CWSSP

IMPROVING SCHOOL WATER SUPPLY AND SANITATION

Discussion Paper No. 1

November, 1995

Community Water Supply & Sanitation Project
Ministry of Housing, Construction & Public Utilities

C W S S P

- The Community Water Supply and Sanitation Project is an initiative of the Government of Sri Lanka with the support of the World Bank.

- The CWSS Programme Unit located within the Ministry of Housing, Construction & Public Utilities coordinates the project. The Regional Directorates in Badulla, Matara and Ratnapura, support Partner Organizations and Community Based Organizations in implementing their projects.

- CWSSP supports improvements in water supply and sanitation for approximately 650,000 rural people in 2,500 villages and 17 small towns in Badulla, Matara, Ratnapura and Monaragala Districts.

- Some 1600 schools in these districts will be eligible for support to improve personal hygiene through school water supply and sanitation, and hygiene education.

- CWSSP works with over 80 partner organizations (NGOs, co-operatives, government and quasi-government bodies) to support, motivate, organize and train communities to implement and manage their own water supply and sanitation schemes.

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Cover photograph

Constructing a rain water harvesting tank for the Paradise Colony School, Kuruwita, Ratnapura.

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EXECUTIVE SUMMARY

In the recent past there have been many programmes aiming to improve the water supply and sanitary conditions of the communities in various parts of the country. Relatively lesser attention has so far been given to schools in this respect. Community water supply and sanitation has evolved from supply driven programmes to people-based demand driven activities, with complementary support activities in hygiene education, cost recovery and maintenance. Ownership and the responsibility belonging to ownership have become important issues in community based schemes.

In schools this evolution has not taken place. In many schools facilities are really below par, and where with the support of the Department of Education construction has been undertaken, the functioning of water supply and sanitation has often been poor and the responsibility for the facilities by the school community limited.
The Community Water Supply and Sanitation Programme Unit (CWSSPU) of the Ministry of Housing, Construction and Public Utilities has developed a programme component on school water supply and sanitation. However, before implementing the technical assistance and financing facility, it was considered necessary to study the actual situation in a small sample of the schools in Matara, Ratnapura and Badulla Districts and draw conclusion and recommendations for improvement of project delivery.

The survey carried out on the sample of schools has shown that the conditions of water supply and sanitation facilities are very poor. 80% of the schools inspected face difficulties due to inadequacy of water. The quality of water used in at least 30% of the schools is extremely poor. In a large number of schools children have been exposed to various kinds of water borne diseases as a result of using unsafe water.

Water is often not provided to latrines, even at those schools where water supply is available. This has led to very poor cleanliness of latrines. The number of children per latrine is excessively high in many schools. 20% of the schools do not have latrines for boys at all. Lack of maintenance of both water supply and sanitary facilities is a matter for serious concern.

The above findings were discussed in detail at a National Expert Seminar organized with a view to facilitate formulation of national level policies and programmes to improve the situation. The recommendations made by the participants covered many areas needing immediate attention by the relevant authorities.

No school should get their drinking water supply from open water sources such as streams and immediate remedial action is necessary. Revising the Education Ministry standard for the number of students per latrine from 100 to 50, and provision of water to all latrine were two other main recommendations.
Further recommendations included rehabilitation of existing facilities, revival of School Development Societies, formation of school health clubs, and the need to raise community awareness etc.

1.0 INTRODUCTION

The School Water Supply and Sanitation Programme (SWSSP) is an essential element of the Community Water Supply and Sanitation Programme (CWSSP) implemented under the Ministry of Housing, Construction and public utilities.

The SWSSP was launched in the first quarter of 1995 with an aim to ensure access to basic water supply and Sanitation facilities to some 1600 schools in the Matara, Ratnapura and Badulla Districts.

In order to facilitate the design of a consistent and effective program applicable to all the areas, a study was undertaken by the CWSSP in August 1995 to assess the current School Water Supply and Sanitation situation.

As a part of this study, a survey was carried out on a sample of 30 schools, 10 schools each in Matara, Ratnapura and Badulla Districts. Findings of the survey were subsequently presented to a National Expert Seminar on Water Supply and Sanitation which was held on September 2, 1995 at the Sarvodaya Auditorium at Moratuwa. This report presents the findings of the survey and the outcome of the seminar.

This study was executed under the CWSSP Research and Demonstration Programme

2.0 FINDINGS OF THE SURVEY

2.1 Methodology adopted for the survey

Ten schools in each District were selected at random for the survey, covering as many Divisional Secretariats as possible. Community Relations Officers attached to the district secretariats of CWSSP visited the schools. Information was collected from the principals and the teachers through a questionnaire and by personally inspecting the facilities. Community members and the school children were consulted wherever possible. Information was also collected through informal interviews carried out with the senior officials of the Line Ministry and the Provincial Ministries of Education.

Matara, Ratnapura and Badulla Districts have 423, 594 and 572 schools respectively. Therefore, 10 schools out of these numbers is a fairly small sample, and will not be fully representative of all the schools in the Districts. However, the survey has unearthed some crucial common problems and difficulties relevant to almost all the schools surveyed. These problems indicate trends which are likely to be true in most of the schools. Relevant authorities concurred with the general validity of these trends.
These findings can form the basis for further studies and action.

Appendix - I shows the names and other particulars of the 30 schools surveyed.

2.2 Water Supply Situation

2.2.1 Source Information

Schools get water from different types of sources including distribution mains, shallow wells, tube wells, rivers and streams.
7 out the 10 schools surveyed in Matara District use shallow wells while one gets the water through the NWSDB main supply. 2 of the schools have no regular supply at all.

The situation in Ratnapura and Badulla is somewhat different. In each of these districts, only 3 out of 10 of the schools surveyed use shallow wells while 4 of the schools get the water from the NWSDB supply. One uses a tube well and a private gravity system. 2 schools do not have regular supplies, and these use streams nearby for their water requirement.

2.2.2 Status of facilities and maintenance

Facilities in 95% of the schools surveyed are not subjected to any maintenance. As a result, many of the structures and fittings such as wells, storage tanks, stand-posts, and taps cannot be properly used. Some facilities have been abandoned due to lack of maintenance. There are schools where the wells have not been properly used from the time of their construction due to poor quality of water and are being filled up with the sweepings and refuse collected from the school compound.

2.2.3 Adequacy of Water

80% of the schools face difficulties due to inadequacy of water. Children in many schools, specially at primary level, bring their own drinking water from home. In some schools, children are forced to fetch water from neighbouring houses for both drinking and cleaning purposes.

No school has a proper distribution system within the school compound. Even those schools supplied by mains have only one stand-post. Latrines are also not provided with water.

