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**VILLAGE WATER SUPPLY SCHEMES SPONSORED BY THE**

**SARVODAYA RURAL TECHNICAL SERVICE**

**(AN EVALUATION BASED ON A FIELD STUDY OF 10 COMMUNITIES)**

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**1986**

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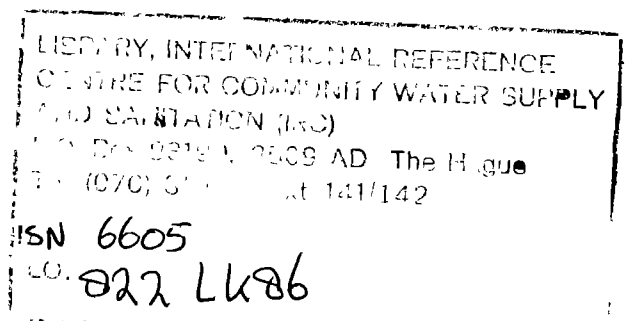
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## INTRODUCTION

This study was conducted in the latter part of 1985 to evaluate gravity based village water supply schemes constructed by the Rural Technical Service division of the Sarvodaya Movement. ~~Under the terms of reference agreed upon,~~ The researchers were to evaluate these schemes in relation to two broadly defined areas. Their first task was to examine how they have been successful in achieving the goal of providing safe drinking water to rural communities. This involved examination of organisational and operational aspects of the schemes in terms of social factors that influence success <sup>or</sup> /failure. Second, the researchers were also to evaluate the role these schemes have played in awakening rural communities by promoting the idea of social development through self-reliance (~~see appendix for detailed terms of reference~~). The study was commissioned jointly by the Sarvodaya Rural Technical Service and Helvetas. ~~the funding agency of gravity based village water supply schemes in Sarvodaya villages.~~

*Summary*

### The Sarvodaya Rural Technical Service

The Sarvodaya movement in its approach to development from grass root level up, by motivating the masses to realise their development goals through self reliance, considers that adequate infra-structural facilities at community level are a basic requirement of development in rural areas. These infra-structural facilities according to the Sarvodaya movement are roads, safe drinking water, waste disposal,

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prevention of soil erosion and irrigation facilities for agriculture (Sarvodaya 1985 lp). The Rural Technical Service is the arm that is in charge of these operations of the Sarvodaya movement. In provision of the above infra-structural facilities the Rural Technical Service is responsible for all technical aspects and provision of financial and material help the villagers cannot organize within community.

Construction of these infra-structural facilities by the Rural Technical Service is based on the principle of self-reliance ie cooperation among villagers and pooling of community resources in the development effort. So the projects sponsored by the Rural Technical Service are treated not as projects of either the Sarvodaya movement or those of the RTS (RTS nd). They are projects of the people, envolved and carried out through their own efforts. The philosophy is that people should be allowed to decide and organise their needs and the way they are fulfilled and the Rural Technical Service should not interfere by imposing its will on the community. The RTS is there not to lead but help the community in its development efforts. So the activities of the Rural Technical Service is limited to the provision of technical and other facilities, mainly financial, which are not available at the village level.

### Gravity based village water supply schemes.

The gravity based water supply schemes were first started by the Rural Technical Service of the Sarvodaya Movement in some selected villages in 1980. The work has now been extended to some thirty odd Sarvodaya villages in five districts. These schemes are funded

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by a Swiss non governmental organization called the Helvetas which also provides technical know how through the Rural Technical Service. The primary and immediate aim of these schemes is to provide safe drinking water to rural communities that have difficulties in getting an adequate supply of suitable drinking water. The long term aim of the schemes is common with that of the Sarvodaya ie to promote grass root level development effort.

The gravity based water supply schemes are not planned with the aim of providing drinking water to every household of the community on individual basis. The objective is to supply water to water points at selected locations. What is envisaged is communal consumption and not individualise use of drinking water. The primary reason for such a system is the limited availability of water. We do not intend here to explain in detail the technical aspects of the water supply schemes. It is sufficient here to say that these schemes envisage a system of distribution consisting of storage tank that holds water from the source, and one or more water points that receive pipe borne water purified by natural processes (see Stark 1983). The number of water points, their size, positioning of the storage tank and the frequency the water is released for consumption are decided by needs of the community, availability of water and technical feasibility of distribution.

At present there are 36 completed schemes distributed in five districts. They are andy, Badulla, Nuwara Eliya, Awissawella and Matara. The following table gives the distribution of the scheme in the five districts (table 1.1).

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Table 1.1Completed Village Water Supply Schemes

Districts	Number of completed Schemes
Kandy	23
Badulla	05
Nuwara Eliya	02
Awissawella	01
Matara	05
TOTAL	36

As the above table shows the most of the schemes are in the district of Kandy. It has more schemes than all the other districts put together. The average number of people provided with water by the schemes varies from scheme to scheme ranging from about 100 people in small schemes to about 1000 in larger ones RTS - 1985. Average size of villages where schemes are in operation is about 400 people. Similarly the number of water points also varies from scheme to scheme. The smallest scheme has only one point while there are larger ones with upto about 10 taps.



The approach of the Rural Technical Service to the construction of water supply schemes is based on three principles. The first principle is that the schemes should be decided, organised and constructed by the members of the community. So they are people's efforts and the role of Rural Technical Service is limited to provision of funds and technical expertise. Once the scheme is agreed upon and the villagers organise themselves for the purpose by forming a water committee the Rural Technical Service comes with its support. The second principle is the attainment of technical excellence of construction. For this close supervision is carried out by the Rural technical Service throughout the construction stage of the schemes. Thirdly the RTS holds the view that maintenance to be the back bone of the success of the scheme. So it has organised an extensive maintenance scheme and organised a care taker training for maintenance of the completed schemes. (Stark 1984).

### Organisation of the Survey

The study was carried out by the two researchers between September and December 1985. As this was to be a general evaluation, only ten out of thirty seven villages where village water supply schemes are in operation were selected for the study. In selecting these 10 communities the following criteria were used to get a representative sample of communities for the study. These were,

1. Size of community
2. Settlement type
3. Other development projects in operation



4. Economic status of community
5. Present status of the scheme
6. Situation of the community before the start of the scheme.

The last three criteria which are subjective measurements are from an evaluation made by the Rural Technical Service. An information file containing these and other relevant informations were obtained for this purpose by the researchers before planning the study. The following table gives the communities selected for the study, their location and the number of people served by each scheme (Table 1.2).

Table 1.2

Communities selected for the study.

District	Community	Number of People served
Badulla	Kotamihinna	130
	Bambarapana	300
Kandy	Kahatagastenna	400
	Ekiriya	400
	Atgala I	200
	Kotaligoda	400
Matara	Galpihilla	260
	Kitulhena	120
	Rahigampola	400
NuwaraEliya	Lamasooriya	350



Once the community sample was chosen the second step was to select respondents for interviews. It was decided that a purposive sample ranging from 10% to 20% should be chosen for this. The main criterion in selecting the sample of respondents was the use of the RTS village water facilities. Though the use of random sampling techniques also was considered at the planning stage this was abandoned as it became clear such would not serve any tangible purpose in view of the distribution of water through community stand posts. As the distribution of RTS water facilities is not uniform in the community random sampling would have given unforeseen bias to either users or non-users. As we wanted to avoid this we decided on a purposive sample. The following table gives the sample of the study (Table 1.3).

Table 1.3

The sample of the study

District	Community	No. of people served	Sample intended (person)	Sample actual (person)
Badulla	Kolamihinna	130	20	19
	Bambarapana	300	30	30
Kandy	Kahatagastenna	400	40	40
	Ekiriya	400	40	28
	Atgalla I	200	25	25
	Kotaligoda	400	40	38
	Galpihilla	260	30	20
Matara	Kitulhena	120	25	17
	Dehigampola	400	35	32
NuwaraEliya	Lemasooriya	350	35	35





As the above table shows the sample of persons selected for detailed interviews range from 20 to 40 with higher percentages coming from smaller communities. The discrepancy between the intended sample and the actual sample ie the number of people interviewed, is due to problems encountered in the field. But we believe that this has not affected the validity or accuracy of the data collected in the study.

