

Promoting Sanitation and Hygiene to rural households:

The experience of the
Southern Nations,
Nationalities and People's
Region (SNNPR), Ethiopia

July 2008



**Synthesis
Paper**



**Research-inspired Policy and Practice
Learning in Ethiopia and the Nile region**

Promoting Sanitation and Hygiene to rural households:

**The experience of the
Southern Nations region, Ethiopia**

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Research-inspired Policy and Practice Learning in Ethiopia and the Nile region (RiPPLE) is a five-year research programme consortium funded by the UK's Department for International Development (DFID). It aims to advance evidence-based learning on water supply and sanitation (WSS) focusing specifically on issues of planning, financing, delivery and sustainability and the links between sector improvements and pro-poor economic growth.

RiPPLE Synthesis Papers present a consolidation of case studies under a RiPPLE research theme to present an abridged version of case study findings, recommendations and how to go forward.

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This is a synthesis of the case study on Sanitation and Hygiene in the Southern Nations region ('SNNPR') of Ethiopia commissioned by the RiPPLE Programme – Research-inspired Policy and Practice Learning in Ethiopia and the Nile Region (www.rippleethiopia.org/) – and carried out in 2007.

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Responsibility for the opinions presented in this report rests exclusively with the authors and the researchers, and should not be attributed to the SNNPR Bureau of Health, or other Ethiopian government institutions, WSP, or any of the other persons consulted.

Accompanying this synthesis paper are two Working Papers in which the in-country researchers report on the technical and policy aspects at greater length. These are available at: **www.rippleethiopia.org**

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List of acronyms and Amharic names

| | |
|-------------|--|
| AAU | Addis Ababa University |
| AfDB | African Development Bank |
| Alaba | A special woreda in SNNPR, one of the study woredas |
| AWD | Acute Watery Diarrhoea |
| BoARD | Bureau of Agriculture and Rural Development |
| BoE | Bureau of Education, SNNPR |
| BoFED | Bureau of Finance and Economic Development |
| BoH | Bureau of Health, SNNPR |
| BoWR | Bureau of Water Resources, SNNPR |
| Cell | sub-kebele level structures of government encompassing 20 households |
| CHP | Community Health Promoter |
| DA | Development Extension Agent, reporting to woreda (district) level Agriculture and Rural Development office |
| DFID | Department for International Development |
| EC | Ethiopian calendar |
| ESHE | 'Essential Services for Health in Ethiopia' |
| FGD | Focus Group Discussion |
| HEP | Health Extension Package or Health Extension Programme |
| HEW | Health Extension Worker |
| HH(s) | Household(s) |
| HWF | Hand Washing Facilities |
| IRC | International Water and Sanitation Centre |
| KAP | Knowledge, Attitude and Practice |
| Kebele | lowest level of government administrative structures |
| KI | Key informant |
| LPA | Learning and Practice Alliance |
| MDGs | Millennium Development Goals |
| MHSM | National Millennium Hygiene and Sanitation Movement |
| Mirab Abaya | A woreda in Gamo Gofa zone of SNNPR (also sometimes spelt 'Mierab') |
| MoARD | Ministry of Agriculture and Rural Development |
| MoE | Ministry of Education |

| | |
|-------|---|
| MoH | Ministry of Health |
| MoWR | Ministry of Water Resources |
| MoU | Memorandum of understanding |
| NGO | Non-governmental organisation |
| ODI | Overseas Development Institute |
| PHAST | Participatory Hygiene and Sanitation Transformation |
| S&H | Sanitation and Hygiene |
| SNNPR | Southern Nations Nationalities and Peoples Region |
| TPL | Traditional Pit Latrine |
| TRG | Technical Research Group |
| UAP | Universal Access Plan |
| WaSH | Water Sanitation and Hygiene |
| WSP | Water and Sanitation Programme |
| WSS | Water supply and sanitation |
| WHO | World Health Organisation |
| Zone | Government administrative structure between Region and Woreda to which the Regional council delegates coordination and administration responsibilities over woredas |

Executive summary

Initially brought to international attention as a success story by the Water and Sanitation Programme-WSP, the post-2003 Sanitation and Hygiene strategy of the regional government of the Southern Nations region (SNNPR) in Ethiopia has now been studied by a DFID-funded research and learning project, the 'RiPPLE' Programme, to look at how success was achieved – and how far.

Latrine construction and use, hand-washing and water storage/handling by households were surveyed, by quantitative and qualitative methods, in six localities (kebele) in two districts (woreda). The project also studied the policy-making process.

In both districts, the results show a substantial increase in the number of household latrines, using basic technology, achieved in a few years. Some questions do arise as to the sustainability of this wave of latrine construction in prevailing environmental conditions. In order that households (HHs) maintain a foothold on this first basic rung of the sanitation 'ladder', the aim of the regional Bureau of Health (BoH) is to arrange for further support to HHs – motivational and technical follow up. Latrine design and materials choice merit further (action) research to increase present short lifetimes of latrines. As to hygiene, the survey and interviews suggest there was some increase in awareness, although observation pointed to continued poor practices in hand washing and water storage/handling – suggesting a need for further research on HH behaviour change.

A combination of political promotion and institutional mobilisation was successful in launching and 'rolling-out' the BoH strategy as a 'movement'. Sanitation and hygiene (S&H) was made part of a basic community health package, designed to be politically attractive, and financially and administratively feasible. 'Ignition' documents were written with a strong communication orientation to persuade politicians, motivate civil servants, and build consensus for action by a range of stakeholders. Implementation tools piloted by donors in the region were opportunistically applied by the BoH, and for that donor funds leveraged, for software aspects. Hardware subsidies were not provided, with efforts focused instead on promotion of S&H to HHs via (employed) health extension workers (HEWs) supporting (volunteer) community health promoters (CHPs) who were progressively deployed within the region.

Implementation of the strategy evolved from broad-based, cross-sectoral and politically driven, to single sector (health) and professionally promoted. The kebele authorities, as part of the formal hierarchy, put their authority behind the S&H campaign to encourage HHs to construct latrines, and the HEWs and CHPs were effective 'promotional' change agents – a combination, therefore, of command (especially in the initial phase from 2003–05) and promotion (2005 onwards). Increasingly, as trained HEWs were deployed in each kebele, communication of messages on S&H improved (especially in relation to construction of latrines), and kebele officials assumed more of a role as enablers of the HEWs and CHPs, and thereby facilitators of change. Higher rates of latrine construction occurred during this second phase.

The experience in the SNNPR region is an interesting example of how vision and leadership by government can create political momentum for S&H and achieve outreach to rural communities.

Elements of the SNNPR approach are included in proposals for the 'National Millennium Hygiene and Sanitation Movement' which the federal Ministry of Health is developing, for official launch in 2008.