2.2.4 Quality of Water

Water is generally used without any sort of treatment except where the water is supplied through mains. No chlorination or filtering is carried out even on the water drawn from open streams. Quality of water used in 30% of the schools surveyed is extremely bad. From time to time children in at least 40% of the schools suffer from various diseases such as diarrhoea, hepatitis, stomach upsets etc., as a result of drinking polluted water. Appendix II shows the individual details on water supply in all the 30 schools.

2.3 Sanitary Situation

2.3.1 Facilities

95% of the Latrines presently used in the schools are water seal type. There are hardly any school latrines with water points fitted, or with water near-by. Even in the schools where water supply is available, service outlets are located fairly far from the latrines and therefore water has to be carried in buckets for cleaning purposes. As a result, the cleanliness of the latrines is very poor as a whole, even though many schools have arrangements to use groups of students to look after regular cleaning.

The Ministry of Education has a standard for provision of latrines, which is 100 students per latrine. However, the findings show, that except for those school where the student population is small, the number of students per latrine in the majority of the schools is much more than the stipulated standard. While the situation is slightly better in the case of girls, in some schools one latrine caters for as many as 500 children. There are 6 schools out of the total sample without any latrine facilities for boys, while 8 schools do not have urinals.

Table - 1 shows the approximate numbers of students per latrine in each school. While Tables 2 and 3 show the numbers of schools with different ranges of boys and girls per latrine.

2.3.2 Maintenance

More than adequate numbers of latrines have been provided to almost all the schools at different times. The majority of the old ones are pit latrines while almost all the new ones are water seal type. However, more than 50% of the facilities are now

Table - 2

Boys

Number of boys per latrine	Number of Schools
< 100	3
100 - 200	10
200 - 300	5
300 - 400	3
400 - 500	1
500 - 600	1

- **6 Schools have no latrines.**
  (1 School is a girls school)

Table - 3

Girls

Number of Girls per latrine	Number of Schools
< 100	8
100 - 200	14
200 - 300	4
300 - 400	1
400 - 500	2

- One School has no latrines.

abandoned and are not in use. This situation has very clearly resulted from poor maintenance. The situation with the urinals is also no different. Where urinals are untidy, boys use the open compound for the purpose. There is no structured on-going maintenance programme in any of the schools with respect to latrine facilities.

2.3.3 General Cleanliness of the Compound

Many schools engage students in groups for cleaning the school compound. Solid waste collected is dumped into pits dug for this purpose. 80% of the school compounds are generally clean.

Appendix III shows the individual details on the Sanitary Facilities in all the 30 schools.

2.4 Hygiene Education

Few opportunities are available to students in the school environment to practice improved personal hygiene. While the class teachers pay some attention to the personal hygiene of the primary students, no proper attention is given to the senior students.

Hygiene education is not a part of the school curricula for the senior students. However, some aspects of it such as the importance of using safe drinking water and washing hands with soap before meals and after defecating, are taught to the students through subjects such as Home Science, and Physical Exercise. Nevertheless, students do not practice these at school due to various reasons. Lack of water and discipline instilled by teachers are the main obstacles to raising hygiene behaviour. Another main obstacle to having a proper hygiene education programme is non-availability of properly trained teachers in this subject.

2.5 Community Participation

Although the School Development Societies are active and participation by the school community in carrying out various activities seems to be fairly good in 70% of the schools, community involvement in these schools in relation to water supply and sanitation is very minimal. This situation has resulted from a lack of awareness in the community and so far no initiative has been taken by any authority to educate them properly. Non-involvement of the community in ensuring the sustainability of the services and facilities has been the main cause for the deterioration of the situation.

2.6 Institutional Support

Due to lack of funds the Department of Education has not been able to support the water supply and sanitary requirements arising in the schools subsequent to their inception. As a result, the schools have been forced to find alternative finances. Provincial Councils and Divisional Secretariats have extended support to schools, but this has been on an ad-hoc basis. Consequently. there is no systematic approach in place to provide and maintain the facilities in the schools in a sustainable manner.

International Agencies such as SIDA, UNICEF, UNESCO etc., have provided support from time to time for various schools. 20% of the schools covered in the survey have had such support. However, there seems to be no proper co-ordination between various institutions that are associated with the school water supply and sanitation.

Most of all, lack of involvement on the part of the community in providing and maintaining the services and facilities is seen as a major obstacle in this sector.

2.7 Summary of Findings

The conditions of the water supply and sanitation facilities at schools are very poor. However, there is only a limited concern, motivation and knowledge to change this situation. Hygiene education is not given the required and sustained priority in the school environment. Community participation and the institutional support for improving the school water supply and sanitary condition remains very weak.

3.0 NATIONAL EXPERT SEMINAR

On September 2, 1995 a national expert seminar on School Water Supply & Sanitation was held at the Sarvodaya Auditorium, Moratuwa.

The main objectives of the Seminar were to review the findings of the survey described above and to propose actions and recommendations.

The seminar was well attended by representatives of various institutions. The education sector was represented by the Line Ministry and Provincial Ministries of Badulla and Matara. Representatives from the Line Ministry of Health,

IRC of The Netherlands, the Community Medicine Department of the Sri Jayawardenapura University and the Marga Institute were among the other participants. The Director and a number of senior staff members represented the Community Water Supply & Sanitation Project (CWSSP) of the Ministry of Housing, Construction & Public Utilities.

M. H.T. Hewawasam, Director (CWSSP) in his inaugural address emphasized the importance of such a national seminar in formulating policies and programmes to tackle the problems in school water supply and sanitation. He further explained the concept of the Community Water Supply & Sanitation Programme and the importance of community participation in the whole development process in order to ensure sustainability of the facilities and services.

In her key note address, Ms. Ineke van Hooff of the IRC International Water and Sanitation Centre of Netherlands, stated a number of reasons why School Water Supply and Sanitation should be given proper attention. Children spend a considerable time of the day at school. Therefore, the school environment has a great influence on their behaviour and health. As the children spend a lot of time with their teachers, the guidance of teachers is extremely useful in changing the attitudes of the children. Changing attitudes is comparatively easy at young age.

Ms. Van Hooff gave some examples of the Community Water Supply & Sanitation Projects carried out in schools in countries such as Nepal, Pakistan and India. She gave some specific details of such a programme implemented in Madras. Here, a pilot project was carried out in 9 schools and very effective low cost options were adopted through participatory needs assessment involving both teachers and students.

The full text of Ms. Van Hooff's interesting contribution is given in Appendix - VI.

Mr. Susil Somasiri, the Consultant Environmental Engineer, who undertook the study briefed the meeting on the key findings of the survey, as these have been highlighted in the section 2 of this report. The majority of the participants agreed with the findings and trends indicated.

The discussions raised many of the issues once more and it became clear that there was common agreement among the participants that many problems and short-comings existed in the field of School Water Supply and Sanitation and drastic changes in the present policies were necessary to overcome them.

According to the Education Ministry Officials, hygiene education is adequately covered in the science subjects for senior students but the problem arises when it comes to practicing hygiene habits as there are inadequate facilities.