Data collection of the study was conducted by four research assistants who were graduates of the University of Peradeniya. The Data collection techniques used in the study fall into three broad categories.

1. Semi-structured and un-structured interviews
2. Observations
3. Reports and other records

Semi-structured interviews using questionnaires were used to collect information from the main sample and from selected individuals such as Gramaseva Niladari, Public Health Nurse, school Principal and the Sarvodaya Worker in the community. Including the main questionnaire there were 5 questionnaires in all.

Observation was used to collect data at both planning stage of the survey and later to collect detail information about the schemes and the community under study. For this purpose research assistants were stationed at each community, upto 2 weeks depending on the amount of work, and were advised to attend functions,



both relating to the scheme and that were general and visit places that are frequented by villagers such as village bazaar.

Secondary data or recorded information came mainly from relevant Sarvodaya documents. These information were used to get an idea of the nature of the schemes of water supplies and other relevant background information. Though we were told by the Rural Technical Service that a social surveys had been done in each community and we would be able to use these information we found later that such information was not available due to poorly organised procedures of conducting surveys and documenting of data by the Sarvodaya organisation.

#### General Overview of Communities Studied

Of the 10 communities studied 9 are traditional villages while one, Atgala I is a new settlement created under village expansion scheme. The general socio-economic levels of the communities range from poor to very poor. Most of the community members, except in Kotaligoda and Kahatagastenna, were found to be either farmers or day labourers of agriculture based activities. These patterns identified through observations are supported by questionnaire data as well (see tables I and II in appendix). But we are hesitant to quote them as the sample was a purposive one.

Another important feature of the communities under study was the significance of caste structure in day to day activities. Though caste based conflict situations were not identified except in Lamasooriya and to some extent in Atgala I, role of caste groups especially that of the dominant one is still significant



in understanding working of these communities. In addition to caste divisions, divisions caused by new and old leaderships also found to be present in some communities. In some communities these intertwine with caste divisions like in Atgala I or takes the form of power politics as in Galpihilla. These aspects will be treated carefully in the analysis at a later stage.



## CHAPTER II

### Village Water Supplies and their Operation

This chapter is both descriptive and evaluative. In here our attempt is to evaluate the village water supply schemes in their operational and organizational aspects. We shall examine the major characteristics, the functions, the problems and the achievements in three distinct stages identified by organisational and functional criteria. These stages are namely, the preliminary stage, the construction stage and the consumption stage. In what follows we shall discuss each stage separately and evaluate the performance of the water supply schemes in terms of organisation, operation and above all mobilisation of rural masses in development activities.

#### Preliminary Stage

The lengthy process of decision making involving both the community and the Rural Technical Service is the main element in this stage. In this stage the community makes the first move by contacting the Rural Technical Service through the Sarvodaya after arriving at a decision to construct a gravity based water supply scheme. This decision ideally is a popular one though the original idea may first come from an individual, in most cases a leader of the community or from an interest group. Once the idea is accepted by the majority of the community a water committee is formed. The water committee contacts the Rural Technical Service and makes the initial deposit stipulated by the RTS. Once these are done the decision to construct the village water supply is taken subject to a feasibility study. It also needs to be mentioned here that communities seeking for assistance should be Sarvodaya villages.





The preliminary stage as we saw is a time of decision making for both the Rural Technical Service and the community. The community seeking help takes a popular decision and forwards it to the Rural Technical Service. The decision of the Rural Technical Service to either accept or reject the proposal is based on both technical and policy grounds. The latter stipulates the existence of Sarvodaya activity in the community, formation of a water committee and organisation of initial deposit as basic requirements before considering to build a water scheme. So in a way the decision of the Rural Technical Service at the stage is a 'bureaucratic' one. We shall examine here the way these two decision making procedures, one popular and other bureaucratic, in detail.

Popular decision making is a complex process. An idea can originate from the masses or it may come from a section of the masses which in turn gets the popular approval. In both cases the decision making is a "popular" one. In the communities we studied we found that the both of the above two processes had been in operation. The following table shows the decision making pattern of these communities as perceived by the members of the community. (Table 2.1).

As table 2.1 shows in 5 communities the members saw the decision to construct a water facility as a "majority one" while in two communities, namely, in Galpihilla and Dehigampola people saw it differently. Three of the 10 communities studied did not have a clear opinion which also can be safely considered as a negative response. This clearly shows that decision making does not always originate from the majority. We must say here that there is nothing wrong in this as minority decisions can become popular decisions if the majority does



accept them. Our observations in the communities studied reveal that it happens always. But we found that methods used in making minority decisions accepted by the majority cannot be always condone.

Table 2.1

Community perception of decision making

Community	Members opinion of the decision making process			Total Interviewed
	Majority	Minority	No-opinion	
Atgala I	08	01	16	25
Ekiriya	26	02	-	28
Kotaligoda	33	03	02	38
Kitulhena	16	-	01	17
Kotamhinna	02	-	17	19
Kahatagastenna	21	04	15	40
Lamasooriya	32	-	03	35
Dehigampola	-	18	14	32
Galpihilla	-	14	06	20
Bambarapana	20	-	10	30



Popularisation of decisions taken by a minority whether it is an interest group or an individual, is done by means of force or false promises. For example in Galpihilla the decision to construct the water facility was taken by a man who was trying to establish his leadership in the community. We found that he had promised the village priest unlimited supply of water to get his support. He needed the support of the priest first to use the existing water source that was used by the temple, as well as to reach the people through the priest. This individual got what he wanted but problems that followed as he could not keep his promises have affected the success of the water scheme. There are other instances of similar methods being used to mobilise popular support in the decision making stage. In Lamasooriya also we found that people had been promised by the organisers to provide taps for their convenience ie closer to home, to get their support. On the other hand in Lamasooriya we noted that force also had been used to get support of a section of the community. There the majority of the people who belong to Govigama caste did not have problems in mobilising majority support along caste lines. But in order to get the support of the so called low caste people Govigama people had used their social position. We question of the validity of both these tactics ie false promises and show of force to get popular support.

There is another characteristic that needs to be brought into light when discussing the majority support in the decision taken by the leaders. We noted that there was a "Silent Majority" in every



community that we studied. They are the sections of the community that accept the decision of the leaders without question. So even when there are questions they do not bring them to open. This we think is basically a manifestation of traditional role played by the high caste people (respectable people of community are invariably people of higher caste and of considerable wealth). So even some of these "majority" decisions we do not think always are arrived at in purely democratic manner.

We said that a decision to construct a water supply scheme a popular one either the proposal is initiated by a minority and subsequently given majority support or if it was an outright majority decision. In either case there is participation of the members of the community in the actual decision making process. We examined this process to understand how this was carried out in the communities we studied. The table gives the breakdown of the role of different categories of family in the process. (table 2.2).

The table shows that decision to support is basically a family affair. Most responses are concentrated around "husband and wife" category or "all" category which also includes husband and wife. Still there is a significant number of responses in wife category and wife and children category. This and the relative unimportance of "husband only" category except in Galpihilla and Lamasooriya we consider as a significant indicator of women's participation in the decision making process.

Unlike the decision making process of the community the decision to either accepts or reject a proposal put forward to the RTS is a more or less straight forward one. There are regulations and stipulated





conditions and if they are not met by the community the RTS rejects the proposal. We found that except in one instance the accepted procedures have been followed by the RTS. The exception is Galpihilla where permission has been given without basic conditions having been met. This we have found has created suspicion about the honesty of both the Sarvodaya and the RTS among the people in Galpihilla. We would like to emphasise here that this in no way is a weakness of the system but only one occasion where both the RTS and the Sarvodaya have been either misled or have allowed themselves to be misled. Our discussion with the team leader of the RTS or Sarvodaya officials did not reveal enough details to understand what exactly happened here.