I. Introduction

I.1 Scope and purpose

This is a synthesis of the case studies on sanitation and hygiene (S&H) in the Southern Nations region (SNNPR) of Ethiopia commissioned by the RiPPLE Programme – Research-inspired Policy and Practice Learning in Ethiopia and the Nile Region (www.rippleethiopia.org) – carried out in 2007. RiPPLE is a research and learning project funded by the Department for International Development of the UK Government (DFID). The purpose of RiPPLE is ‘to advance evidence-based learning on water supply and sanitation (WSS) financing, delivery and sustainability that leads to measurable improvements to the equity of water and sanitation access for the poor in Ethiopia and the wider Nile region’.¹

SNNPR is located in the south-west corner of Ethiopia, adjoining the borders with Sudan and Kenya – as shown on the Map in Annex I. The region occupies 111 km², and population was estimated at 14.9 million in 2005 (according to a publication of the Bureau of Finance and Economic Development (BoFED) in June 2007), i.e. nearly 20% of the national population in c.10% of the national territory.

In 2003 – the equivalent of 1996 in the Ethiopian calendar (E.C.)² – the SNNPR Bureau of Health (BoH) begun a new community health strategy including S&H. The BoH approach focused on a small number of ‘broad-based, low-cost and high-impact oriented’ public health interventions in order to improve the status of basic health status across the region. The approach was aimed at reaching households (HHs)³ via (employed) health extension workers (HEWs) and (volunteer) community health promoters (CHPs).

One important element of this approach was to be promotion of basic latrine construction and improvement of hygiene practices. The new BoH strategy put emphasis on raising awareness of HHs on S&H and encouraging each HH to take responsibility for action. Once HHs were convinced of the importance of S&H facilities, they were encouraged to construct them from locally available materials. Hardware subsidies were not provided. HHs were to start from simple traditional pit latrines (TPL) and, subsequently, upgrade their standard as awareness grew and opportunity allowed.

Initially brought to international attention as a success story by a Field Note of the Water and Sanitation Programme (WSP, 2007), this S&H initiative of the SNNPR government has now been studied by RiPPLE, to look at how success was achieved – and how far.

This case study has been one of several sponsored by RiPPLE on WSS as an input into the SNNPR Learning & Practice Alliance (LPA), established in May 2007 with RiPPLE support, to help improve WSS in the region.

The purpose of this case study has been to conduct research on the post-2003 experience in SNNPR, identifying the salient features of the strategy towards S&H adopted by the BoH and offering, potentially, pointers for approaches to be adopted (and adapted) in other regions of Ethiopia, or in the Nile region.

¹ Description of the detailed objectives and range of activities of RiPPLE is set out at: <http://www.rippleethiopia.org/>

² i.e. where EC dates are used, add 7 years to arrive at the timing according to the international calendar.

³ Targeted at HHs, the BoH approach was not ‘community-led’ in the manner of ‘Community-Led Total Sanitation’ (CLTS). As noted in the WSP Field Note, while the BoH strategy had some features similar to those of CLTS (e.g. no hardware subsidy), CLTS has been a later introduction to Ethiopia, from 2006 onwards.

The S&H case study has comprised two principal elements: (i) investigation of the technical factors working for (or against) the success of the post-2003 S&H strategy in SNNPR, with preliminary research into the knowledge, attitude and practice (KAP) of HHs relating to construction and utilisation of HH sanitation facilities and to HH hygiene (the technical and KAP study); (ii) study of the policy and institutional factors which made a success (or otherwise) of the BoH strategy (the policy study).

Technical factors are, for example, soil type, groundwater level, presence of termites, availability and cost of suitable building materials and technical expertise, e.g. technology choices, availability of technical skills.

Due to the limited time available for this case study, financial and budgetary aspects were not considered in detail, although the policy study noted the increase in resources applied to salaries for the HEWs from the regional budget and donor grants.

The technical and KAP study used a sample of households in selected localities (kebeles – the lowest administrative unit) within two districts (woredas) in SNNPR. The woredas – selected by RiPPLE in consultation with the Regional Government – the BoH and the Bureau of Water Resources (BoWR) – were: Alaba Special woreda⁴ and Mirab Abaya woreda. The policy study focussed on the policy-making⁵ process – conception and promotion of the BoH's strategy – and policy implementation.

1.2 Definitions

Interpretations of 'sanitation' and 'hygiene' vary. As shown in Annex 2, the range of activities potentially included is wide, especially since different contexts (e.g. urban/rural) involve different means of delivering them. The focus of this study has been the challenges of improving provision of S&H to households in rural areas, and particularly the following three aspects:

- i) household facilities for human excreta disposal, e.g. latrines;
- ii) hand-washing at critical times, for example, after use of a latrine by a household member; and
- iii) facilities for safe storage of drinking water.

As will be seen below, the above aspects were incorporated in a broad programme for improvement of basic health services.

1.3 Methodologies

The information for the technical and KAP study was collected using a combination of quantitative and qualitative methods as described in Annex 3. For the policy study, key actors involved in the

⁴ The term 'special' woreda refers to woredas which are directly accountable to the Regional administration, a status given to woreda which are composed of distinct ethnic groups in the region, but not large enough to have 'zonal' status (for a definition of 'zone', see footnote 13 below).

⁵ As described in Chapter 4.1, the BoH aligned its S&H strategy within health policy already expressed at federal level. Strictly the BoH did not formulate a new policy, but rather developed a new strategy within established policy. In this synthesis report, the term 'policy-making' includes the strategising by the BoH and 'policy' is sometimes used interchangeably with 'strategy'.

initiation, formulation, communication and implementation of the post-2003 S&H strategy were consulted. To identify strengths and weaknesses of the approach of the policy, the researchers studied strategy/policy content, context and process, including institutions and other actors, and inter-actions between them. The data collection was carried out from July to October 2007.

The focus was on formal institutions of government (including overlaps with ruling party), rather than the informal structures of power within communities and HH.⁶ The system of HEWs (reporting to woreda health office and health centres) and CHPs (voluntary health workers from within the community, supported by the HEWs) provided a specific link between formal and informal systems. Responses to the survey and comments in interviews and FGDs as to why HHs were motivated to construct latrines gave indications of which actors were agents of change – and how (see further in section 4.2 below).

1.4 Establishment of LPA

RiPPLE has, in collaboration with the regional government, brought together a group of stakeholders in a learning and practice alliance (LPA) at regional level. The technical research group (TRG) focusing particularly on S&H first met in Awassa in May 2007. The findings of this case study were presented to the TRG and (full) LPA in January and February 2008 respectively – the first public dissemination of the results of this research.

⁶ The longer paper of Tefera, W., 2008, however, refers to some aspects of power relations within HHs.

2 Context

2.1 Regional – SNNPR

Before 2003, SNNPR had one of the lowest S&H coverage levels in the country, recorded (according to official figures) at 16% (BoH Health Ignition doc. No.8, 2006). The extent of the regional budget allocated to S&H was also amongst the lowest at only 0.4% of the health budget (Shiferaw Teklemariam, 2003). The scope of education on S&H was at that time limited, due to lack of appropriate strategies for community education and mobilisation (ibid). Messages on S&H were communicated when community members came to health institutions to obtain health services. The approach to S&H was supply-driven, with health authorities raising the expectations of households that incentives to improve S&H practices would be provided by government. The BoH recorded that, as a consequence, HH demand for S&H services had been low.