Lack of maintenance was considered to be the main cause creating the poor condition of the facilities. Lack of funds and lack of awareness in the school community were considered to be the biggest problems leading to this situation. Lack of participation by the school community was another issue of serious concern.

Therefore, educating the children and parents and giving the proper orientation to all the teachers was seen as a priority.

During the last part of the seminar, participants divided in to develop recommendations on the following four areas.

* Provision of facilities
* Maintenance
* Hygiene Education
* Institutional Support

3.1 Recommendations

3.1.1 Provision of Facilities

In some instances schools do not have water supply at all, and students are forced to use streams or open water. Immediate attention needs to be drawn of the authorities to the deplorable situation in such schools, with the aim of drawing up a plan for corrective action.

It has been noted that the Education Ministry standard for the number of students per latrine is not allowing students to make proper use of available facilities during the breaks that they are allowed. It has been recommended that the Education Ministry revise is standards to 50 students per latrine instead of 100, while where ever possible clean water should be provided in all the latrines, or at least very close to the latrine blocks.

Rehabilitation of the existing facilities will go a long way in restoring the school's capacity in offering students adequate water supply and sanitation services. Just rehabilitating the facilities is however not sufficient, as the reasons for the earlier breakdowns most certainly had a lot to do with the lack of understanding and appreciation of regular cleaning and preventive care. The latter does not take much money, but does require a certain degree of discipline. To reinforce the aspect of

operation and maintenance, it was recommended that student hygiene societies be formed or reinvigorated and that the involvement of health personnel like PHIs be increased.

It would further be important to develop and introduce appropriate low-cost designs for the construction of facilities in the school environment. The right designs and procedures for their construction and maintenance would allow a greater role for School Development Societies to really take charge of the infrastructure improvement programme in their schools. This may also go a long way in generating an ownership feeling and corresponding care on the part of the School Development Society.

3.1.2 Maintenance

Building awareness among the whole school community including the principals, teachers and students is an essential element of any successful maintenance program. Developing an effective on going preventive maintenance programme based on regular inspection by school authorities and students is a must.

Here again the application of sturdy, yet maintenance friendly designs will allow the school community of teachers, students and parents, to take better care of the facilities they have already in place. A clear schedule for regular - say weekly - inspection and assigned responsibilities to teachers and students will ingrain the cleaning and maintenance routine, avoid a deterioration of the service level and reduce the number of breakdowns of the system.

In case of a gravity or pumped scheme one permanent employee of the school should be trained in the operation, maintenance and repair of the system. In addition, the School Development Society should be informed where it can get assistance in case of problems it can not resolve itself. The School Works Division or CWSSP can assist in this matter.

3.1.3 Institutional Development

A main recommendation was to strengthen the institutional capacities of various organizations involved in the process. At the same time, coordination among those actors have to be improved. Revival the of school development societies with a clear mandate and aware of their responsibilities, establishing maintenance units in schools and raising awareness are critical for the success of the Institutional Development.

3.1.4 Hygiene Education

Preparation of informational booklets and training modules, orientation of principals, teachers, students as well as community members, formation of health clubs came up as main recommendations.

All the recommendations made by the four working groups at the seminar are shown in the Appendix - V.

4.0 Conclusion

The situation with regard to water supply and sanitation in our schools is extremely poor. The sample survey and the National Seminar have helped greatly to identify the root causes of problems and the strategies for improvement. Based on these findings further studies could be carried out on specific issues wherever necessary. Raising awareness, introducing a proper hygiene education programme, a systematic maintenance plan, community participation are key issues that have to be addressed in order to ensure sustainability and long term positive impact of school water supply and sanitation.

Appendix – I

INFORMATION ON 10 SCHOOLS IN MATARA DISTRICT

School No.	Name of the School	Grade	Divisional Secretariat	Number of Students			Number of Teachers		
				M	F	Total	M	F	Total
M–1	Henegama Primary Vidyalaya	2	Akuressa	310	268	578	4	20	24
M–2	Palatuwa Gunarathna Maha Vidyalaya	1 B	Malimbada	360	380	740	10	70	80
M–3	Waralla Kanitu Viduhala	2				725	6	20	26
M–4	Kapugama Kanitu Viduhala	2	Devinuwara			417			36
M–5	Arankahadeniya Kanitu Viduhala	2	Dikwella	144	146	290	7	14	21
M–6	Palolpitia Maha Vidyalaya		Kamburupitiya			301	3	20	23
M–7	Sri Indrasara Maha Vidyalaya	1 C	Weligama			419	7	32	39
M–8	Diyagaha West Maha Vidyalaya	1 C	Matara	318	329	647	8	27	35
M–9	Ginnaliya Kanitu Viduhala	2	Pasgoda	444	442	886	7	23	30
M–10	Govila Kanitu Viduhala	2	Pasgoda			267	6	10	16

INFORMATION ON 10 SCHOOLS IN RATNAPURA DISTRICT

School No.	Name of the School	Grade	Divisional Secretariat	Number of Students			Number of Teachers		
				M	F	Total	M	F	Total
R–1	Palla Kande Maha Vidyalaya	2	Openayake	170	172	342	05	15	20
R–2	Thalangama Vidyalaya	3	Balangoda	105	85	190	01	10	11
R–3	Weeragama Sri Sunanda Vidyalaya	2	Elapatha	200	118	82	03	12	15
R–4	Madampe Wijeya Maha Vidyalaya	1 C	Godakawela	652	900	1552	20	29	49
R–5	Gajanayake Maha Vidyalaya	1 C	Kahawatte	307	307	614	06	23	29
R–6	Welimaluwa Vidyalaya	2	Pelmadulla	170	146	316	03	12	15
R–7	Al Akfa Muslim Maha Vidyalaya	1 C	Aheliyagoda			1200	15	20	35
R–8	Dharmapala Maha Vidyalaya	1 C	Ratnapura	443	527	970	08	34	42
R–9	Bodhimaluwa Vidyalaya	2	Kuruvita	112	93	205	05	11	16
R–10	Udawlawa Maha Vidyalaya	1 C	Embilipitiya	1046	990	2036	16	63	79

INFORMATION ON 10 SCHOOLS IN BADULLA DISTRICT

School No.	Name of the School	Grade	Divisional Secretariat	Number of Students			Number of Teachers		
				M	F	Total	M	F	Total
B–1	Pelgahathenna Maha Vidyalaya	1 C	Passara	164	163	327	11	14	25
B–2	Dambagalla Sumana Vidyalaya	2	Mahiyangana	107	86	193	5	4	9
B–3	Thaldena Maha Vidyalaya	1 C	Meegahakivula	377	320	697	16	22	38
B–4	Udawela Madya Maha Vidyualaya	1 C	Badulla	334	303	637	11	23	34
B–5	Naulla National School	1 AB	Ella	537	525	1062	16	38	54
B–6	Vishaka Girls Maha Vidyalaya	1 AB	Badulla	–	1855	1855	4	76	80
B–7	Kandegedara Primary School	1 AB	Soranatota	202	186	388	6	13	19
B–8	Galauda Vidyalaya	1 C	Kandaketiya	525	485	1014	21	27	48
B–9	Morethota Vidyalaya	2	Haliela	52	49	101	5	11	16
B–10	Uduwara M.V	1 C	Haliela	201	202	403	8	10	18