Table 2.2

Family members and the decision to construct the water supply

Community	Family Members Supported							Total
	Husband	Wife	H/W	W/C	Child	All	NA	
Atgala I	-	6	10	1	-	2	6	25
Ekiriya	1	-	6	4	-	16	1	28
Kotaligoda	-	1	6	7	-	22	2	38
Kitulhena	4	1	8	-	-	1	3	17
Kotamhinna	2	2	9	3	-	2	1	19
Kahatagastenna	3	1	6	8	7	7	8	40
Lamasooriya	16	-	6	-	2	7	4	35
Dehigampola	7	5	4	-	-	8	8	32



## Construction Stage

The construction stage begins once the Rural Technical Service completes its feasibility study and agrees to go ahead with the scheme. The community is asked by the RTS to organise labour and locally available construction material such as sand and stone while the former comes in with financial assistance and technical support. In our evaluation we examined the construction stage in relation to two areas. They are, namely, the technical and organisational aspects of the construction. In the technical aspects our attention was on the supervision by the RTS and the satisfaction of the community of the constructed scheme. Organisational aspects on the other hand were examined in relation to labour recruitment, participation of the community and organisation of material resources.

Technical work of the construction starts with the arrival of the Rural Technical Services team to organise infrastructural facilities of the scheme and map out strategies of construction. Technical supervision and provision of engineering know how are done through a technical worker who is assigned to the village and works as the coordinator between the community and the Rural Technical Service.

We do not want to go into detail about the technical side of the construction as it is beyond our training. Further there is to be a separate technical evaluation carried out by the RTS in all the schemes. What we can say from our study is that technical work of the construction is a success in terms of the acceptance



by the community. We found that in the 10 schemes we surveyed people were quite satisfied with quality of work of the RTS and its personnel. Further more the physical involvement of the community members in the construction has given them a good understanding of the whole project. For example they know what a stock tank is and its uses or why a certain job has been done a particular way. We consider this is a significant achievement as it enables people to relate to the scheme helping them to consider it their own. We do not think an "outside constructed" project would leave the same relationship with the community.

Labour used in the construction of the RTS schemes is voluntary community labour. It is organised and managed by the community on Shramadana basis. We observed that in here in management of the schemes particular attention has been paid to avoid conflict situations that are so common in community labour mobilisations. As no payments are involved, except in the case of trained sarvodaya personnel such as masons, there is no opportunity for villagers to accuse the organisers of "favours done" to their friends and relations in giving employment. In general this has helped increase efficiency of work and construction programme is smoothly run. The only serious deviation from this general pattern we observed was Galpihilla.

Construction of the schemes is done by Shramadana ie voluntary labour. We found that in the construction stage all the schemes have managed to get wide support of the community members. The following table (table 2.3) illustrates this fact.



Table 2.3Participation in Shramadana by Communities

Community	Participation	No Participation	Total
Atgala I	22	3	25
Ekiriya	26	2	28
Kotaligoda	37	1	38
Kitulhena	15	2	12
Kotamihinna	14	5	19
Kahatagastenna	36	4	40
Lamasooriya	32	3	35
Dehigampola	25	7	32
Galpihilla	20	-	20
Bambarapana	28	2	30

This illustrates a very strong initial support for the schemes in all communities. But we must state here again that this situation should be understood in relation not only to the voluntary decision making of the community but also to other areas such as power relations and silent majority we discussed previously.

But we do not want to say here that every aspect of the construction work is without problems. There is a problem, though not extensive, that has somewhat affected the success of the construction stage. We heard stories of pilferage and misuse of construction material in several communities some of which were even verified by the RTS officials. For example in Kotaligoda and in Galpihilla we found that cement has been used by community members who were involved in the schemes. We consider these occurrences are only natural and even unavoidable. But as they





have created mistrust between the community and the RTS we consider that the RTS should take more effort in preventing them. For example by allowing unscrupulous individuals to come forward as helpers and using the RTS for their advantage in however small way as it happened in Kotaligoda and in Galpihilla the credibility of the scheme sets affected.

### Consumption Stage

Once construction is complete the RTS hands over the scheme to the community in a handing over/opening ceremony. Activities in the consumption stage fall into two categories. These two categories are the consumption and maintenance. In what follows we shall examine the consumption in relation to adequacy of water and pattern of water use and related problems. Maintenance will be examined in relation to its adequacy and the perception of the maintenance process by the community in general.

Though the RTS water supplies are basically meant to provide safe drinking water, use of water in these facilities are not limited to drinking. In the event there is excess water, this happens normally during rainy season, the overflow could be used for other purposes such as bathing. Further at the water points (a scheme with one outlet tap) the overflow is always used for purposes other than drinking. Problems only arise when there is no adequate water for drinking. As we see from the following table some schemes do not provide adequate water to satisfy the community. (Table 2.4).



Table 2.4Adequacy of water as seen by the community

Community	Adequate	Inadequate	No opinion	Total
Atgala I	5	20	-	25
Ekiriya	28	-	-	28
Kotaligoda	37	1	-	38
Kitulhena	17	-	-	17
Kotamihinna	7	7	5	19
Kahatagastenna	29	-	11	46
Lamasooriya	30	3	2	35
Dehigampola	32	-	-	32
Galpihilla	4	16	-	20
Bambarapana	29	1	-	30

As the above table shows the communities studied, except for three, saw that the water they get as adequate. The exceptions are Atgalla I which is a water point and Kotamihinna and Galpihilla. When the water is not adequate not all people who wait at the line up may get enough water. The particular pattern of collection which concentrates people around taps in mornings and evenings also contributes to this situation. This kind of concentration on the other hand is unavoidable as the family members who involved in collecting water are mainly children and mothers. As the most children go to school they go to collect water either before they leave for school or after they return home. But this is an unavoidable situation and cannot be taken as a weakness of the scheme.



In consumption stage location of taps is also very important. Consumer always sees the accessibility of the tap as important. We generally believe the location of taps are reasonably distributed considering that the RTS has to look for both a distribution agreeable to the community as well as one that is technically feasible. The second point is particularly important as the distribution of water is gravity based. Though the distribution of taps are normally agreed upon by the community we did not see a complete agreement among those interviewed about their location. The following table gives the perception of the community about the location of taps. (Table 2.5).

Table 2.5

Location of taps as seen by the community

Community	Community opinion about the location of taps			Total
	Good	Bad	No-opinion	
Atgala	22	2	1	25
Ekiriya	28	-	-	28
Kotaligoda	28	12	-	38
Kitulhena	16	-	1	17
Kotamihinna	9	7	3	19
Kahatagastenna	35	5	-	40
Lamasooriya	27	7	1	35
Dehigampola	28	4	-	32
Galpihilla	15	5	-	20
Bambarapana	29	1	-	30



Here we can see that in three communities there are significant disagreements regarding the location of taps. Some of these disagreements come from either existing community disputes or disputes arisen when location of taps were decided. This we see as a weakness of the community decision making process.

So far we discussed about the patten of use of water and problems involved in that. Apart from the minor problems we discussed so far for which we do not blame either the RTS or the Sarvodaya there is another area that needs mentioning here. That is the deliberate misuse of the water facilities by certain members of the community. We observed four different patterns of misuse in three communities we studied. In Atgala I we found a case of a certain women who demands priority at the water point. She, we found does not allow others to use the facility till she gets her vessels filled. In Kotaligoda we found one case of certain individual who has given his land to be used as a location for a tap preventing some of his neighbours using the tap. In the same community there is a household that uses an extension hose to get water to their house. Finally in galpihilla the priest blocks the section of the pipe that carries water to the village and uses water for bathing and for watering his vegetable garden. These weaknesses we think as basic problems in the organisation of the system and needs to be remedied.