2.2 District – Alaba and Mirab Abaya⁷

The centre of Special Woreda Alaba, Alaba Kulito, is located 90 kms south-west of Hawassa (see map in Annex I). The altitude range is from 1,554 to 2,149 metres above sea level. The climatic zone of the woreda consists of mainly mid-land (weinadega) (86% of woreda) and low-land (kola) (14%). The mean annual temperature ranges from 17 to 20°C. The main soil type in Alaba is mostly silt and ash (white, volcanic) characterised by high water infiltration capacity and fragility. Such unstable soils may cause latrine pits to collapse.

Administratively, the woreda is organized into 78 kebeles, 2 urban and 76 rural. Population size of the woreda according to official figures as of July 2005, was 251,385, with a total land area of 974km², the average population density was therefore 258 inhabitants per sq. km. Population growth is estimated at 3% per annum. The proportion of male to female was about 49% to 51% respectively. The dominant ethnic group is Alaba followed by Silte; the dominant religion is Islam (94%).

Alaba faces water scarcity problems. Annual rainfall varies from 857 to 1,085 millimetres. The main sources of safe water are deep bore holes (with water tables in the 150-300 metres range) and rainwater harvesting. The water supply coverage (source: woreda Water Resources Office) was 41% in 2007. Man-made ponds are also used as alternative water sources.

Mirab Abaya woreda is located in Gamogofa Zone – see map in Annex I. The centre of the woreda is Mirab Abaya, 230 kms from Awassa. Lake Abaya is situated near Mirab Abaya town (the name of the woreda means 'West of Lake Abaya'). The woreda land area is c.1,613 sq. km, with a total population in 2006 of 69,036, average population density is 43 inhabitants per sq. km⁸. Male to female ratio was 1:1.027. The majority (91.8%) of the population live in rural areas.

The woreda is composed of three climatic zones: lowland (62%), mid-land (27%) and highland areas (11%). Soil types are predominantly sandy (55%), silt (30%), and clay (10-15%).

⁷ The principal source of this information is the Alaba woreda Agricultural and Rural Development Office, Jan 2008, as cited in Tefera, W., 2008.

⁸ As noted in section 3.1. below, the take-up of latrines was higher in the kebeles studied in one district, as compared with the study areas in the other; it is in the former district that the population density (the average density across the whole district) is significantly lower.

Administratively, the woreda is divided into 24 kebeles, 1 urban and 23 rural. The dominant ethnic group is Gamo (85%) followed by Wolayita (9%). The main religions are Protestant (52%), orthodox Christian (41%), Muslim (5%) and Catholic (2%).

Coverage in water supply was 27% in 2006 (source: woreda Water Development Office). The main water source is ground water found at a depth range of 6 to 108 metres. Of the 57 water schemes, about 40 were functional (source woreda Water Development Office, 2006⁹).

The three kebeles selected from each woreda were: in Alaba: Hologeba Kukie, Galeto, Amata; in Mirab Abaya: Omo Lante, Mole and Wojjifo.

2.3 National – Ethiopia

The goal of achieving universal access to water supply and S&H in Ethiopia is a key government objective. The Universal Access Plan (UAP) expresses this goal for water. For S&H, the National Millennium Hygiene & Sanitation Movement (MHSM) is the vehicle which the federal Ministry of Health has been developing for achievement of the goal – see further in section 5.1.

⁹ A further case study commissioned by RiPPLE in 2007 on the ‘sustainability’ of water points has investigated levels of functionality in both districts: see the RiPPLE website: www.rippleethiopia.org/pdfs/infosheets/GaP.pdf

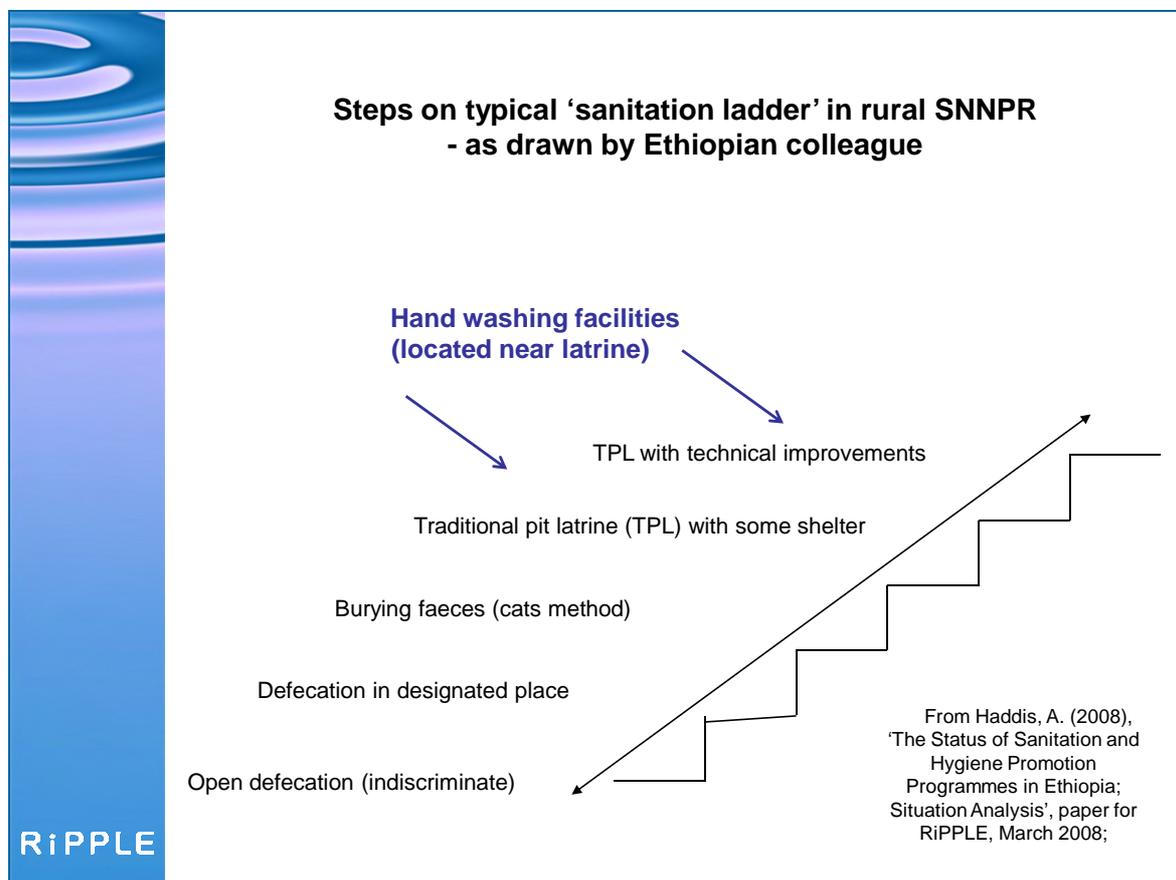
3 Findings – from the technical and KAP studies

Latrine construction and use, hand-washing and water storage/handling by households were surveyed by the researchers, in the sample HHs in the two districts, in the six localities. Characteristics of the respondents to the questionnaire included the following: gender: 44% male, 56% female; age range: 15 to 99 years; average family size: similar in the two woreda, namely 7.04 and 6.49 respectively.

