104,157	4	$58,017	2,880	$492,429	1	$19,383	2,400	$154,905	7,200	$105,617	24	$18,718	¥1,583,321	¥2,058,317	0.0%	100%	8,281	8,281	100%
27	OZ-04	West Arsi	OW-14	Sheshemane	O-42	Hursa (BH&SP)	5,700	6,705	4	$75,949	4	$26,371	4	$104,157	4	$58,017	2,400	$410,358	1	$16,614	2,000	$129,088	6,000	$88,014	19	$15,156	¥1,385,586	¥1,801,262	3.5%	97%	6,705	6,470	97%
28	OZ-02	Borena	OW-12	Mijo (Miyo)	O-43	Hidi-Lola (BH)	6,550	7,704	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,500	$256,473	1	$12,922	2,500	$161,359	7,500	$110,018	22	$17,414	¥1,040,266	¥1,352,346	23%	77%	7,704	5,940	77%
29	OZ-02	Borena	OW-13	Dugda dawa	O-44	Fincadaa (Fincawaa) (BH)	7,200	8,469	2	$37,975	2	$16,262	2	$52,079	2	$29,008	1,500	$256,473	1	$14,768	2,500	$161,359	7,500	$110,018	24	$19,143	¥1,045,629	¥1,359,318	122%	-22%	8,469	-1,882	-22%
30	OZ-03	East Shewa	OW-24	Liben	O-45	Adulala (nil.)	3,601	4,236	1	$18,987	1	$8,131	1	$26,039	1	$14,504	450	$76,942	1	$11,076	1,500	$96,816	4,500	$66,011	12	$9,575	¥492,122	¥639,759	0%	100%	4,236	4,236	100%
Oromia Region Average						**6,452**	**7,590**	**2**	**$41,350**	**2**	**$23,205**	**2**	**$78,039**	**2**	**$30,327**	**1,965**	**$321,991**	**1**	**$18,124**	**2,797**	**$182,483**	**8,390**	**$124,420**	**22**	**$16,856**	**$1,258,567**	**$1,636,137**	**101%**	**-**	**7,590**	**-**	**-**
Oromia Region Total						**193,573**	**227,695**	**62**	**$1,240,506**	**62**	**$639,077**	**62**	**$2,133,489**	**62**	**$899,262**	**58,950**	**$10,079,408**	**33**	**$557,489**	**83,900**	**$5,415,223**	**251,700**	**$3,692,197**	**651**	**$514,681**	**$37,757,001**	**$49,084,101**	-	-	-	-	-
Average of 2 regions (SNNPRS+Oromia＝82 towns)						**5,868**	**6,903**	**2**	**$41,878**	**2**	**$23,180**	**2**	**$78,107**	**2**	**$30,226**	**1,616**	**$269,355**	**1**	**$15,532**	**2,428**	**$157,709**	**7,284**	**$107,529**	**20**	**$15,453**	**$1,110,138**	**$1,443,180**	**98%**	-	**6,903**	-	-
Total of 2 regions (SNNPRS+Oromia=82 towns)						468,349	550,899	170	$3,445,570	170	$1,843,103	170	$6,198,544	170	$2,465,717	124,860	$21,348,854	89	$1,230,353	191,000	$12,327,861	573,000	$8,405,360	1,574	$1,245,251	$87,765,919	$114,095,695	-	-	-	-	-

＊Note …⑥Negative values of Beneficiary population (2015) : Due to the current water coverage as 20lpcd. In 2010 are exceeded 100%, that are considered to be Zero.