Maintenance of the scheme also is an important part of the consumption stage. As we said before the Rural Technical Service has organised an extensive maintenance scheme including a programme





for training individuals for this purpose. Each water facility is assigned to one or more maintenance worker chosen from the community. The most heard problem in this area was the removal or breakage of taps. We found one case in Atgala I, one in Lamasooriya, two in Galpihilla and two in Bambarapana. Our understanding is that community conflicts are the reasons for this.

Table 2.6

Adequacy of maintenance as the community sees it

Community	Maintenance Level			Total
	Adequate	Inadequate	No-opinion	
Atgala I	1	14	10	25
Ekiriya	28	-	-	28
Kotaligoda	37	-	1	38
Kitulhena	11	6	-	17
Kotamihinna	2	13	4	19
Kahatagastenna	39	1	-	40
Lamasooriya	32	2	1	35
Dehigampola	32	-	-	32
Galpihilla	10	10	-	20
Bambarapana	20	4	-	30



The maintenance worker has to look into these problems as well as to help keep the tap area and stock tank area clean and protected. As we can see from the following table the members of the communities are reasonably happy with the maintenance (Table 2.5).

As table shows except in Atgala I, Kotamihinna and in Galpihilla in other areas people are satisfied with the maintenance. Even in communities where there are complaints about maintenance it is not seen as a major problem by the community. We believe that in most places maintenance is hampered by the fact that the maintenance worker is otherwise engaged in earning a livelihood for himself and his family. So it is natural that his maintenance work taking secondary importance.



## CHAPTER III

### The Impact of the Village Water Supplies on the Communities.

In this section our aim is to evaluate the water supply scheme in relation to two areas. As previously mentioned, the Sarvodaya movement attempts to achieve two goals through the village water supply schemes. They are, namely, to provide communities with safe drinking water and to promote development potential among the rural masses. For the sake of clarity we shall call the first objective the immediate objective of the village water supply schemes. The second is referred to as the long term objective. Under the immediate objective we shall discuss the achievements of these water supply schemes in providing adequate amount of safe drinking water. The long term objective will be evaluated in relation to the role of the schemes in improving general health conditions among the community members, in mobilising rural masses in development activities as well as in uplifting the community life in general in terms of increased social harmony and improved social values. Finally we shall also look at the unintended consequences of the water supply schemes.

#### The immediate objective

The immediate objective of the village water supply schemes, as we said before, is provision of safe drinking water. In the communities we studied we found that people were experiencing great difficulties in getting suitable drinking water before the schemes. The sources of their drinking water were either open streams or dug up wells. Both cannot be called hygienic sources of drinking water. Not only



that, the accessibility to these water sources was limited as the majority of people had to travel long distances to reach them. So the attempt of these RTS schemes was to provide these villagers with adequate supply of safe drinking water that can be collected regularly with reasonable comfort. The suitability, accessibility and adequacy of water that is provided is the focus of the evaluation

We would not like to comment much about the suitability of water. The method used in collecting and storing water used by the Rural Technical Service is a proven method in this regard. It uses simple technology that employs natural processes to obtain clean water. The other two ie adequacy and accessibility will in given careful consideration in this analysis.

Today, these communities whether they have only a water point as in Atgala I or it is a tap system as in Kotaligoda or Galpihilla, have achieved reasonably easy access to source of water for the people. For example in Atgala I people had to travel to other side of the village, which involved a climbing of a hill also, to get water prior to the scheme. Today an average consumer travels, about 1/4 to 1/2 mile and some even less. In places where extensive tap systems exist the situation is even better. This does not mean that there are no problems in reaching water under the new schemes. As we discussed in the previous chapter petti-village conflicts etc . Sometimes cause problems. But they, compared to the problem these people experienced prior to the schemes, can be considered minor problems. Further, those problems are nothing to do with the schemes.





The Rural Technical Service considers 45~~l~~l of water per capita as adequate supply. But our study shows that there are always disagreements in communities in this respect. Here we shall draw the attention to table 2.4 (chapter II) which gives the perception of villagers of the adequacy of the amount of water they receive. It shows that in 7 communities people consider that schemes provide adequate water for their daily needs. In others people saw it differently. In these communities the "perceived inadequacy" has been caused by different reasons. In Atgala I the water point, though originally planned for the colony, is also used by the members of the old village. In Kotamihinna there is a similar problem. In Galpihilla, as we discussed before, the dispute with the village priest has caused a similar situation. So in general our conclusion is that the schemes have succeeded in providing an adequate amount of suitable water with reasonable access. This is a vast improvement from the situation these communities were in before.

### The long term objective

The Sarvodaya movement as we mentioned in chapter I considers the provision of drinking water as a part of their effort to re-organise infra-structural facilities in rural communities. Their argument is that unavailability of suitable drinking water in rural areas has long term effects. That results in decreasing general health conditions that in turn affect productivity causing general decline of village social life. So one of the long term aims that is examined in this section is the general improvement of community health by these schemes. Second we shall evaluate the improvement of social life of these communities including increase of development consciousness among the members of these communities.



Direct measurement of these improvements is not possible in a survey of this nature. So we resort to using indirect measurements by examining indirect indicators of these characteristics in society. We first took the impressions of the community members we studied. Second the opinion of the leaders of these communities and health personnel were collected. This was particularly important as there were no sufficient documented data on the health conditions of these communities. Thirdly our observations were also utilised in conjunction with the above in arriving in our conclusions. We shall start our discussion with the impression of the community members which is given in the following table (Table 3.2).

The table gives the impression of the members of community in relation to changes caused by the schemes. It shows from the table that villagers are not in agreement in this area. Now let us examine this situation in detail.

The column 3 of the table 3.2 gives the number of people that considers the schemes as having done significant contribution in improving health situation of the communities. As the table shows improvement of health is the most important contribution of the village water supply schemes. In 3 out of 10 communities studied there are majorities who over whelmingly consider the significant impact in this area. In the forth one, half of those interviewed has the similar impression. Our discussions with the public health personnel in these gave us similar results to conclude that there is a likelihood of significant health impact. We tend to agree with them not only because they are in a better position to give an



objective evaluation but also our observation also confirmed it. So though not all communities voice the same opinion we consider that improved health as a result of these schemes is likely to be quite significant.

Table 3.2

The impact of the village water supply schemes (views of community members).

Community	Nature of Impact			No Impact	No-ov.	Total
	Unity	Conflict	Health			
Atgala I	3	2	1	18	1	25
Ekiriya	2	-	22	4	-	28
Kotaligoda	1	-	24	12	1	38
Kitulhena	-	-	4	4	9	17
Kotamihinna	-	3	-	16	-	19
Kahatagastenna	1	-	36	3	-	40
Lamasooriya	2	-	17	3	13	35
Dehigampola	7	6	-	18	1	32
Galpihilla	2	1	-	6	11	20
Bambarapana	7	-	-	23	-	30



The other long term impact of the village water supply schemes is the changes of social values of the communities. According to community members this is in two directions. First there is increase of unity in the communities and second there is increase of conflict. The above table shows that the both aspects have been given equal importance by the people. In Atgala I, Kotaligoda, Dehigampola and Galpihilla we found different conflict situations caused by the existence of the village water supply schemes. So it is not surprising that community members mentioning conflict as one of the result of the schemes. But it is important to note even in these communities there were people who thought that the schemes have done positive contribution ie increase of social harmony (unity) and improvement of health conditions. Further the above table shows that the opinion of the community in this area ie creation of conflict, is divided. Our impression in this regard is that the schemes have caused both intended and unintended results in this area. Intended being the increase of social harmony and unintended being the creation of conflict situations.