3.1 Main findings

The results of the research show a substantial increase in the number of household latrines, in a few years, from 16% to 94% coverage in Mirab Abaya and 10% to 69% in Alaba (in each case in the kebeles studied). Despite a certain percentage of latrine owners who dropped back off the 'sanitation ladder' – see Figure below depicting sanitation 'stairs' (10% in Alaba, which seems significant; 2% in Mirab Abaya) – there is, overall, evidence of high impact of the BoH approach in the study areas. The use of locally-available materials in the construction of latrines meant the BoH approach was indeed low cost. In part, the large jump in S&H coverage is accounted for by the previously low level.

Some questions do arise as to the sustainability of this wave of latrine construction, for instance, in order to sustain high latrine coverage, technical improvements may be needed. Good designs and durable construction, even with low-cost materials, contribute to proper functioning and lasting of latrines. It also motivates people to use latrines. The field observation suggests that hand washing and water storage/handling practices are still poor. The technical and behavioural challenges have been listed below.



The following sub-sections are the main findings relating to the S&H approach adopted by the BoH.

3.2 Main technical findings

- Latrine coverage: in Mirab Abaya coverage increased by some 78% from \approx 16 (2003) to 94% (2007); in Alaba by some 59% from \approx 10 (2002) to 69% (2007);
- Latrine construction: radical construction rate observed in recent years: 80-90% of present latrines constructed in last 2 years (mid-2005 to mid-2007) in both *woredas*; more than 50% of ever-built latrines were constructed in the past 2-3 years (in both *woredas*);



- Latrine life: the data indicate short life span of household latrines, about 1–3 years only;
- Use of local materials: all latrines made of local materials; about 16% have concrete slab or 'sanplat'; probably many or most will have been provided by NGOs as free slabs;
- Latrine use: while HHs claim 100% latrine use, observation by proxy points to 93% of latrines utilised;
- Hand washing facilities (HWF) and practice: good (declared) knowledge on hand washing (according to questionnaire); but actual practice seems poor; HWFs present in 82% of HHs; however, most (64%) located inside the house; only 6% near the latrine.

3.3 Main findings on Knowledge, attitude and practice – KAP

- A significant rise in awareness and knowledge on S&H (e.g. in relation to the benefits of hand-washing), which led to some changes in attitude and behaviour (new HWFs, although two-thirds of HWFs were found inside houses reflecting a predominant practice of hand-washing before meals, but much less after using a latrine, with also little use of soap/detergents);
- Through the work of HEWs and CHPs: positive dialogue at community and household level; the result was effective mobilisation (a broad-based result);
- Empowerment of HHs by HEWs and CHPs: resulted in ownership of S&H process by the community. HHs construct their own latrine and hand-washing facility; both men and women participated in the process. However, decision-making on design and construction was mostly by men; women were hardly involved in siting and design, although they were involved in providing materials and plastering.

The research identified several main factors that supported the above technical and KAP achievements. These (success) actors are the following (categorised in three groups):-

3.3.1 As related to politicians and health workers:

- HEWs and CHPs through the Health Extension Package (HEP), led the grass-roots community approach in S&H;

- Woreda health staff and HEWs had performance contracts with their supervisors (see further below);
- Kebele councillors and cells were involved in the HEP; they could enforce policy on HH latrine construction, although this was not common (see further below);
- Political accountability to the woreda was expected from councillors.

3.3.2 *As related to technical aspects:*

- promotion of locally available materials meant that latrines became more affordable to the poor (although in locations where little wood is available, logs for the latrine floor may be expensive for some families – an issue of affordability);
- acceptance of any type of pit or latrine means that any latrine is counted as 'covered', giving high coverage figures;
- the research did not point to presence of masons or other artisans currently supplying sanitation goods/services, at least in the rural context of the kebeles selected for study in the two woreda, nor was the need for skilled artisans raised in the FGDs conducted by this study: HHs constructed their own latrines, based on instructions (when available) of CHPs, with few (the more wealthy) calling upon carpenters to build the superstructure.

3.3.3 *As related to behaviour:*

- Cultural attitude has moved to less acceptance of open defecation, i.e. some collective behavioural change (shame appears to have been a persuasive trigger to behaviour change by individual HHs);
- Increased demand for privacy among women noticed, including calls for separate facilities for women in order not to share with, for example, in-laws.

3.4 Challenges which remain

However, challenges remain if HHs are not to drop off the sanitation ladder (return to open defecation) and 100% coverage/use is to be achieved.

The challenges, first, **as related to politicians and health workers**, are as follows. A lack of technical support from higher level (at woreda level) to HEWs and to CHPs due to lack of resources (e.g. on knowledge as to most suitable designs for latrines and best places for siting latrines). A drop-out of voluntary CHPs because of lack of incentives and motivation. Lack of follow-up and refresher courses for CHPs (S&H is part of a total HEP package), again due to lack of resources. Limited monitoring on S&H at kebele and woreda levels: this was seen to be due, partly, to lack of a monitoring system and guidelines. At community level, monitoring is mainly done by HEWs with the support of CHPs, primarily focusing on access of HHs to sanitation facilities, with the number of latrines constructed taken as an indicator. Changes in S&H behaviour of households are **not**

monitored.¹⁰ Also noted by the research was a lack of consistency in mobilisation of follow-up issues by kebele and woreda officials.

In relation to technical aspects, challenges are as follows. Lack of durable construction materials due to limits on HH's resources and little innovation in building materials. Lack of good latrine designs which lead to problems during flooding, in loose soils and high groundwater tables (e.g. in Mirab Abaya). In some cases, the short lifetime of latrine pits is due to collapsing: the actual reasons vary by location (as found in the study), particularly in the study areas floods and loose soils. Short latrine life means that HHs have to dig a new pit and construct a new floor and superstructure, involving further investment in materials and more labour/energy. It means that HHs may temporarily drop off the sanitation ladder for at least some months (until floods are over), or some years (until motivation to build a latrine returns). If pit collapse occurs too frequently, it may discourage HHs altogether.



Meanwhile, many latrines have no doors and poor walls – features of traditional mode of construction with a lack of innovation. Foul smell and fly-breeding arise from poor design and cleaning/maintenance. There is a problem of termites (e.g. in Alaba) from failure to use termite-resistant timber or low-cost concrete slabs. Responses to the survey and FGDs revealed that latrines are not women- and child-friendly (because of limited privacy, holes too large or poor floors). Women were not involved in latrine design. Provision of free slabs by NGOs creates expectations, increases waiting time to actual construction as slab production/delivery limited and promotes dependency on aid. The most promising potential solution would be to promote HHs to use and buy slabs, and to stimulate local

entrepreneurs (such as are present) to produce durable low-cost latrine slabs. Ecological sanitation has not yet been considered as a possibility. At the time of conducting the study, examples of ventilated improved pit (VIP) latrines (representing a rise up the sanitation ladder) were not seen in the rural communities visited.