WATER SUPPLY SITUATION – 10 SCHOOLS IN MATHARA DISTRICT

School No.	Source of Water	Adequacy of Quantity	Quality of Water	Maintenance/Status of Facilities and other Comments
M–1	School Well	Good	Satisfactory	Well needs rehabilitation. Also a proper distribution system needed.
M–2	Pumped from the School well	Poor	Satisfactory	Distribution system needs improvements. Maintenance is not done properly.
M–3	Mains	Poor	Satisfactory	Only one outlet available. No proper maintenance. A proper supply needed.
M–4	Neighbour's Private Well	Very Poor		A new Supply Ststem is necessary.
M–5	Neighbour's Private Well	Very Poor	Very Poor	A new Supply Ststem is necessary.
M–6	Neighbour's Private Well	Very Poor	Very Poor	A new Supply Ststem is necessary.
M–7	Neighbour's Private Well	Very Poor		A new Supply Ststem is necessary.
M–8	School Well	Poor	Poor	A new Supply Ststem is necessary.
M–9	Nearby Stream	Very Poor	Very Poor	A new Supply Ststem is necessary.
M–10	Gravity Line	Good	Satisfactory	Only one outlet. Distribution needs improvement.

WATER SUPPLY SITUATION – 10 SCHOOLS IN RATNAPURA DISTRICT

School No.	Source of Water	Adequacy of Quantity	Quality of Water	Maintenance/Status of Facilities and other Comments
R–1	Main Water Lines	Poor	Satisfactory	School not involved in maintenance. Only one stand post available.
R–2	Nearby River		Very Poor	A proper supply system needed.
R–3	Temporary extension from a private water line	Poor	Satisfactory	Needs a permanent supply for the school.
R–4	Tube Well	Poor	Poor	School not involved in maintenance.
R–5	A School Water Line	Poor	Poor	An Improved System is needed.
R–6	School Well	Poor	Poor	A better arrangement needed.
R–7	Mains/School Well	Good	Good	School development Society is involved in maintenance.
R–8	Mains	Satisfactory	Good	School development Society is involved in maintenance.
R–9	Pumped from the School well	Good	Good	Well not covered.
R–10	Mains	Satisfactory	Good	Needs Improvements.

WATER SUPPLY SITUATION – 10 SCHOOLS IN BADULLA DISTRICT

School No	Source of Water	Adequacy of Quantity	Quality of Water	Maintenance/Status of Facilities and other Comments
B–1	No proper source	Poor		Children bring water form neighbour's Houses. A proper water system needed.
B–2	Neighbour's Private Well	Very Poor	Satisfactory	A proper Water Supply is needed.
B–3	Mains	Good	Good	System needs Improvements increasing outlets.
B–4	Mains	Poor	Good	Only one standpost. Needs increasing the outlets.
B–5	School Well	Poor	Poor	School Development Society is involved in maintenance.
B–6	Mains	Good	Good	School Development Society Maintains.
B–7	No Proper supply	Very Poor		A proper Water Supply is needed.
B–8	No Proper supply	Very Poor	Poor	Water is tapped from a Hospital Line. A proper supply is needed.
B–9	A Nearby Stream	Very Poor	Very Poor	A proper supply is needed.
B–10	Mains	Satisfactory	Poor	A storage tank is needed.

Appendix III

SANITARY SITUATION – 10 SCHOOLS IN MATARA DISTRICT

School No.	Number of Urinals	Number of Latrines				Type of Latrines		Maintenance and Status of Facilities	Cleanliness and other Comments
		M	F	Teachers	Total	Water seal	Pit		
M–1	4	1	2	1	4	4	–	Poor condition. Not maintained properly	Poor
M–2	–	1	4	1	6	6	–	Condition of the facilities satisfactory	Poor. No water available in Latrines
M–3	5	–	–	–	5	5	–	Only 3 Latrines are being used. Other 2 abandoned	Poor. No Water available in Latrines
M–4	2	–	–	2	2	2	–	Poor maintenance	Poor. Water is carried in buckets for cleaning
M–5	1	–	–	–	3	2	1	Not maintained properly	Poor. Water is carried in buckets
M–6	2	2	1	1	–	2	2	Poor maintenance	Poor. No water for cleaning
M–7	1	2	2	–	4	4	–	Two Latrines abandoned.Urinal is in poor condition	Poor. No water near Latrines for cleaning
M–8	2	2	2	–	4	4	–	Two Latrines abandoned. Poorly maintained	No water in the Latrines
M–9	2	1	.1	1	3	3	–	Satisfactory	No water in the Latrines .
M–10	–	1	1	2	4	4	–	Satisfactory	No water near Latrines for cleaning

SANITARY SITUATION – 10 SCHOOLS IN RATNAPURA DISTRICT

School No.	Number of Urinals	Number of Latrines				Type of Latrines		Maintenance and Status of Facilities	Cleanliness and other Comments
		M	F	Teachers	Total	Water seal	Pit		
R–1	02	01	01	01	03	01	02	Poor maintenance. Condition of the facilities poor	Poor. Water is not available in the Latrines
R–2	01	–	01	–	02	02	–	Poor maintenance. Condition of the facilities poor	Poor. Water is not available in the Latrines
R–3	–	01	04	01	03	01	02	Latrines are very old. Need extensive repairs	Poor. Water is carried in buckets for cleaning
R–4	05	–	04	02	06	05	01	Latrines need Improvement	Poor. Water is carried in buckets for cleaning
R–5	–	–	01	–	01	01	–	Satisfactory. More facilities needed	Cleanliness acceptable But water in the Latrines
R–6	–	01	02	01	04	03	01	In addition 4 abandoned Latrines	Water is carried in buckets for cleaning
R–7	02	02	04	04	10	07	03	Pit latrines are very old. Very poor maintenance	No water available in the Latrines.
R–8	–	02	02	01	05	05	–	Poor maintenance	No water in the Latrines
R–9	–	01	02	02	05	02	03	Satisfactory maintenance	Only one Latrine has water
R–10	03	02	04	02	08	08	–	Repairs needed in most of them	Water is carried in buckets for cleaning.