We consider that this unintended result of the schemes or social conflict as important in evaluating them. The reason is that in these communities these conflict are directly caused by the existence of water supply schemes. For example in Atgala I the community is divided between the Plan-International and the Sarvodaya. This has been caused by intensification of community division promoted by the disagreements caused during the operation of the schemes. In Galpihilla





we observed a similar situation where an existing conflict between two leadership factions have been intensified by the water supply scheme there. These unintended results we consider as negative impacts caused by the schemes though they are present only in a few villages.

What happens when a situation similar to this exist? Does it have a negative influence on the activities of the Sarvodaya movement? Though we do not like to give an outright "yes" as an answer we wish to point out that the conflicts caused by the schemes, failure of the schemes in the eyes of the community and the reputation of the Sarvodaya movement are closely related. This can be further elaborated if we look at the general impression of the community of the ability of the sarvodaya movement to carry out development in communities. The following table gives the opinion of the community members of these problems. (table 3.3).

Table 3.3

Sarvodaya and Alternative modes of Development Strategies (Opinion of villagers).

Community	Sarvodaya is the best	Other Strategies	No Opinion	Total Response
Atgala I	7	1	17	25
Ekiriya	17	-	11	28
Kotaligoda	3	-	35	38
Kitulhena	5	-	12	17
Kotamhinna	13	-	6	19
Kahatagastenna	5	3	32	40
Lamasooriya	-	4	34	38
Dehigampola	17	-	15	32
Galpihilla	2	1	17	20
Bambarapana	11	1	18	30



As the above table shows only in 4 communities there are majorities who consider Sarvodaya strategy as the best form of grass root development. Majority of the communities we studied, 6 to be exact, did not have a clear opinion in this regard. It is true that this is not the best measurement of the success or failure of the activities of the Rural Technical service. Nevertheless the above can be taken as an indirect assesment of the work of both the Sarvodaya and the Rural Technical Service as the impression of those who are benifitted by them reflect the ability of these organisations to carry out their tasks. So we can come to the broad conclusion that the RTS work, in this case supply of water to village communities, has not resulted in forming a long lasting favourable impression in majority of the communities we studied. We believe the unintended results of the schemes ie. conflicts caused by them and the activities of the community workers employed by the Sarvodaya movement are responsible here.

The other area we attempted to understand was the increase of development conciousness among the members of the communities as a result of the construction of the water supply schemes. The situation we discussed above also shows that the development conciousness has not significantly improved in these communities. Had that been happened the favourable impressions of the Sarvodaya movement would have been more among the villagers than seen in the table 3.3. We can further elaborate our point by examining other existing grass root level development projects in these communities and the extent of awareness among people of those activities. What we found was that there is no significantly identifiable impact of either the



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Sarvodaya or the RTS in this area. But in fairness to the Sarvodaya we must say that our measurements here also are indirect. We used existing projects and the awareness of the members of the communities of these activities as indicators here. The following table gives these information on the 10 communities we studied (table 3.6).

Table 3.6

Existing grass root level development projects and the awareness of villagers of their activities.

Community	Projects RTS other than RTS water Schemes	No. who know about the projects	Total
Atgala I	yes	2	25
Ekiriya	yes	10	28
Kotaligoda	yes	-	38
Kitulhena	-	-	17
Kotamihinna	yes	-	19
Kahatagastenna	-	-	40
Lamasooriya	-	-	35
Dehigampola	yes	25	32
Galpihilla	yes	16	20
Bambarapana	-	-	-

The above table that shows the awareness of the community of the existing projects supports our argument of the long term effec-



-tiveness of the Sarvodaya activities in promoting self reliance and development consciousness. There are six communities with Sarvodaya projects but only a few of those interviewed were aware of them. This we take as an indicator of failure of the Sarvodaya movement to mobilise the rural masses. Had the Sarvodaya been successful in promoting development consciousness in the communities through its activities the awareness of the members of the communities of the existing development scheme would have been higher.

To sum up the evaluation of impact of the water supply schemes we can say that they have succeeded in achieving their immediate objective. The long term objective on the other hand is a complex one and the impact of the water supply schemes in this area is difficult to measure effectively to give an outright answer. Their achievements in the area of improvement of health conditions is likely to be are significant. Still there are unintended conflict in some schemes. We identified these as negative impacts of the schemes. Further we cannot confidently say that the village water supply schemes have contributed significantly in the area of increased development consciousness in the communities.





## Chapter IV

### Factors Influencing the Success of the Village Water Supply Schemes.

So far our attempt has been limited to examination of the water supply schemes in terms of their achievements and short comings. In this chapter we shall go one step beyond the evaluation proper to attempt a causal explanation. Before we attempt this, one clarification is necessary. In here we are not going to examine each individual case seperately. Our attempt is to explain general problems taking examples from schemes where such problem seem to be prominent. With this frame of analysis in mind we categorised the factors we identified as significantly influencing the performance of the schemes. First, there are factors that are related to the organisation of the Rural Technical Service and the Sarvodaya movement. Second, there are factors that are related to the community.

As the sponsors of the village water supply schemes and as those who are responsible for their administration, the role and the activities of the Sarvodaya movement and that of the Rural Technical Service are pivotal to the success of these water supply schemes. We have discussed the role played by these two organisations in the preceeding chapters. Here we shall elaborate on these discussions and examine how the role of these two associations influence, the performance of the schemes. Our attention in this area will be on two problems. They are, namely, the relationship between the Sarvodaya personnel and the employees of the RTS at the grass root



level and the performance of community workers, especially the community workers of the Sarvodaya organisations.

Though the Rural Technical Service is an integral part of the Sarvodaya movement there is an important difference between the two. Unlike the Sarvodaya organisation which is oriented towards achieving a long term ideal the immediate concern of the RTS is short term and more mundane. By saying that we are not saying that the Sarvodaya movement as a whole does not have short term objectives. It has and they are carried out through its sub-divisions such as the RTS. These divisions are the apparatus that help the Sarvodaya to go towards its long term goal ie social development, by implementing short term plans. So it is possible for all practical purposes to distinguish between the more mundane concerns that are primary to the RTS such as the schemes under evaluation and the long term ideal of the Sarvodaya.

Because of these basic differences, the personnel attached to the two, especially at the grass root level, are different in several ways. This can be seen in the method of recruitment, their qualifications and background and training. The people who are attached to the RTS are first, experts in their work ie the technical officer, unlike the, sarvodaya workers. On the other hand the primary work of the sarvodaya personnel at grass root level is co-ordination and mobilisation of village activities. He is a dedicated community worker <sup>who</sup> receives only an allowance while the RTS worker on the other hand an employee who is paid to do a job. What is expected from the RTS worker is different from that of the sarvodaya community



worker. Most importantly the RTS worker has more facilities and a better pay. This situation, we found, as having potential for conflict situation between the two categories. In Lamasooriya in Nuwara Eliya we found that conflict between the two categories has contributed to the failure of the water supply schemes.

It also must be said here that such conflicts are not seen in Kandy or in Matara. Further the above discussed situation is only a potential basis of conflict and does not necessarily lead to open conflicts always. But we would like to say that the resentment often unexpressed, of the RTS worker by the Sarvodaya worker does always exist. The result of this is the lack of properly co-ordinated activities in projects such as the village water supply schemes.