On behavioural aspects, the following issues were highlighted by the research. Poor cleaning practice of latrine (it is not a routine) has discouraged HH latrine use (due to smells, flies and infection risks).

Hand washing practice with water (and soap or equivalent) is weak. Hand washing facilities (HWFs) are poorly designed and dirty water is often used, with, also, HWFs not located near the latrine – all of which results in dirty hands with high risks of transmission of faecal-oral diseases. Lack of public latrines at gathering places forces people to open defecation, which may undermine their adapted behaviour of latrine use at home.



¹⁰ One challenge is the dimension of the task of monitoring with, e.g. each HEW responsible for 500 to 1,000 HHs.

4 Findings – from the policy study

4.1 Development of the BoH strategy

In 2003¹¹, an internal assessment made by the BoH noted the low priority attributed to S&H by the regional government, despite attention to S&H in national health policy (issued in 1993). A review by the BoH in 2003 highlighted that much of the disease burden in SNNPR was linked, directly or indirectly, to poor S&H practices (Shiferaw Teklemariam, 2003). Also, five of the principal causes of morbidity were associated with poor community awareness about basic health (interview with BoH, 2007).

At the outset of preparation of the BoH strategy, S&H was subsumed in a wider movement for improvement of basic health services in the region, the Health Extension Programme (HEP) – with, amongst a total of 17 elements, 7 on 'Hygiene and Environmental Sanitation', including 3 relating to S&H (see Annex 2.). Alongside curative health measures, a major focus of the HEP as a whole was on preventative health.

Following the 2003 assessment, a comprehensive document was developed on basic community health education including a strengthened S&H component. This document was the first in what became a series of health 'ignition' (or 'revitalisation') documents (interview with BoH, 2007) for engaging politicians, government and NGOs in the region. The ignition documents addressed a range of issues from basic health education and awareness, to citizens' right to basic health and accountability of health service institutions, as well as financing and management of the sector, ongoing civil service reform, performance in implementation of five year strategies etc.

From the outset, promotion of S&H occupied an important place. The key elements of the S&H component, as described by the BoH, were: 'broad based', 'household-centered', 'low cost' (that is hardware subsidy-free, promoting use of local materials) - for 'high impact'. The ignition and revitalisation documents were designed to raise awareness, build consensus and mobilise support to basic health improvement initiatives. The system was called 'cascading advocacy', communication of messages down through the different levels of government (regional, woreda and kebele). It was targeted at officials of several sectors – not only health, but also water, education, agriculture. Lead responsibility for this basic community health package (implementation of the HEP) nevertheless rested with the health authorities.

The proposed BoH strategy, including the manner of its promotion, was presented by the Head of BoH at that time, Dr Schiferaw Teklemariam, to the Regional Cabinet (which includes the Heads of the regional Bureaus) and was approved. The factors which made the BoH proposals acceptable to the Regional Cabinet, in terms of their content, were:-

- the S&H strategy was packaged, in the health ignition/revitalisation documents, in such a way as to make it politically attractive (or at least not politically offensive) to Bureau heads and other high-level politicians at regional level, in order to win their backing – endorsement of the BoH approach;

¹¹ A full description of the events in SNNPR from 2003 relating to S&H is set out in the longer paper of Terefe, B. (2008).

- the S&H strategy, as outlined by the BoH, did not conflict with the existing policies at a federal level, e.g. the Ethiopia National Health Policy of 1993¹²; i.e. it was implementable at regional level;
- the messages accompanying the strategy, relating to a right to basic health, participation in health service decision-making, accountability of health service institutions to citizens, were politically resonant (in the political context prevailing at that time – see below), adding to attractiveness of the package;
- the ignition documents used layman’s instead of technical language;
- a striking feature was that the key elements of the S&H strategy were formulated in brief and general terms, not in detail as in the conventional manner of documenting a policy strategy; this allowed flexibility for the BoH approach to evolve, incorporating within it new initiatives as they were successfully piloted (e.g. ESHE – see below);
- the approach was manageable within existing financial resources, e.g. removing the hardware subsidy reduced the cost, with implementation mainly relying on HHS’ own resources;
- the BoH approach was also administratively feasible in that it would rely, essentially, on existing government structures – the additional reinforcing element being the CHPs;
- in technical terms, the approach of promoting construction of basic-pit latrines using local materials did not pose, it was argued, insurmountable technological problems: the traditional pit latrine (TPL) was a technology which could be made available in rural communities.

Once cabinet approval had been obtained, the health revitalisation documents were first shared internally in BoH, then discussed at zone¹³, woreda and kebele levels, with the health sector leading. Other sector staff and NGOs participated in the discussions. At woreda level, the woreda councils took responsibility with the health office to communicate the revitalisation messages down to kebele level where the kebele council was lead. At the outset, the ‘cascading down’ was taken up by several bureaus (BoWR, BoE and BoARD, as well as BoH) and strongly based on political support (see in section 4.2. below under ‘actors’). At that time, there were no HEWs across the region, nor CHPs (although the BoH engaged volunteers at kebele level who operated in practice like CHPs). Then, as the HEPs were deployed, the implementation of the strategy became more ‘professionalised’ – and at the same time more narrowly confined within BoH channels (see also under ‘actors’ below).

The means of promoting basic health to communities was provided by an initiative external to the BoH, a USAID-funded project, called ‘Essential Services for Health in Ethiopia’ (ESHE), which had, since 2001, been piloting in SNNPR a programme promoting community basic health awareness using volunteers selected from the community. Each such volunteer CHP was selected for c.50-60 households including a requirement that at least 50% be women. S/he received a short initial training of 2 days to 1 week (with refresher trainings once yearly) for communicating simple do-able actions on the elements of the HEP: i.e on S&H (basic pit latrine construction, hand washing and safe water storage), immunisation, family planning, malaria prevention and HIV/AIDS. The CHPs reported to the HEWs. The HEWs reported formally to health officials at woreda level and to health centres, where one health centre oversaw five health posts (with the objective of having two HEWs at kebele level

¹² The 1993 policy had identified environmental health as one priority area and the BoH could argue that use of informal community structures for S&H education found a strong base in the existing body of policy.

¹³ Zones are the third, intermediate tier of government structure in the decentralisation system, between the region and the woreda, to which the regional council delegates coordination and administration responsibilities over woredas.

in every kebele). Starting in 2001, the ESHE programme has been piloted in four woredas in SNNPR including Alaba and Mirab Abaya. After a year, the pilot was evaluated (within the first half of 2003) and found to be a success. The BoH decided to adopt the approach across the region and ESHE agreed to fund its application in a total of 20 woredas in the region (interview with ESHE, 2007).

The mode of working via CHPs took health education to HHs rather than waiting for them to come to health service institutions. Community conversations, coffee ceremonies and other social gatherings provided a form of behavioural change communication which was interactive, based on dialogue. Coming themselves from the communities, CHPs could be more easily accepted and listened to by community members (interview with BoH, 2007).