データ 7.5　優先小都市の給水施設規模と概算事業費

SNNPRS (High priority 11 towns) ＊Selected by Water potential, water quality, Water coverage and Beneficial efffect (except population, Existing rights & Disputes and Accesibility …etc.)							Town population		Tube well		Pump		Generator		Generator House		Convayance pipe line		Water Reservoir tank		Transmission pipe line		Distribution pipe line		Public faucets		Implementation cost	Project cost (Incl. consulting service)	Water coverage (2010)	Out of water coverage 100－Water coverage	Population	Beneficiary population (2015)	Beneficiary ratio (2015)
							Q'ty		Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	計	Q'ty	Cost							
No.	Zone		Woreda		Small Town		2010	2015		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$	①	②	20lpcd	④	2015	⑥	⑦
							Persons		nos.	$	nos.	$	nos.	$	nos.	$	m	$	nos.	$	m	$	m	$	nos.	$	US＄	US＄	③	=100%-③	⑤	=④×⑤	=⑥÷⑤
1	SZ-02	Hadiya	SW-05	Shashago	S-09	Dosha (BH)	1,881	2,213	1	$18,987	1	$8,131	1	$26,039	1	$14,504	450	$76,942	1	$3,692	1,500	$96,816	4,500	$66,011	6	$5,002	$474,187	$616,443	10%	90%	2,213	2,001	90%
2	SZ-03	Kembata Timbaro	SW-10	Kedia Gamela	S-14	Adilo (BH)	4,659	5,480	1	$25,316	1	$11,428	1	$44,188	1	$14,504	450	$76,942	1	$13,845	1,500	$96,816	4,500	$66,011	16	$12,387	$542,155	$704,801	16%	84%	5,480	4,603	84%
3	SZ-03	Kembata Timbaro	SW-11	Dayiboya	S-15	Daniboya (BH)	8,111	9,541	2	$50,633	2	$32,525	2	$114,889	2	$29,008	1,200	$205,179	2	$44,304	2,000	$129,088	6,000	$88,014	27	$21,566	$1,072,808	$1,394,651	42%	58%	9,541	5,534	58%
4	SZ-04	Sidama	SW-13	Dara	S-17	Kebado (BH)	8,365	9,839	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,200	$205,179	1	$16,614	2,000	$129,088	6,000	$88,014	28	$22,240	$934,171	$1,214,422	20%	80%	9,839	7,871	80%
5	SZ-06	Wolayita	SW-23	Humbo	S-30	Tabela (Humbo)(SP)	6,246	7,347	2	$25,316	2	$16,262	2	$52,079	2	$29,008	2,100	$359,063	1	$12,922	3,500	$225,903	10,500	$154,025	21	$16,607	$1,336,779	$1,737,813	36%	64%	7,347	4,702	64%
6	SZ-08	Silite	SW-33	Lanifaro (Lanfuro)	S-46	Tora (BH)	9,163	10,778	4	$75,949	4	$45,710	4	$176,752	4	$58,017	3,360	$574,501	1	$16,614	2,800	$180,723	8,400	$123,220	31	$24,363	$1,913,772	$2,487,904	30%	70%	10,778	7,545	70%
7	SZ-08	Silite	SW-35	Sankura	S-51	Mazoria (BH)	2,730	3,211	1	$18,987	1	$6,593	1	$26,039	1	$14,504	360	$61,554	1	$8,307	1,200	$77,453	3,600	$52,809	9	$7,258	$410,255	$533,332	14%	86%	3,211	2,761	86%
8	SZ-01	Gurage	SW-02	Meskan	S-53	Hamus-Gabeya(Bamo)(BH)	4,152	4,884	2	$50,633	2	$16,262	2	$52,079	2	$29,008	480	$82,072	1	$13,845	800	$51,635	2,400	$35,206	14	$11,040	$512,669	$666,470	22%	78%	4,884	3,825	78%
9	SZ-02	Hadiya	SW-05	Shashago	S-54	Hirkofofo (BH)	2,590	3,047	2	$50,633	2	$22,855	2	$88,376	2	$29,008	300	$51,295	1	$8,307	500	$32,272	1,500	$22,004	9	$6,887	$467,455	$607,692	12%	88%	3,047	2,694	88%
10	SZ-02	Hadiya	SW-06	Misrak Badawocho	S-55	Weyira Mazoria (BH)	8,346	9,817	2	$50,633	2	$32,525	2	$114,889	2	$29,008	900	$153,884	2	$49,842	1,500	$96,816	4,500	$66,011	28	$22,190	$923,696	$1,200,805	0%	100%	9,817	9,817	100%
11	SZ-06	Wolayita	SW-38	Sodo Zuria	S-59	Dalbo ~~Wegere~~ Atowa (SP)	4,772	5,613	2	$25,316	2	$16,262	2	$52,079	2	$29,008	900	$153,884	1	$13,845	1,500	$96,816	4,500	$66,011	16	$12,688	$698,863	$908,522	6%	94%	5,613	5,276	94%
SNNPRS Average							**5,547**	**6,525**	**2**	**$39,125**	**2**	**$21,324**	**2**	**$74,187**	**2**	**$27,690**	**1,064**	**$181,863**	**1**	**$18,376**	**1,709**	**$110,311**	**5,127**	**$75,212**	**19**	**$14,748**	**$844,256**	**$1,097,532**	**19%**	**81%**	**6,525**	**5,148**	**81%**
SNNPRS Total							**61,015**	**71,770**	21	**$430,380**	21	**$234,567**	21	**$816,057**	21	**$304,589**	**11,700**	**$2,000,493**	**13**	**$202,136**	**18,800**	**$1,213,423**	**56,400**	**$827,334**	**205**	**$162,229**	**$9,286,811**	**$12,072,854**	-	-	71,770	56,630	-