Table 4.1

Favourations by the Sarvodaya Officer

Community	Favour	No favours	No-opinion	Total
Atgala I	9	3	13	25
Ekiriya	-	27	1	28
Kotaligoda	3	33	2	38
Kitulhena	1	15	1	17
Kotamihinna	9	4	6	19
Kahatagastenna	-	38	2	40
Lamasooriya	10	25	-	35
Dehigampola	3	27	2	30
Galpihilla	18	2	-	20
Bambarapana	1	29	-	30



The second Sarvodaya factor that influence the performance of the water supply schemes is the activities of the Sarvodaya field officers (community worker). Their involvements in the communities they live in and work the involvements that fall out side the interests of the Sarvodaya, have brought the organisation into disrepute in the eyes of the villagers in more than one instance. They are mainly blamed for either favouring certain people or for personal involvement in the community life. The above table gives the impressions of the community members of the Sarvodaya worker. (Table 4.1). As the above table shows in three communities people saw the Sarvodaya worker as doing favours to certain sections. In Galpihilla there is a clear majority who believe in this and in Atgala I and Kotamihinna it is significant as there are majorities who do not have positive opinion in this respect. This situation results in creating mistrust between the community and the Sarvodaya movement that in turn have negative effects on activities of the latter.

In addition to the above the Sarvodaya community worker also is blamed for his personal involvement in the community. We found of several cases of these people having extra-material relationships with village women or getting involved with village girls. We do not mean to blame people for having love affairs with the opposit sex. The "affairs" we are refering to here are those that do not confirm to any accepted values. We found out a few cases where these people have made village girls pregnant.

The result of these situations is the disillusionment of the community not only of the Sarvodaya worker but also of the sarvodaya





movement. We discussed the impressions of the community members of the Sarvodaya movement in chapter III. (see table 3.1 and the following discussion). Only 4 communities had majorities who believed that the Sarvodaya strategy as the best for social upliftment of communities. The following table gives the impression of the community of the performance of the sarvodaya worker (Table 4.2). The above table shows that there are three communities with majority of people who are either displeased with the activities of the community worker or who have no favourable opinion of him. This is a result of their alleged favourations and involvement of community activities that are outside their officially assigned work.

Table 4.2

Impression of the Community of the Activities of the Community Worker

Community	Satisfactory	Unsatisfactory	No Opinion	Total
Atgala I	7	5	13	25
Ekiriya	28	-	-	28
Kotaligoda	33	-	5	38
Kitulhena	15	-	2	17
Kotamihinna	10	1	8	19
Kahatagastenna	5	1	34	40
Lamasooriya	25	2	5	32
Dehigampola	25	5	-	30
Galpihilla	2	18	-	20
Bambarapana	23	1	6	30



The fact that these people have been long term stayers of the communities and the lack of adequate training may be the reasons for these weakness we discussed. Further, these people have to depend on the community members for their meals and accomodation. This also we think have contributed to the above situation, especially favouring of certain members of the community.

Apart from the Sarvodaya based factors there are also community factors that contribute either to the success or the failure of the schemes. These factors are basically manifestations of the socio-political organisations of the communities. For the sake of clarity of analysis we divided the community based factors influencing the performance of the water supply schemes into two categories. They, are namely, the social stratification and the power structure of the community and the community leadership.

The social stratification and the power structure basically refer to caste divisions and the traditionally accepted leadership role ascribed to the higher caste. We want to note here that, though class situations can be identified in rural communities, caste divisions still play a very important role in them. Often there is a close relationship between membership in higher castes and higher classes. ie land owning class or the middle class public servants. In the communities we examined the highest caste has always been the Govigama caste. They always seem to take the leaderships role in all community activities. In six communities we studied the high caste people were the sponsors of the idea to build a water supply scheme (table 2.1) and their decision was accepted by the community. In the construction stage also the support of the community is more



or less unchanged (table 2.3). There are four communities where leaders and the masses disagreed. But if we examine this situation deeper we see that situation is not simple and clear cut as it appears to be.

In a previous section we discussed the existence of silent majorities in the community we studied (table 2.1 and the following discussion). Their behaviour can be explained in relation to the traditional leadership role of the high caste people. It is a common situation in every village to see the high caste people to be the over all majority. This also helps them to mobilise the support they need for activities organised by them. This does not happen when caste memberships are fairly equally distributed. In those events the role of the traditional caste can be contested and that has happened in several communities. In Atgala I, Kotamihinna, Dehigampola and Kahatagastenna we observed caste based divisions disrupting the performance of the schemes. In all these communities problems have come up despite the initial consensus the leaders were able to achieve during the early stages of construction. In Lamasocriya, on the other hand where the Govigama caste is the clear majority we saw a different situation. There, as we noted before also, the so called low caste people who are only a handful have been forced to support the scheme and have been mainly used as construction workers. We found a strong resentment among them of the way they were treated during the construction by the leaders of the Govigama caste.

The role of the castes is not always divisive. Castes can help to mobilise people along caste lines. We mentioned the fact that where there is a clear majority of people belonging to a certain



caste it helps the leaders of that caste to get the support of their own people. When the community is of the same caste similarly the problems are reduced and unity is easily achieved. The most successful example in here is the success story of the Ekiriya project. But it must be mentioned also that in communities unified along caste lines other division can emerge, for example the conflict between traditional leadership and the new leadership. This bring us to the next problem we mentioned at the begining of the discussions of community based factors, namely the community leadership.

The role of community leadership is very important in organisation of any community based activities. They are the people who not only work as the link between the community and the outside but also they have the ability to mobilise and draw popular support of the rural masses. So proper utilisation of this resource is paramount to success of the village water supply schemes. We shall attempt here to examine to what extent this has been achieved by the Rural Technical Service in construction of the village water supply schemes. We shall also examine the way the internal dynamics of community leadership ie its composition and support base and leadership conflicts affect the success failure of the village water supply schemes.

Before examining the success of the Rural Technical service in reaching the leaders of the community and utilising their support in the construction of the village water supply schemes we need to understand the way the Sarvodaya movement sees the role of the village leadership. The Sarvodaya movement sees effective community leaders as primary in the mobilisation and in motivation of the rural masses. These leaders are not the chieftains but benefactors





or heroes of the community (Ariyaratne 1980 44p). Has the Rural Technical Service succeeded in here? We found that there is a degree of success here but it should be seen in relation to another aspect of community leadership we want to mention.

In societies where there is some form of social stratification it is not theoretically possible to find heroes or benefactors respected by all. In the communities we studied we did not find one example of such leaders accepted to every section of the community. Community leadership as observed in these communities has more to do with social position than their other qualities. Nevertheless we do not question the existence of benefactors. Our doubt is that they have to face constraints unless they are not from the higher caste or class. So the leadership that combines respect and other qualities does not exist in communities we studied. There were respected people for their position ie higher caste men, priest, and there were other leaders who were respected for their deeds ie youth leaders, school teachers. Effective utilisation of leadership in mobilisation of rural masses can be done only when there is cooperation between the two categories of leaders. This we observed in Bambarapana and in Ekiriya. The RTS in these two communities has effectively used the community leadership.

But achievements should be measured not only in relation to positive situations as the ones mentioned above. There are negative situations as well. This leads us to examine the ability of the RTS in utilising the community leaders when there are conflicts. Conflict situations among leaders can arise in several contexts. The above discussed division of leaders by social position and leaders by



deeds and others such as caste or political divisions can give rise to conflicts. In Kotaligoda and Kitulhena we observed that leaders by position and leaders by deeds are in disagreement though there are no open conflicts. The latter does not get the cooperations of the former in these two communities. In Atgala I there is caste based conflict while in Galpihilla political affiliations have intertwined with a conflict between the old and the new leadership of the community.

In all these places we cannot say the RTS has been able to exploit the full potential of the leadership. The RTS activities and the Sarvodaya organisation both have aligned with a faction causing the other group to distance itself from the activities of these organisations. In Atgala I this has resulted in a situation where even the long established members of the Sarvodaya organisation joining the Plan-International organisation. But the biggest mistake done by the RTS in this respect is in Galpihilla where the village priest and traditional leaders are at loggerheads with the new leadership who is with the RTS. These situations, we believe, have been caused by the failure of the both the Sarvodaya and the RTS to understand the complex socio-political relations governing community leadership.