Another initiative adopted into the regional strategy was the 'Participatory Hygiene and Sanitation Transformation' (PHAST) approach. A review of progress in implementation of the BoH strategy, conducted by UNICEF and BoH in 2005, confirmed strong political commitment to improved education and the success of the advocacy campaign in stimulating latrine construction, but showed that messaging on hygiene practice needed to be strengthened. UNICEF supported the scaling up of the PHAST approach in the region by training health office staff and 'front-line' implementers including HEWs, sanitarians working within the woreda health offices and teachers in schools (interview with UNICEF, 2007).

4.2 Main findings

Contextual factors supported the launch and implementation of the S&H strategy, which the BoH applied to its advantage. The ignition in late 2003 and 2004 coincided with rallies for the 2005 national election. The manner of presentation to the regional cabinet was in line with the political need of the ruling party to solicit public support. Meanwhile, as noted above, the success of the CHP pilot¹⁴ and presence of PHAST provided the tools required for outreach to HHs.

After launch of the S&H strategy, several factors helped to keep S&H issues on the political agenda of the regional government:

- the initiation in 2004 of the HEP reinforced the focus on environmental health, serving to institutionalise the movement for improvement of basic health, including S&H;
- the implementation of WASH programs in selected kebeles, supported by the World Bank and the African Development Bank (AfDB), and the formation of steering committees from various sector offices for WASH implementation, backed by the civil society WASH movement;
- the recurrent outbreak of acute watery diarrhoea (AWD) was another focusing event, provoking employment of more sanitarians.

As to the roles of specific actors, the leadership of the BoH was key. The then Head of the BoH, Dr. Shiferaw Teklemariam, combined technical knowledge of preventative health, based on his background as a health professional, with strong communication skills and the vision to direct those skills. Heads of regional bureaus are political appointees and the personal qualities of the Head of the BoH were reinforced by his membership of the ruling political party. He was also ably and actively

¹⁴ It may be that the ESHE pilot, ongoing since 2001, had influenced the BoH from an early stage; some of the forward actions suggested in the 2003 assessment report reflected the CHP strategy (the CHP model still had to be promoted politically).

supported by senior officials in the BoH Department of Disease Prevention and Control and Dept. of Planning and Programming who helped develop the S&H strategy and contributed to preparation of the health revitalization documents.

The approval of the S&H strategy by the regional cabinet provided the political lever to 'institutionalise' the policy, putting it on the agendas of bureaus (including the BoH) to implement. The Bureau of Agriculture and Rural Development (BoARD) was active in support, through its local level development extension workers (DAs), although the interviews revealed that in practice, over time, that support tailed off.

The cascading advocacy was formalised in performance contracts which set out targets for implementation of the S&H strategy. Such contracts were signed by health officials in the BoH. The BoH signed agreements on S&H targets with zonal/woreda health offices, with, in turn, HEWs signing up to performance agreements on S&H targets with woreda health offices. Also, in some instances, HEWs may have agreed performance targets with CHPs.¹⁵

The BoH policy was striking, in a country with a high aid dependency, for being regionally-inspired, rather than driven by donors. As seen above, it was, however, supported by donors, with ideas and finance coming from international sources, such as the CHP approach (an experience taken by USAID from Madagascar) and, later, PHAST, as well as international NGOs which have financially supported the implementation of the approach, training CHPs. Despite the BoH approach being 'low-cost' from a hardware perspective, implementation of course required support to the 'software' elements, (e.g. CHPs) essential to 'roll-out', and the donors provided critical funding for these implementation aspects.

The kebele leaders – kebele chairmen and other kebele cabinet members – collaborated with the HEWs, linking HEWs (as these were increasingly deployed). This collaboration was applied by HEWs to exert influence on HHs (interview with HEWs in Alaba and Mirab Abaya, 2007).

The picture which emerges is of implementation of the S&H strategy in two phases:-

- In the first phase, 2003-05, construction of latrines was promoted by a broad campaign involving several sectors (as alluded above, not by health authorities alone), kebele leaders and CHPs. In this phase, the 'command' aspect of the kebele authorities was important – the key driving force behind latrine construction. Kebeles have authority as part of the formal institutional (and political) hierarchy – the 'obeying of orders from above' being a common feature of social interaction in Ethiopia (Vaughan & Tronvoll, 2003). Kebele chairmen and other kebele cabinet members collaborated with Cell leaders to communicate the community health policy (amongst other government policies) downwards. HHs built latrines, but frequently the latrines were not utilised – in the absence of adequate technical support to guide construction with quality of messages on S&H also low at that stage. The CHPs received only 2 days' training and technical support from HEWs was required to convert that training into effective CHP practice;
- In the second phase, post-2005, promotion, rather than command, became the significant driver of decisions by HHs to make changes to S&H facilities/practices, with technical support from the HEWs and CHPs. In this period, kebele influence still played its part, although the kebeles

¹⁵ Signing of performance agreements by officials at the different levels within the *health* sector clearly occurred. In the interviews carried out during the policy study, however, it was not possible to verify whether *other* sectors were involved in signing performance contracts, nor whether *woreda* and *zonal* officials signed such agreements with the BoH.

assumed more a role as facilitators and enablers of the work of the CHPs/HEWs – kebele officials still being aware of the political importance accorded to the S&H as part of the HEP. In addition, HEWs indicated that they sometimes relied on the authority of the kebele to ensure that HHs were constructing latrines. Increased rates of latrine construction by HHs occurred in this second phase.

From 2005 onwards, the deployment of the trained HEWs in each kebele raised the quality of message communication on S&H, including technical input on construction of latrines. The engagement of CHPs significantly raised the number of community level communicators from the previous 1 community health agent for 2,000 HHs in a kebele to 12-28 CHPs for a kebele, or one CHP per c.50 households, thereby reaching a much wider audience. HH representatives responding to the questionnaire stated that their primary sources of S&H messages were CHPs and HEWs: 35% of HHs indicated that they heard about S&H messages for the first time from CHPs, 31% cited HEWs and 25% from kebele officials. With regards to latrine use, the messaging of HEWs and CHPs was more effective: survey responses indicate that, after receiving messages from kebeles and BoARD extension development agents (DAs) alone, a higher percentage of HHs built latrines but failed to use them.

The above picture was corroborated by comments of two interviewees, a HEW in Galetto, Alaba and an official at the women's development desk, Alaba. They expressed the view to researchers that enforcement sanctions did not work if unaccompanied with promotion and they cited examples in the early days of the campaign, 2003/04, when HHs dug open pits because of orders from local officials, but did not use them. Once the HEWs were in place in a kebele, the BoH's approach to S&H combined information and encouragement of HHs, not just commands to them, and this combination was more effective. As to rewards to HHs for improving S&H practices, the HEP has since 2005 awarded graduation certificates for HHs which have implemented all 17 elements of the HEP.