SANITARY SITUATION – 10 SCHOOLS IN BADULLA DISTRICT

School No	Number of Urinals	Number of Latrines				Type of Latrines		Maintenance and Status of Facilities	Cleanliness and other Comments
		M	F	Teachers	Total	Water seal	Pit		
B–1	01	04	05	–	09	04	05	Five pit Latrines are of very poor condition	Poor. Water has to be carried for cleaning
B–2	–	02	02	02	06	06	–	Satisfactory	Water is carried for Latrines
B–3	03	03	03	01	07	07	–	Condition of 4 Latrines is very poor	Poor. Water is not available in the Latrines
B–4	03	02	02	02	06	06	–	Condition of 4 Latrines is very poor	Poor. Water has to be carried in buckets for cleaning
B–5	05	03	03	01	07	05	02	Condition of almost all the Latrines is poor	Poor. Water has to be carried in buckets for cleaning
B–6	–	–	16	–	16	16	–	Satisfactory. Some repairs needed	Satisfactory. More Latrines needed
B–7	01	01	01	02	04	02	02	Not maintained properly	Poor. Water is not available in the Latrines
B–8	07	–	01	01	05	05	–	03 Latrines are of very poor condition	Poor. Water is carried in buckets for cleaning
B–9	01	–	01	–	01	–	01	More facilities needed	Satisfactory
B–10	04	01	02	–	06	03	03	Pit Latrines are abandoned	Poor. Water is carried in buckets for cleaning

APPENDIX IV

MINISTRY OF HOUSING, CONSTRUCTION & PUBLIC UTILITIES

COMMUNITY WATER SUPPLY & SANITATION PROJECT

STUDY ON IMPROVING SCHOOL WATER SUPPLY & SANITATION

Survey Questionnaire (August 1995)

Name of the Interviewer :

Designation :

Office :

Date :

---

1. Details of the School Surveyed

1.1 Name of the School : .....

1.2 Address : .....

.....

.....

1.3 District : .....

1.4 Divisional Secretariat Division : .....

1.5 Brief description of the School.
(History, location, topography of the land, etc)

.....

.....

.....

.....

.....

.....

1.6 Name of the principal : .....

1.7 Name/s of the respondents : .....

.....

.....

1.8 Grade of the School : .....

1.9 Span of classes : .....

1.10 Number of children :

	Year 1 - 5	Year 6 & above
M		
F		

1.11 Number of Teachers : .....

☐ Male ☐ Female

2. Information on School Water Supply

2.1 What is the source of water supply to school ?

Mains	
Private School Well	
Neighbour's Private Well	
Public Well	
Stream/River	
Tube Well	
Other (Specify)	

2.2 Is there a system for distribution of water within the school premises ?

Yes [ ] No [ ]

2.3 If the answer to question 2.2 is 'No', how do the children get their water for drinking and other uses ?

. . . . . .

. . . . . .

2.4 If the answer to question 2.2 is 'Yes', what is the arrangement for distribution ?

A distribution network connected to mains	
A distribution network and an overhead tank	
Surface tanks	
Movable barrels and containers	
Other (Specify)	

2.5 If a distribution network is available, is there a maintenance arrangement and who maintains it ?

. . . . . .

. . . . . .

2.6 How far is the source of water from the school ?

. . . . . .

2.7 Is the yield of the source adequate for drinking, washing and other purposes of total School population ?

. . . . . .

2.8 Does the source go dry any time of the year ?

. . . . . .

. . . . . .

2.9 How the school drinking water been tested any time in the recent part ? If Yes, please inspect and record the results.

. . . . . .

. . . . . .

. . . . . .

2.10 Is the quality of the water acceptable for drinking ? (Please comment in colour, smell, turbidity, hardness, etc and any pollutants ?

. . . . . .

. . . . . .

. . . . . .

2.11 Is the drinking water subjected to any form of purification ?

. . . . . .

. . . . . .

2.12 Are there any other preferred alternatives to be considered as the source ?

. . . . . .

. . . . . .

2.13 What fraction of children on average bring their own drinking water from home ?

. . . . . .

2.14 Is the rainwater collected in the school and used for any purpose at all ?

. . . . . .

2.15 User suggestions for improvements in the School Water Supply ?

. . . . . .

. . . . . .

. . . . . .

. . . . . .

3. Information on Sanitation

3.1 Are the latrines available in the School ?

Yes [ ] No [ ]

3.2 If the answer to questions 3.1 is 'No', how do the children dispose of excreta?

. . . . . .

. . . . . .

3.3 If the answer to question 3.1 is 'Yes', how many latrines are available.

[ ] Male [ ] Female

3.4 Are the latrine facilities adequate during peak times ?

. . . . . .

3.5 What type of latrines are available ?

	Number
Pit Latrines	
Water Seal	
Urinals	
Other (Specify)	

3.6 Do the teachers have separate latrines ? If Yes, how many ?

. . . . . .

. . . . . .

3.7 Materials of construction of latrines.

Pit	
Squatting plate/pan	
Floor	
Walls	
Roof	
Doors / Fan lights	

3.8 Condition of the latrines, (whether good, satisfactory, poor, very poor, etc.)

	L1	L2	L3	L4	L5	L6	L7	L8
Pits								
Floor								
Walls								
Roof								
Cleanliness								
Other								

Please comment on any broken parts, unattended maintenance work, etc.

. . . . . .

. . . . . .

3.9 Are the latrine pits located reasonably away from any water sources under use ?

. . . . . .

3.10 How often are the latrines cleaned ?

. . . . . .

3.11 Are any disinfectants used when cleaning ?

. . . . . .

3.12 How often are the pits disludged ?

. . . . . .

3.13 Is the water available in the latrines ?

Yes [ ] No [ ]

3.14 Does any bad smell come from the pits ? Are the vent pipes connected to the pits ?

. . . . . .

. . . . . .

3.15 Does the waste water from the pits create any unhealthy condition surrounding the area ?

. . . . . .

. . . . . .

3.16 Is there a programme in the School for solid waste disposal and maintaining general cleanliness ?

. . . . . .

. . . . . .

3.17 What are the user suggestions for improving sanitary facilities ?

. . . . . .

. . . . . .

. . . . . .

4. Health Situation

4.1 Were there any incidents of suspected water pollution or bad sanitary conditions within School premises leading to ill health of children during the past two years ?

Yes [ ] No [ ]

4.2 If Yes, please give details. (Number of children affected, number of occurrences the type of disease etc.)

. . . . . .

. . . . . .

4.3 Do the children know the importance of boiling drinking water before use?

Yes [ ] . . . . . .

No [ ] . . . . . .

. . . . . .

. . . . . .

4.4 Do the children wash their hands with soap after defecating ?

Yes [ ] . . . . . .

No [ ] . . . . . .

. . . . . .

. . . . . .

4.5 Do the children wash their hands before taking meals ?

Yes [ ] . . . . . .

No [ ] . . . . . .

. . . . . .

. . . . . .

5. Hygiene Education

5.1 Does the School have a proper hygiene education programme ? If Yes, please record the material covered.

. . . . . .

. . . . . .