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## Chapter V

### Findings and Recommendations

In the preceding chapters we examined 10 village water supply schemes sponsored by the Sarvodaya Rural Technical Service. Our aim was to evaluate the achievements of these water supply schemes in terms of operation and organisation, and as a medium of promoting the Sarvodaya ideal of social development through self reliance. In this chapter our attempt is two fold. First is to present the major findings of our study in summary form. Second is to offer our recommendations so that the Rural Technical service can utilise them in formulating guidelines in the light of the findings of this study.

### Summary of Findings

1. In general, the village water supply schemes ~~we~~ studied have achieved their immediate aim with reasonable success.

↳ We say this on the basis of the following.↳

- A) Their is <sup>an</sup>adequate supply of safe drinking water in most of the villages ~~we~~ studied. The inadequacy of water <sup>quantity</sup> is basically a result of ~~the~~ factors beyond the controls of the Rural Technical Service. ~~the~~ (e.g. source yield, expectation,
- B) ~~The~~ schemes <sup>In general</sup> are properly and adequately maintained ~~except with a few exceptions.~~



C) Except in Galpihilla the petty -political divisions have not interfered with the scheme. This is a very important achievement as ~~the~~ schemes similar to this that were exist~~ent~~ in some of these villages previously were beset with political interference and other malpractices such as favouration in the supply of water.

D) Finally, the contribution of the schemes in the improvement of health conditions of the communities seems to be significant.

2) The long term aim of the RTS sponsored water supply scheme cannot be seen as a success. ~~We did not find~~ <sup>No</sup> significant impact of the scheme <sup>was noted in relation to an increase of</sup> ~~in the areas of increasing~~ development <sup>or</sup> consciousness <sup>awareness</sup> in the communities ~~we studied~~. We <sup>This conclusion is based on the following</sup> came to this conclusion on following grounds.

A) Only a few communities ~~we studied~~ have "other development activities" organised by the community.

B) The awareness of the members of these communities of those few activities <sup>was minimal</sup> ~~were~~ very low.

C) In some communities conflicts have either been created or intensified as a result of the <sup>VWS</sup> schemes. ~~This we must emphasise here though, is~~ <sup>This seems not</sup> ~~not~~ <sup>be</sup> ~~the~~ <sup>fault</sup> ~~fault~~ of the concept but a result of bad management.





- 3) The activities <sup>of</sup> ~~between~~ the grass root level employees of both the RTS and the Sarvodaya are not properly co-ordinated. ~~We found that~~ There is resentment of the RTS employees by the grass root level Sarvodaya workers. This ~~was~~ found in all communities and in Lamasooriya it has come out into open affecting the very existence of the water supply schemes.
- 4) ~~We found that~~ The services of the community level Sarvodaya worker <sup>was</sup> ~~as~~ unsatisfactory in general. <sup>to be</sup> Their personal involvements in community life ~~have~~ created problems.
- 5) Proper and careful identification of community leadership is pivotal to the success of the schemes of this nature. ~~We found that~~ RTS has only moderate success in this area.
- 6) Misuse of water facilities is ~~also~~ found to be common in some communities. In Galpihilla we mentioned about a woman who claims priority in collecting water by claiming that without her efforts the scheme would not have come up. In Kotaligoda there is one family that uses an extension hose to get pipe born water to their house. In the same village there is a person who prevents some of his neighbours from using the tap installed in his land by closing the foot path leading to it. Further there are incidents of damages caused by certain individuals to some of the installations. ~~Though the~~ RTS believes that these are community problems and villages themselves



should solve them. <sup>But the</sup> people seem to believe <sup>expect</sup> that the RTS <sup>to</sup> also intervene here and help. Such situations have led people to be disillusioned with the RTS. ~~What we observed~~ here <sup>After</sup> is that villagers are powerless to take action <sup>in against</sup> these <sup>problems</sup> circumstances either because the culprits are powerful members of the community or due to general passive nature of village communities that does not encourage any form of confrontation.

### Recommendation of the study.

<sup>The</sup> ~~Our~~ study revealed that the short comings of the RTS sponsored village water supply schemes are caused by factors related to both the community and the Sarvodaya organisation. ~~We believe that~~ <sup>The</sup> re-organisation and revision of (some of the areas of) the RTS approach to the village water supply schemes can help remedy the problems. ~~we discussed in this report.~~ The recommendations of this study fall into two categories. First, there are general recommendations that consider the village water supply scheme as a whole. Second, we shall also present a few specific recommendation to deal with some specific situations.

1. The preliminary activities of the Rural Technical Service must consist of a carefully planned socio-economic survey in the communities it considers as potential recipients of water supply schemes. ~~we found that~~ <sup>Present</sup> social surveys are incomplete and inconclusive. The surveys by the RTS should be planned not only to collect general



socio-economic data but also to gain knowledge on specific aspects of the communities such as leaderships structure and the nature of interaction between the masses and the leaders.

- 2) The decision to construct water supply schemes should not be taken only on the basis of need for water. The success of on going Sarvodaya activities also should be given equal consideration in selecting the communities. ~~We found that such~~ <sup>It is</sup> is not the case today. In other words ~~they~~ <sup>RTS</sup> should start water supply projects only in re-awakened villages. In the event that it is decided to construct a water supply scheme in communities ~~when~~ <sup>where</sup> the Sarvodaya movement is not "very active" a long term preparation period must be considered before the actual construction.
- 3) ~~We strongly recommend that~~ <sup>F</sup>Facilities given to the Sarvodaya community workers be increased. They should be given a better allowance as a begining<sup>ing</sup>.
- 4) ~~We recommend that~~ <sup>E</sup>Existing training programme for the community workers <sup>should</sup> be broad based and improved in content and in duration. ~~It should be broad based to include the~~ <sup>should</sup> RTS workers ~~too so that they also get a proper~~ <sup>community-oriented</sup> training before they go to work in communities. We suggest that content be improved and duration be increased because we are in the opinion that the present sporadic programmes are quite insufficient and ineffective. We found that ~~Due to insufficient training and preparation the~~ <sup>Sarvodaya</sup> grass root workers are basically not good communicators and are wanting in <sup>their</sup> ~~the area of~~ ability to motivate people.



5) The RTS should take an active role in helping people to resolve disputes arising from situations such as abusing of water facilities, misuse of water and damages to installations. ~~Here we believe that~~ <sup>the</sup> non-interference philosophy of the RTS does ~~much~~ <sup>more</sup> harm than good. It is true <sup>that</sup> facilities are constructed by ~~the~~ <sup>the</sup> people and should be treated as belonging to ~~the~~ <sup>the</sup> communities. It is also true that it is their responsibilities to maintain and run them. Such philosophies though do not go with hard facts of rural life. People are not always able to confront the ~~people~~ <sup>persons</sup> who damage and misuse water facilities due to various reasons. Neither the community worker of the Sarvodaya movement nor the Sarvodaya village level organization is able to do anything contributory here. Some kind of involvement by Sarvodaya officials is necessary so that the villagers have the backing they need to confront the culprits.

In addition to the above general recommendations we would also like to suggest changes to a few specific projects. These specific recommendations are as follows.

- 1) We recommend that the RTS should sever its relationship with the Galpihilla scheme. It will help in long term as it will show the community in general that the Sarvodaya movement is not to be blamed for the mistake of the few who had taken the decision here to construct this scheme. continuing association will further alienate the majority of the community from the Sarvodaya.





- 2) The Sarvodaya and RTS should re-organise its work in Badulla. Ways and means be found to resolve the conflict situation between the RTS and the Sarvodaya grass root level workers in this district.