In summary, in the motivation of HHs to construct latrines, the HEWs and CHPs, as the 'frontline' health workers, were progressively significant to the success of the S&H strategy, as promotional change agents, while the kebele authorities contributed throughout, in command and facilitation roles. In both woredas, it was a small minority of respondents to the survey who stated that they had built their latrine out of fear of punishment: the application of sanctions on non-compliance seems to have been exerted sparingly. The regional Public Health Proclamation of 2004 had decreed that failure to construct inter alia sanitation facilities was punishable at law (e.g. by fines). In practice, the lack of by-laws under the Proclamation meant that there was no standard code of sanctions. Officials in kebeles applied what each thought was appropriate, e.g. with threats of punishment (interviews with HEWs/CHPs). While the kebeles applied their authority in the form of commands, therefore, they rarely resorted to actual enforcement – 'policing' by kebeles of the latrine campaign appears to have been limited.

At a later stage in implementation of the S&H strategy, review of progress was incorporated into the existing health sector review process, which includes semi-annual meetings in the regional capital, Awassa (see below, under 'Issues for Further Research').

4.3 Challenges remaining

HEWs and CHPs have commented to the researchers on recent lack of incentives to their work. Initially, the HEWs who performed best were publicly recognised and this served as a good



motivating factor. However, that recognition system has not been consistently applied which has been discouraging to some HEWs (HEW at Galeto, Alaba). Similarly, CHPs complain of lack of regular recognition of their contributions to S&H implementation. In the initial period of 2003 and 2004, their efforts were rewarded by, for example, certificates in public festivals and gatherings prepared by BoH, but, since, this practice has apparently ceased.

Quotas were assigned to different health line offices of the number of latrines that needed to be built or the coverage levels to be reached annually. Assignment of quotas combined with performance agreements helped to create accountability and responsibility of different actors to raise coverage. However, the quotas were sometimes very ambitious and the focus on quotas

(by their nature, directed at coverage as an easy to measure indicator) diverted attention from utilisation of latrines and behavioural change issues (interview with Rural Women's Development desk in Alaba).

5 Conclusions of the case study

5.1 Insights from the SNNPR experience

This study has yielded the following insights:-

5.1.1 *Policy, institutional and organisational insights:*

- the BoH initiative was regionally-inspired, not donor-driven;
- the strategy was expressed in general terms, aligned with the existing body of policy, and presented in such a way as to make it politically attractive to the regional cabinet;
- promotion of the BoH's approach to community health, including its S&H elements, coincided with election time and resonated with the values and goals of the ruling party; that meant that the political will could be more readily applied through the official hierarchy (administrative and political);
- this combined with the financial and administrative feasibility of the strategy in terms of its content;
- the ignition documents were communication-oriented documents which succeeded in not only persuading politicians, but also inspiring senior civil servants and mobilising government officials below them;
- conventional technical policy documentation was available at federal level, with which the BoH approach fitted; health officials in the region readily and actively embraced the approach;
- implementation tools piloted by donors in the region were opportunistically applied by the BoH, and donor funds leveraged (for software aspects);
- the strategy implementation evolved from broad-based, cross-sectoral and politically driven, to single sector (health) and professionally promoted;
- the two cadres intensively involved in outreach to communities were the HEWs (financed by regional government and donors) and CHPs (volunteers);
- over time, reduction in rewards and recognition to CHPs is in danger of reducing levels of motivation.

5.1.2 *Technical and KAP insights:*

- the results of the research show a substantial increase in the number of HH latrines, in a few years; despite a certain percentage of latrine owners who dropped back off the 'sanitation ladder', there is, overall, evidence of high impact of the BoH approach in the study areas;
- the use of locally-available materials in latrine construction meant the BoH approach was indeed low cost;
- local environmental conditions, such as loose soils, high groundwater tables, floods, termites attacking construction timber, and lack of timber threaten, however, to make the lifetime of latrines short; i.e. questions do arise as to the sustainability of this wave of latrine construction (e.g. need for technical innovative improvements) if HHs are not to drop off the sanitation ladder and stop using a latrine;

- field observation suggest a high rate of latrine use, but reveal still poor hand washing and water storage/handling practices (despite respondents to the survey declaring much higher rates); if the BoH approach is not to be reduced to just 'latrine counting', the behavioural aspects need more effective attention;
- amongst an otherwise strong communication campaign, this echoes one weakness in the way messages were communicated, whereby the focus given to coverage – responding to the ambitious quotas for latrine construction – diverted attention from latrine utilisation and personal hygiene, those being behavioural issues harder to change than hardware.



Overall, the above activities – a combination of political promotion, institutional mobilisation and capacity strengthening of front-line human resources – achieved a large measure of success in launching and 'rolling-out' the S&H policy, which (as noted above) resulted in a substantial rise in latrine construction. Five years later the BoH maintains this policy and ingredients of it are being applied and adapted at federal level for further application.

As mentioned in section 2.3, the MHSM is the vehicle which the federal Ministry of Health has been developing – to be launched in 2008 – for achievement of the universal access goal in relation to S&H. The declared aim of the MHSM of the MoH is: 'Sanitising (cleaning up) all Homes, Kebeles and Towns for the new millennium' (E.C.). The MoH's approach has key elements which the Minister of State employed in SNNPR (in his former position as Head of the regional BoH), as studied by this case study.

5.2 Issues for further research

When the SNNPR TRG and LPA met in the first quarter of 2008, they requested that RiPPLE facilitate further collaborative research on S&H.

A key proposed research priority area is information management in relation to S&H (and WSS generally). Issues to investigate in relation to S&H are: how to strengthen the information collection system so as to be more supportive of the front-line health workers (HEWs and CHPs), including incentivising the CHPs to carry out community-based monitoring with households, with sensitivity to equity issues, while providing reliable information for aggregation and use at woreda, regional and federal level to improve accountability (thereby increasing the value of the system of progress review).

A second area where more practical research is merited is the technical and behavioural aspects. This case study has served to provide some preliminary insights, but the behavioural complexities, interacting with environmental, technical and socio-cultural circumstances, are such that further research is needed. That research could usefully field-test selected technical innovations in S&H and measure the cost-effectiveness in mitigating experienced problems. It could also study which approaches and methodologies implemented by HEWs and CHPs have greater cost-effectiveness for arriving at S&H behavioural change – as seen in the behaviour of different categories of HHs and HH members (taking into account gender aspects and age, e.g. widowed women).