. . . . . .

5.2 Is the Hygiene Education is part of the School Curricula ?

Yes [ ] No [ ]

5.3 Do the teachers themselves develop and implement Hygiene Education activities ?

. . . . . .

. . . . . .

5.4 Are the teachers handling Hygiene Education matters properly trained for the purpose ?

. . . . . .

. . . . . .

5.5 Do the children practice what they learn in the class room ?

Very well [ ] To certain extent [ ] Not at all [ ]

5.6 What are the suggestions to improve Hygiene Education at the School ?

. . . . . .

. . . . . .

. . . . . .

6. Social Participation

6.1 Is there any arrangement/system to obtain the participation of children or parents in Operation & Maintenance work of the School Water Supply & Sanitation work ?

. . . . . .

. . . . . .

. . . . . .

6.2 The level of participation from the children or their parents in operating and maintaining the facilities related to School Water Supply and Sanitation?

Good [ ] Satisfactory [ ] Poor [ ]

Please give details.

. . . . . .

. . . . . .

. . . . . .

6.3 Is there a School Development Society for the school ?

Yes [ ] No [ ]

6.4 If yes, will the School Development Society be willing to take part in O&M if a proper orientation is given ?

. . . . . .

. . . . . .

6.5 Are there any voluntary organizations (including Past Pupil's Associations) in the community which could help the school in Operations and Maintenance work ?

. . . . . .

. . . . . .

6.6 If Yes, please give details including the assistance already extended (if any)

. . . . . .

. . . . . .

6.7 Will the parents of the school children be able to make any financial contribution if improved water supply and sanitation facilities are to be provided to the School ?

. . . . . .

. . . . . .

7. Institutional Support

7.1 What sort of assistance is received from the Department of Education for the School Water Supply & Sanitation ?

. . . . . .

. . . . . .

. . . . . .

. . . . . .

7.2 Any assistance received from International Agencies such as UNICEF ?

. . . . . .

. . . . . .

7.3 Who provides the assistance on technical matters in design, construction and O&M of the facilities.

. . . . . .

. . . . . .

. . . . . .

7.4 Availability of funds for Water Supply & Sanitation.

Good [ ] Satisfactory [ ] Poor [ ] V. Poor [ ]

8. Interviewer's observations and comments

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. . . . . .

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National Expert Seminar on School Water Supply and Sanitation
Sarvodaya Auditorium, Moratuwa, September 2, 1995

Agenda

Time	Activity	Resource Person	Chair Person
	SESSION I		
09.00	Registration of Participants		Dr. H.M. Fernando, Director, (Environmental & Occupational Health) Ministry of Health
09.15	Inauguration	Director, CWSSP	
09.30	Key Note Address	Ms. Ineke Van Hooff, IRC	
10.00	Presentation of Report on the Study on School Water Supply and Sanitation	Mr. Susil Somasiri	
	SESSION - II		
10.30	Tea		Dr. D. B. Wijetunga Director, Education Provincial Council, Badulla
11.00	Discussion of the report and brief verbal contributions by selected participants	Dr. Vinya Ariyaratne	
12.30	Lunch		
13.00	Formulation of recommendations on Technical, Social, Management, Hygiene and Educational Issues	Ms. Ineke Van Hooff Working Groups	
14.30	Tea		
	SESSION - III		
15.00	Development of a Step-by-Step good practices checklist for planning and implementation	Dr. Vinya Ariyaratne	
15.45	Concluding Remarks	Mr. Sisira Kumarasiri	
16.00	End		

APPENDIX V

Appendix VI

FULL TEXT OF THE SPEECH MADE AT THE SEMINAR
BY
MS. INEKE VAN HOOFF OF IRC, THE NETHERLANDS

SCHOOL SANITATION IN THE SOUTH-ASIAN REGION

The importance of school sanitation

School sanitation can be defined as sanitary (excreta disposal, waste water disposal and waste disposal) and water supply facilities combined with hygiene education.

Adequate water supply and sanitary facilities are crucial to improve the general health situation and break the transmission of water and sanitation related diseases. However, these facilities need to be used effectively, often requiring motivation and explanation of the reasons for their use. Improvement of water supply and sanitary facilities should therefore go hand in hand with hygiene education.

The above mentioned statement is rather general, it does not explain why it is important to focus our attention on schools. There are several reasons why schools should get extra attention for sanitation and health education. (1) Schools are the ideal place to reach children, they spend a large part of their time at school in a learning environment where use can be made of teachers as resources. (2) Children are vulnerable to water and sanitation related diseases. (3) They are future adults, thus changes in their attitude and behaviour will have a long lasting impact. (4) Children are more sensitive to change than grown-ups and can have an impact on the whole community.

Schools are thus places which should get a high priority for sanitation and hygiene education, however in practice a lot remains to be done. Whereas, in general, much attention exists for sanitation and hygiene education for communities, schools are unfortunately sometimes neglected.

School Sanitation in Asia

In the past two years IRC has together with partners conducted reviews on school sanitation in 9 countries. In this summary of the result attention will be given to the following Asian countries where a review was done: Pakistan (Karachi), India (Madras and Kerala) and Nepal (Kathmandu).

Availability of water supply and its standard

Only one of the reviews mentioned schools that had water supply throughout the year. The information from the other reviews shows that there is insufficient water during the summer months, or that there is a general lack of water throughout the year.

It was found that the water supply facilities were not always designed such that the children could easily use them.

There were only a few schools that stored their drinking water in a vessel with cover. None of the schools had ladles with which the students can take their water from the vessel. Very few schools provided soap or ashes for hand-washing.

Availability of sanitation and its standard

The most common latrines found are pour-flush latrines. Many schools face problem with the operation of these latrines since they do not have sufficient water for flushing and cleaning.

It was found that most often pits were not emptied, instead new pits were dug in the school compound, leading to a number of places with a high concentration of excreta.

Only one review reported claim to very clean latrines. In these schools the students participated in cleaning their latrines and the rest of the schools. This was not the case in any other of the schools reviewed.

Most of the schools had at least one or two latrines. The major problem regarding these latrines was the poor maintenance, leading to students using the open field for defection.

In two schools urine and faeces were disposed right outside the school fence.

Solid waste disposal

The most common way of waste disposal is that children or a sweeper empty the dust bins in each classroom and throw the waste in a larger dust bin located in a corner of the school compound or on the roadside. Other ways of disposing waste is through burning or throwing it outside the school compound on a field or road or in a river. Only a few schools recycle waste.

Waste water disposal

Waste water is very rarely reused. Only one review mentions that waste water is used for irrigation gardens or trees on the school compound.

Hygiene education

Hygiene education is often not part of the school curriculum and it usually does not get the importance it needs. Some hygiene education is usually given as part of another subject.

Teachers

All teachers needed basic training in hygiene issues as well as environmental sanitation.