Oromia region (High priority 9 towns) ＊Selected by Water potential, water quality, Water coverage and Beneficial efffect (except population, Existing rights & Disputes and Accesibility …etc.)							Town population		Tube well		Pump		Generator		Generator House		Convayance pipe line		Water Reservoir tank		Transmission pipe line		Distribution pipe line		Public faucets		Implementation cost	Project cost (Incl. consulting service)	Water coverage (2010)	Out of water coverage 100－Water coverage	Population	Beneficiary population (2015)	Beneficiary ratio (2015)
							Q'ty		Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	Cost	Q'ty	計	Q'ty	Cost							
No.	Zone		Woreda		Small Town		2010	2015		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$		Yen75,84/$	①	②	20lpcd	④	2015	⑥	⑦
							Persons		nos.	$	nos.	$	nos.	$	nos.	$	m	$	nos.	$	m	$	m	$	nos.	$	US＄	US＄	③	=100%-③	⑤	=④×⑤	=⑥÷⑤
1	OZ-04	West Arsi	OW-08	Kofele	O-10	Kofele (BH)	14,401	16,939	5	$94,937	5	$81,312	5	$287,222	5	$72,521	7,500	$1,282,367	2	$83,070	5,000	$322,719	15,000	$220,036	48	$38,289	¥3,723,707	¥4,840,820	38%	62%	16,939	10,502	62%
2	OZ-01	Arsi	OW-03	Tiyo	O-11	Kulumsa (nil)	3,472	4,084	1	$18,987	1	$6,593	1	$26,039	1	$14,504	600	$102,589	1	$7,384	2,000	$129,088	6,000	$88,014	12	$9,231	¥603,646	¥784,739	12%	88%	4,084	3,594	88%
3	OZ-01	Arsi	OW-01	Hitosa	O-12	Boru Jawi (SP)	4,446	5,230	2	$37,975	2	$26,014	2	$68,649	2	$29,008	1,200	$205,179	1	$9,230	2,000	$129,088	6,000	$88,014	15	$11,822	¥907,468	¥1,179,708	37%	63%	5,230	3,295	63%
4	OZ-01	Arsi	OW-03	Tiyo	O-29	Katar Genet (nil.)	3,953	4,650	1	$25,316	1	$11,428	1	$44,188	1	$14,504	960	$164,143	1	$11,076	3,200	$206,540	9,600	$140,823	13	$10,511	¥942,793	¥1,225,631	0%	100%	4,650	4,650	100%
5	OZ-01	Arsi	OW-20	Limana Bilbilo	O-30	Lemo Sirba (SP)	5,590	6,575	2	$50,633	2	$22,855	2	$88,376	2	$29,008	1,500	$256,473	1	$11,076	2,500	$161,359	7,500	$110,018	19	$14,862	¥1,116,992	¥1,452,089	32%	68%	6,575	4,471	68%
6	OZ-04	West Arsi	OW-22	Wondo	O-34	Bura (Busa) (BH)	5,112	6,013	2	$37,975	2	$13,186	2	$52,079	2	$29,008	1,500	$256,473	1	$9,230	2,500	$161,359	7,500	$110,018	17	$13,592	¥1,024,380	¥1,331,694	6%	94%	6,013	5,660	94%
7	OZ-04	West Arsi	OW-08	Kofele	O-40	Kabate (BH)	4,146	4,877	2	$37,975	2	$13,186	2	$52,079	2	$29,008	1,080	$184,661	1	$13,845	1,800	$116,179	5,400	$79,213	14	$11,024	¥805,753	¥1,047,479	7%	93%	4,877	4,524	93%
8	OZ-04	West Arsi	OW-14	Sheshemane	O-41	Awasho-Dhanku (BH)	7,040	8,281	4	$75,949	4	$26,371	4	$104,157	4	$58,017	2,880	$492,429	1	$19,383	2,400	$154,905	7,200	$105,617	24	$18,718	¥1,583,321	¥2,058,317	0.0%	100%	8,281	8,281	100%
9	OZ-04	West Arsi	OW-14	Sheshemane	O-42	Hursa (BH&SP)	5,700	6,705	4	$75,949	4	$26,371	4	$104,157	4	$58,017	2,400	$410,358	1	$16,614	2,000	$129,088	6,000	$88,014	19	$15,156	¥1,385,586	¥1,801,262	3.5%	97%	6,705	6,470	97%
Oromia Region Average							**5,984**	**7,039**	**3**	**$50,633**	**3**	**$25,257**	**3**	**$91,883**	**3**	**$37,066**	**2,180**	**$372,741**	**1**	**$20,101**	**2,600**	**$167,814**	**7,800**	**$114,419**	**20**	**$15,912**	**$1,343,739**	**$1,746,860**	**15%**	**85%**	**7,039**	**5,716**	**85%**
Oromia Region Total							**53,860**	**63,354**	**23**	**$455,696**	**23**	**$227,315**	**23**	**$826,946**	**23**	**$333,597**	**19,620**	**$3,354,673**	**10**	**$180,907**	**23,400**	**$1,510,324**	**70,200**	**$1,029,767**	**181**	**$143,205**	**$12,093,647**	**$15,721,740**	-	-	63,354	51,448	-

Average of 2 regions (SNNPRS+Oromia)							**5,766**	**6,782**	**2**	**$44,879**	**2**	**$23,291**	**2**	**$83,035**	**2**	**$32,378**	**1,622**	**$277,302**	**1**	**$19,238**	**2,155**	**$139,063**	**6,464**	**$94,815**	**19**	**$15,330**	**$1,093,997**	**$1,422,196**	**17%**	**83%**	**6,782**	**5,432**	**83%**
Total of 2 regions (SNNPRS+Oromia)							114,875	135,124	44	$886,076	44	$461,882	44	$1,643,003	44	$638,186	31,320	$5,355,167	23	$383,043	42,200	$2,723,747	126,600	$1,857,100	386	$305,434	$21,380,457	$27,794,595	-	-	135,124	108,079	-