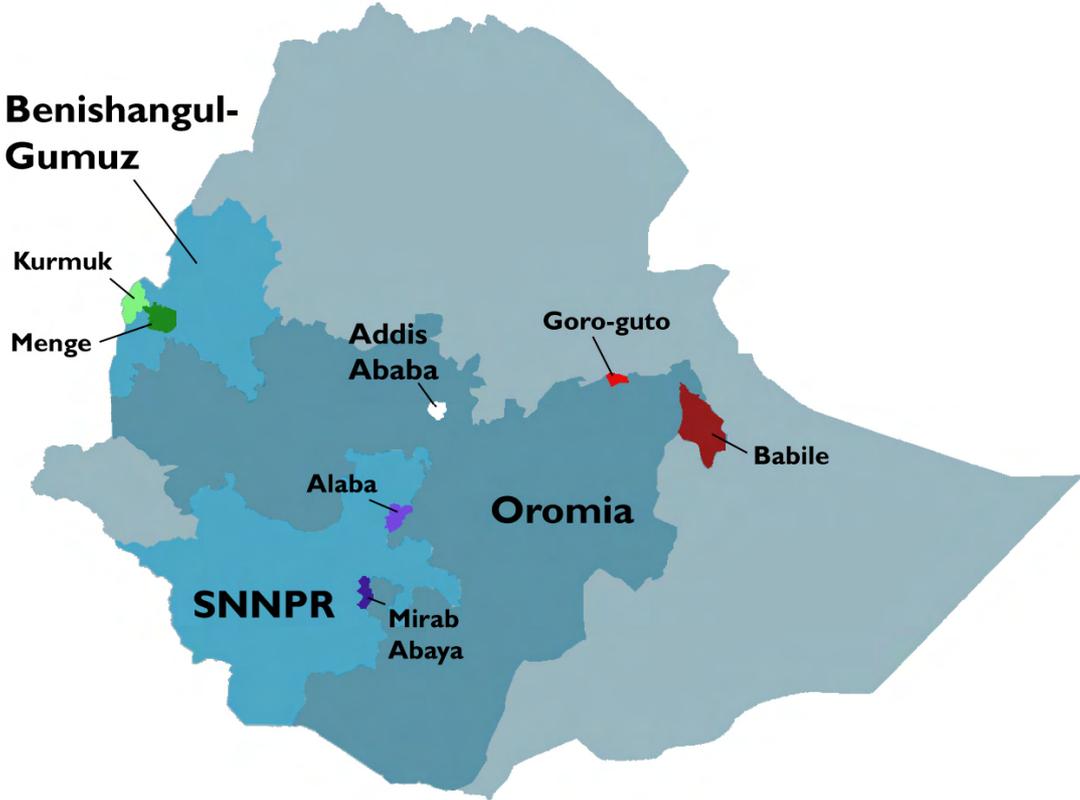
A third area relates to finance: how funds and other resources invested in rural S&H trigger improvements which are significant, affordable, and cost-effective – validated by reliable reporting.

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Annex I: Map of Ethiopia,

This map shows the areas in which RiPPLE works, including the Southern Nations, Nationalities and Peoples region – SNNPR.



Annex 2: Definitions of Sanitation and Hygiene; Elements of the Health Extension Programme

The range of activities referred to by the terms 'sanitation' and 'hygiene' is wide, varying in different contexts (e.g. urban/rural) which involve different means of delivering them. As stated in section 1.2, the focus of this study has been the challenges of improving provision of S&H to households in rural areas, and particularly the three aspects which are highlighted in Box A.

Box A: Broad elements encompassing Sanitation, Hygiene, and Waste Water Management¹⁶

| Sanitation | Hygiene | Waste water management |
|--|--|--|
| <p><i>Safe collection, storage, treatment and disposal of human excreta (faeces and urine)</i></p> <p>Management/re-use/recycling of solid waste (rubbish)</p> <p>Collection and management of industrial waste products</p> <p>Management of hazardous wastes (including hospital wastes, chemical/ radio-active and other dangerous substances).</p> | <p><i>Safe water storage (by households)</i></p> <p><i>Safe hand washing practices</i></p> <p>Safe treatment of food stuffs.</p> | <p>Drainage and disposal/ re-use/recycling of household wastewater (also referred to as 'grey water')</p> <p>Drainage of stormwater</p> <p>Treatment and disposal/ re-use/recycling of sewage effluents.</p> |

Source: Evans (2005) - emphasis added

The MoH's Health Extension Programme (HEP) comprises a total of 17 elements of which 7 relate to 'Hygiene and Environmental Sanitation': see Box B. The three aspects focussed on in this case study are highlighted in Box B.

Box B: Elements of the MoH's Health Extension Programme-HEP (emphasis added)

| | |
|---|--|
| <p>1. Hygiene and Environmental Sanitation</p> <ul style="list-style-type: none"> • Excreta disposal • Solid and liquid waste disposal • Water quality control • Food hygiene • Proper housing • Arthropods and rodent control • Personal hygiene <p>2. Disease Prevention and Control</p> <ul style="list-style-type: none"> • HIV/AIDS and other sexually transmitted disease prevention & control • TB prevention and control • Malaria prevention and control • First Aid | <p>3. Family Health Service</p> <ul style="list-style-type: none"> • Maternal and child health • Family Planning • Immunisation • Adolescent Reproductive Health • Nutrition <p>4. Health Education and Communication</p> |
|---|--|

¹⁶ In Box A, the usual order of presentation of 'WASH' has been adjusted. The key feature of the WASH approach is that it promotes the three components in combination: according to WASH, they go together in policies and practice.

Annex 3: Methodologies

The information for the technical and KAP study was collected using (i) a structured and pre-tested questionnaire for households, selected according to systematic random sampling; (ii) a semi-structured, open-ended schedule of questions for focus group discussions (FGDs) with HEWs, CHPs, and community members, as well as key informant (KI) interviews with e.g. woreda council officers and local community leaders; and (iii) a check list for observation of S&H behaviour and facilities (e.g. use of latrines and hand-washing).

The observation of S&H behaviour of household members was important as a complement to the other data: accumulated experience has shown that observation is important to corroborate the declarations made by respondents to questionnaires on their use of sanitation facilities and their hygiene practices.

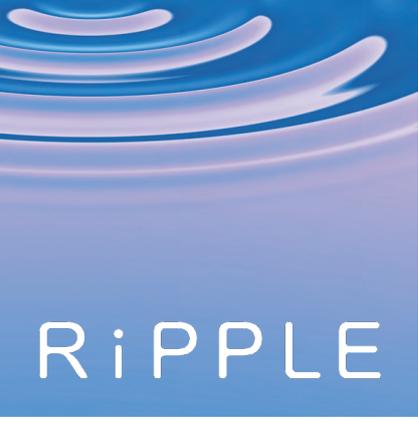
The technical and KAP data were collected by ten graduating students from the Department of Environmental Health of Hawassa University, supervised by two staff members of the same Department, as well as the principal researchers.

The researchers received support from woreda council and health offices. Community leaders participated in the study, together with local translators. Selection of participants for the FGDs and KIs was made in collaboration with HEWs.

The sample size was a total of 392 HHs for the KAP study and 396 HHs for the technical study from the two woreda, with one in five HHs, i.e. 76 HHs, subject to observation. Additionally, 9 FGDs and 5 KI interviews were conducted on technical and KAP aspects.

The policy study carried out semi-structured interviews with health, education and water bureau representatives at regional and woreda levels, in finance and economic offices, with also woreda cabinet heads and rural development offices at woreda level. HEWs were interviewed at kebele level. Further, FGDs were held with BoH staff, HEWs and CHPs at kebele level.

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