Teachers were found to be an important role model for the students. Students will usually copy the behaviour of their teachers, making it important that teachers give good examples such as washing hands before eating food, sweeping the school compound etc.

Students

Most students were found to be willing to participate in cleaning activities

General Conclusions

(1) The influence from community members on school sanitation was in some cases very positive and in some cases negative.

Positive examples found were :

- community members helped with cleaning the school;
- community members collected money to construct new facilities.

Negative examples found were:

- community members destroyed sanitary facilities;
- community members threw garbage on the school compound;
- community members defecated on the school compound;
- community members defecated in latrines without contributing to the maintenance of facilities.

(2) When asked how the school sanitation could be improved, teachers most often asked for money to construct new facilities. In this study it was however found that the problem lies not in lack of facilities but in problems related to operation and maintenance, unavailability of water supply to latrines and unclear responsibilities related to cleaning of facilities. Unless these problems are solved, constructing new facilities will not improve the situation. It would in that case be very likely that the same poor situation will occur after some months.

(3) Most teachers mentioned lack of money as their biggest problem and the cause of the poor sanitary condition in the schools. In their view external funds are the solution. There were two examples of how money was collected. In one case parents contributed money to construct urinals, and in another case a private company provided money to construct a fence. It seems that there are possibilities for raising funds, if school staff knows how to make use of the available resources in the surroundings of the school.

SCHOOL SANITATION PILOT PROGRAMME IN MADRAS, INDIA

In the following, the steps and important lessons learned in initiating a school sanitation programme in Madras are described. The programme was developed by PREPARE, an NGO working in Madras, IRC and 9 schools.

Step 1 Nine schools were selected based on the following criteria: distance from PREPARE head-office, availability of water and interest among the school staff to participate.

Lesson Learned

Enough time should be spent in explaining what the project can offer to the school and what the school staff expects from the programme. In this way those schools with interests the programme can not fulfil can be excluded.

Step 2 An action plan was prepared and discussed with the teachers and headmasters of the nine selected schools. This activity was done before the water and sanitation situation in the schools was assessed. At this time school staff was asked to express any fears they had with regard to the programme. They mentioned the following:

- fear of having to spend a lot of time in the project;
- fear that the need for structural improvements would be neglected;
- fear that the programme would focus only on the school, and not on the surrounding community.

Step 3 A number of NGOs was approached to fund out if they had any activities related to school sanitation in the area. From these discussions it became clear that many schools already were involved in some kind of health project and the there was big difference in approaches followed by the NGOs

Step 4 A participatory problem identification and needs assessment was done in the schools by the school staff and students. First a map of the school compound was made, indicating water and sanitary related problems. Consequently school staff and students were asked to write needs on cards after which the cards were ordered in accordance with their importance. PREPARE and IRC staff facilitated the discussions through asking questions that stimulated school staff and students to look for the real cause of he problems. Emphasis was also given to stimulate staff and students to make a difference between long-term and short-term needs, as well as to consider how they could contribute in meeting the different needs. In particular questions were raised on how they could support low-cost solutions.

The following low-cost solutions were mentioned most often:

- collect money among students and parents to buy buckets for flushing or latrines after use;
- establish school health clubs and involve them in cleaning of the school compound and sanitary facilities;
- stimulate parents to participate in environmental sanitation activities, such as cleaning surrounding streets or funding projects;

Lesson Learned

It is useful to get an overview of how school staff and students perceive the water supply and sanitation problems from the start of the programme. Both staff and students appreciated that their opinion was asked and that information was not collected through a checklist. Data collection with help

of a checklist can be a useful complementary tool for gathering information. Through comparing the information from the checklist review and the participatory problem identification it is possible to check if there are any contradictions or unclarities. School staff clearly indicated that they were tired of discussing water supply and sanitation problems in general. They were only interested in discussing problems related to their schools.

Step 5

In two of the nine schools one of the low-cost solutions, the school health club, was tested. In these schools teachers had asked for assistance in setting up such clubs. The teachers were told that they could get support in the start up of a school health club, but that they had to coordinate and continue the activities on their own. In these schools basic facilities were available, but the operation and maintenance was very poor.

Two afternoons were spent with these schools to support them in developing a school health club. One student from each class and teachers who were interested in the topic participated. The discussions mainly focused on four topics:

1. how to organize the club;

2. which teacher could be identified to guide the club;

3. how the club could improve use, and operation and maintenance of facilities;

4. how the club could involve parents, community members and the municipality.

One of the first results of the establishment of the school health clubs was that in one of the schools the surrounding streets were cleaned by students, teachers and community members. Another result was that latrines were much cleaner, since the club had made sure that water for flushing was available in the water basin just outside the latrines.

Step 6

Form the discussion with the teachers it became clear that many of them had managed to solve a number of school sanitation problems on their own. To stimulate that teachers shared their experiences a meeting was organized.

In the meeting every teacher presented one major sanitary problem in their school and explained why the school staff had not been able to solve the problem. After the presentation the other teachers were asked to comment and to give suggestions on how the problem could be solved. When all teachers had presented a problem each one of them prepared an action plan on how they intended to solve their problem.

Lesson Learned

This activity was highly appreciated by the teachers. They got a lot of relevant information that they could test in their own school. They also seemed to be relieved that other schools faced similar problems related to water, sanitation and hygiene. The teachers decided to follow-up the meeting after two months with a visit in one of the schools. During the visit they would discuss a problem in the school and give suggestions on how it could be solved.

OUTCOME OF THE SEMINAR – GROUP RECOMMENDATIONS

GROUP – 1 FACILITIES

No.	Recommendation	When	Responsibility
1	Non– use of rivers/streams	Now	MoE, CWSSP
2	Revise norm for No. students/latrine to 1 toilet per 50 students	As soon as possible	MoE (school works division)
3	Introduce low–cost designs which can be maintained at local level	As soon as possible	MoE, CWSSP
4	Promote construction through SDS (through contract)	Now, functional	MoE, Provincial Department of Education
5	Formation of students hygiene society (water, hygiene, environmental sanitation)	At the start of SSP	School, Dept of Ed, Health, donors
6	Mapping of facilities, identification of gaps, preparation of action plan through 5	At the start of SSP	do
7	Rehabilitate facilties	First step	Principal and provincial department of education
8	Involve PHI and 5 in sending quarterly WS/S report	Once 5 above is OOperational	Principal, PHI
9	SDS to identify 1–2 persons in the community who could help with the maintenance and repair	At time of construction	Principal, department of education, CWSSP
10	Employ standard technologies in WS which can be used by children (taps, ground level tanks, rope pump, rain water, hand pumps)	At time of planning	School works division, CWSSP
11	Distinguish between potable water and cleaning water if one source does not cover all needs	Consider during planning	PHI, SDS, Principal, advice from CWSSP etc.
12	Clean water should be provided near latrines	Consider during planning	do