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APPENDIX

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Table 1 -Employment structure (Individuals)

Community	Farmer	Labourer	Govt. emp.	Self. emp.	Other	Total
Atgalla	-	16	09	03	02	30
Ekiriya	22	01	09	02	05	39
Kotaligoda	13	11	20	02	03	49
Kitulhena	01	29	02	05	-	37
Kotamihinna	02	09	10	01	04	26
Kahatagastenna	24	02	21	02	08	62
Lemasooriya	23	08	01	03	-	35
Dehigampola	18	08	03	16	01	46
Galpihilla	-	08	08	01	06	23
Bambarapana	17	01	11	03	07	37





Table 2Income Level

Community	0-600	600-1200	1200·	Total
Atgala	15	07	03	25
Ekiriya	20	05	03	28
Kotaligoda	23	07	08	38
Kitulhena	16	-	01	17
Kotamihinna	12	06	01	19
Kahatagastenna	09	20	11	40
Lemasooriya	33	02	-	35
Dehigampola	08	11	13	32
Galpihilla	11	07	02	20
Bambarapana	06	09	15	30

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Table 3

Major Problems Identified.

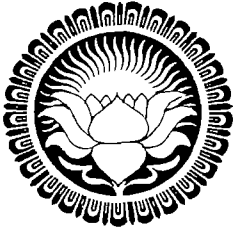
Community	Conflict	Inadequate maintenance	Inadequate water	Favours by Sarvodaya
Atgala	X	X	X	X
Ekiriya				
Kitulhena				
Kotaligoda				
Kotamihinna	X	X	X	X
Kahatagastenna				
Lemasooriya				
Dehigampola	X			
Galpihilla	X	X	X	X
Bambarapana				



Terms of Reference for Social Impact Study of 10 Villages

- a) Do the systems function properly and as intended ?
- b) Do the systems provide an adequate supply of water?
- c) How are the systems maintained? By whom and how paid?
- d) How are the systems used? By whom?
- e) Participation of women.
- f) Have the systems contributed to the general upliftment of the population?
- g) Was there a (perceived or factual) improvement in the general health condition of the population as a result of the new water supply?
- h) Has the experience of the common construction of a water supply precipitated other common projects? If yes, of what nature and with what success?
- I) Through the project experience, has there been a change in community spirit, attitudes of sharing and selflessness, community, leadership, responsibility of individuals towards the community, etc.?
- j) Are there any village groups, committees, development societies etc. formed? Are they active?
- k) What are the opinions about Sarvodaya?





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## ***Sarvodaya Rural Technical Services***

EVALUATION OF VILLAGE WATER SUPPLY SCHEMES CONSTRUCTED BY SRTS  
Authors: Dr. S.K. Pinnawela and Mr. H.M.D.R. Herath

The following provides a summary of the findings and recommendations of the evaluation report.

### INTRODUCTION

This study was conducted in the latter part of 1985 to evaluate the gravity based village water supply schemes constructed by the Sarvodaya Rural Technical Services division of the Sarvodaya Movement. The researchers were to evaluate these schemes in relation to two broadly defined areas. Their first task was to examine how they have been successful in achieving the goal of providing safe drinking water to rural communities. This involved examination of organisational and operational aspects of the schemes in terms of social factors that influence success or failure. Second, the researchers were also to evaluate the role these schemes have played in awakening rural communities by promoting the idea of social development through self reliance. The study was commissioned by HELVETAS on behalf of the Sarvodaya Rural Technical Services.

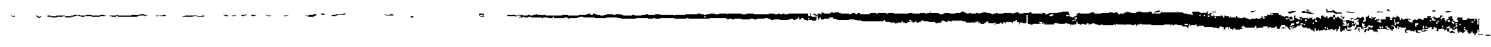
### FINDINGS

In general, the village water supply schemes studied have achieved their ~~mandate with reasonable success.~~

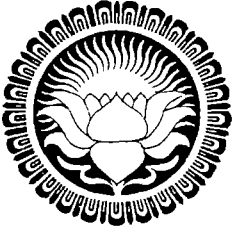
- There is an adequate supply of safe drinking water in most of the villages studied. The inadequacy of water quantity is basically a result of factors beyond the control of the Rural Technical Service (e.g. source yield, too high expectations of the consumers)
- In general the schemes are properly and adequately maintained.
- Except in Galpihilla the petty political divisions have not interfered with the scheme. This is a very important achievement as schemes similar to this that were existent in some of these villages previously, were beset with political interference and other malpractices such as favouritism in the supply of water.
- Finally, the contribution of the schemes in the improvement of the health conditions of the communities seems to be significant.

The long term aim of the SRTS sponsored water supply schemes can not be seen as a success. No impact of the scheme was noted in relation to the (increase of) consciousness or awareness in the communities studied. This conclusion is based on the following findings:

- Only a few communities have "other development activities" organised by the community.
- The awareness of the members of these communities of those few activities was minimal.







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- In some communities conflicts have either been created or intensified as a result of the VWS schemes. This seems not to be the fault of the concept but a result of bad management.
- The activities of the grass-root level employees of both the SRTS and Sarvodaya are not properly co-ordinated. There is resentment of the SRTS employees by the grass-root level Sarvodaya workers. This was found in all communities and in Lamasooriya it has come out in the open, affecting the very existence of the water supply scheme.
- The services of the community level Sarvodaya worker was in general unsatisfactory. Their personal involvements in community life create problems.
- Proper and careful identification of community leadership is pivotal to the success of the schemes of this nature. SRTS has only moderate success in this area.
- Misuse of water supply facilities is found to be common in some communities. There are also incidents of damage caused by certain individuals to some of the installations. SRTS believes that these are community problems and that the villages themselves should solve them. But the people seem to expect SRTS to intervene here and help. Such situation have led people to be ~~disillusioned with SRTS. Often~~ villagers are powerless to take action against these problems either because the culprits are powerful members of the community or due to a general passive nature of village communities that does not encourage any form of confrontation.

### RECOMMENDATIONS OF THE STUDY

The study revealed that the shortcomings of the SRTS sponsored VWS schemes are caused by factors related to both the community and the Sarvodaya organisation. The re-organisation and revision of (some of the areas of ) the SRTS approach to the village water supply schemes can help remedy the problems. Though specific recommendations have been mentioned in the report only the general ones have been listed here.

- The preliminary activities of the SRTS must consist of a carefully planned socio-economic survey in the communities it considers as potential recipients of water supply schemes. Present social surveys are incomplete and inconclusive. The surveys should be planned not only to collect general socio-economic data, but also to gain knowledge on specific aspects of the communities such as leadership structure and the nature of interaction between the masses and the leaders.

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- The decision to construct a water supply scheme should not be taken only on the basis of the need for water. The success of on-going Sarvodaya activities should be given equal consideration in selecting the communities. This is not the case today. In other words SRTS should start water supply projects only in re-awakened villages. In the event that it is decided to construct a scheme in communities where the Sarvodaya movement is not very active, a long period of preparation must be considered before the actual construction.
- Facilities given to the Sarvodaya community workers should be increased. For a start they should be given a better allowance.
- Existing training programmes for the community workers should be broad based and improved in content and duration. SRTS workers should also get a proper community-oriented training before they go to work in the villages. Due to insufficient training and preparation the Sarvodaya grass-root workers are basically not good communicators and are wanting in their ability to motivate people.
- SRTS should take an active role in helping people to resolve their disputes arising from such situations such as abuse of water facilities, misuses of water and damages to installations. The non-interference philosophy of the SRTS does more harm than good. ~~It is true that the facilities are constructed by the~~ people and should be treated as belonging to the communities. It is also true that it is their responsibilities to maintain and run the schemes. Such philosophies, though, do not go with the hard facts of rural life. People are not always able to confront the persons who damage and misuse water facilities due to various reasons. Neither the community worker of the Sarvodaya movement nor the Sarvodaya village level organization is able to do anything contributory here. Some kind of involvement by Sarvodaya officials is necessary so that the villagers have the backing they need to confront the culprits.

HH/31/3/87