APPENDIX VII

GROUP – 2 MAINTENANCE

*	Identify areas of maintenance Water Supply eg. leaks of taps/tanks broken main or pumps dry well Sanitation cleanliness structural defects
*	Preparation of Checklist Item/frequency/responsibility/by whom regular inspection according to checklist
*	Financial resources SDS funds, facilities fees, donations, class room collections
*	Caretaker training Caretakers selected from SDS members/community members for small repairs For major repairs Divisional Secretary/Pradeshya sabha/Education Dept./NWSDB
*	Awareness creation among principal/teachers/publis/community include WS & S maintenance topic in every staff meeting & SDS meeting

GROUP – 3 INSTITUTIONAL DEVELOPMENT

No.	Recommendation	When	Responsibility
1	Revive school development societies with – clear guidance regarding role, responsibilities functions, etc. – legal empowerment – training – (on constitutional arrangements, – maintenance requirements)	Immediately	MoE
2	Strengthen coordination with – Provincial Depts of Education – Dept. of Health – Development Projects – Local Authorities – NGOs – Provincial/divisional adminstration – other SDSs	Immediately	Jointly MoE, CWSSP, Dept. of Health
3	Establish maintenance units/committees at all levels – sub–committees at schools – units at Dept. of Education/Health – Village W/S O & M system (establish links)	By end 1995	Dept. of Education, CWSSP, SDSs, CBOs
4	Raise awareness in schools – importance of maintenance – hygiene education – training – commitment	By end 1995	Dept. of Health Dept. of Education CWSSP, POs, SDSs
5	Develop curriculum models – hygiene education – maintenance training – linkages with existing set–up	By end 1995	Dept. of Education, facilitated by Dept. of Health & CWSSP

6	Change Performance evaluation criteria of schools – develop fresh criteria – develop MIS – feedback to Dept. of Education – record lessons (structured) learned	?	Dept. of Education, CWSSP
7	Establish an O & M fund with or without linkages to village wss scheme – organize student groups, teachers, community	?	Dept. of Education, Supported by CWSSP
8	Implement pilot project to extract missing information and develop models	?	Dept. of Education, Supported by CWSSP

GROUP – 4 HYGIENE EDUCATION

No.	Recommendation	When	Responsibility
1	Conduct in–depth study on the behaviour of the school community in relation to total maintenance of W & S facilities	Pre– planning	Research Committee CWSSP
2	Informational booklet to the parincipals, teachers, students and community	Planning	CWSSP in consultation with MoE and MoH
3	Preparation of training modules on hygiene education	Planning	CWSSP in consultation with MoE and MoH
4	Orientation/Workshops for principals and teachers	Planning	HEO/district and zonal education directors
5	Orientation of community members (SDS included)	Planning	PHIs, school coordinator CWSSP
6	Formation of school health clubs	Planning	Zonal Directors PHIs, HEO
7	Development of promotional materials a. local b. mass media	Planning	CWSSP + HEB
8	Development of M & E tools	Planning	CWSSP

Appendix – VIII

NATIONAL WORKSHOP ON SCHOOL WATER SUPPLY & SANITATION

September 02, 1995

List of Participants

No.	Name	Designation
1	Mr. H.T. Hewawasam	Director, CWSPU
2	Ms. Ineke Van Hooff	IRC, The Netherlands
3	Mr. Susil Somasiri	Consultant Environment Engineer CWSPU, Head Office
4	Dr. Vinya Ariyaratne	Lecturer, Community Medicine Section University of Sri Jayawardenapura
5	Ms. Indrani Mahanama	School Works Engineer/Ministry of Education & Higher Education
6	Ms. Sandya Mendis	Architect, Ministry of Education & Higher Education
7	Mr. D.B. Wijetunga	Director of Education Uva Provincial Council
8	Mr. E. Kurukulasuriya	Zonal Director of Education Matara
9	Dr. H.M. Fernando	Director (Environmental and Occupational Health) Ministry of Health
10	Mr. Upali Jayawardena	Associate Director Marga Institute
11	Mr. G. Chandrasiri	Accountant, CWSPU, Badulla District office
12	Mr. U.K. Sumanadasa	DD/M&E, Admn. CWSPU, Head Office
13	Mr. Sisira Kumarasiri	DD/CD CWSPU, Head Office
14	Mr. K. Ketipearachchi	Accountant, CWSPU Ratnapura District Office
15	Mr. K.D.C. Perera	HEO CWSPU, Head Office

16	Mr. Ananda Alahakoon	STO CWSPU, Head Office
17	Mr. Han Heijnen	M/TSC CWSPU, Head Office
18	Dr. H.D. Sumanasekara	M&E Sp. CWSPU, Head Office
19	Mr. R.M. Sirisena	Education Dept. Coordination of School, WSSP Badulla District Office
20	Mr. L.G. Perera	CRO CWSPU, Matara District Office
21	Mr. R.H. Godakumbura	CRO CWSPU, Ratnapura District Office
22	Ms. D.W. Sarathseeli de Silva	CWSPU, Regional Director/Matara District Office

නිවාස, ඉදිකිරීම් හා මහජන උපයෝගිතා අමාත්‍යාංශය
விடமைப்பு, நிர்மாணத்துறை, பொது வசதிகள் அமைச்சு
Ministry of Housing, Construction & Public Utilities

ප්‍රජා ජලසම්පාදන හා සනීපාරක්ෂක ව්‍යාපෘතිය
சமூக நீர்வினியோக சுகாதார திட்டம்
COMMUNITY WATER SUPPLY & SANITATION PROJECT

☎ 872141, 872142
📠 872143

9 වන මහල, සේත්සිරිපාය, ශ්‍රී ජයවර්ධනපුර කෝට්ටේ, බත්තරමුල්ල 9வது மாடி,'செத்சிறிபாய', ஸ்ரீ ஜயவர்தனபுர, கோட்டே, பத்தரமுல்லை.
9th Floor, Sethsiripaya, Sri Jayewardenepura, Kotte, Battaramulla, Sri Lanka.

මගේ අංකය எனது இல My No

ඔබේ අංකය உங்கள் இல Your No

දිනය திகதி Date: March 20, 1996

822 LK95

Dear Madam/~~Sir~~,

Please find enclosed a copy of the report the CWSSP prepared as the outcome of a National Workshop on School Water Supply and Sanitation, held on September 02, 1995.

On the basis of a sample of 30 schools, the report sketches a fairly grim picture with respect to the state of water supply and sanitation facilities in schools. The need for proper arrangements for Operation and Maintenance, and for better hygiene practices through hygiene education and continued functioning of the facilities is highlighted.

Several recommendations have been put forward which need follow-up and incorporation in future School Water Supply and Sanitation Programmes.

I can whole heartedly recommend the content of this report to your attention.

H.T. Hewawasam
Director
Community Water Supply & Sanitation Project

(sent unsigned)