

**ESTIMATES COMMITTEE  
(1973-74)**

**(FIFTH LOK SABHA)**

**FIFTY-THIRD REPORT**

**MINISTRY OF WORKS AND HOUSING**

**[Action Taken by Government on the recommendations contained in the Thirty-Eighth Report of Estimates Committee (Fifth Lok Sabha) on the Ministry of Works and Housing—National Water Supply Programme]**



**LOK SABHA SECRETARIAT  
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CORRIGENDA TO THE 53RD REPORT  
OF ESTIMATES COMMITTEE (1973-74)

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- p.(vii), (i) line 3 for 'Forty-third' read  
'Fifty-third'  
(ii) line 25 insert 'XVIII' after  
'Appendix'.
- p.2, line 6, for '945' read '1945'
- p.5, (i) line 3, for 'sources' read 'source'.  
(ii) line 17, for 'quarely' read 'squarely'
- p.68, first line, for 'Appendix II' read  
Appendix III.

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(1973-74)

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**STUDY GROUP 'F' OF THE ESTIMATES COMMITTEE  
(1973-74)**

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14. Shri Awadesh Chandra Singh
15. Shri M. G. Uikey.



## INTRODUCTION

I, the Chairman of the Estimates Committee, having been authorised by the Committee present this Forty-third Report of the Estimates Committee on Action Taken by Government on the recommendations contained in the Thirty-Eighth Report of the Estimates Committee (Fifth Lok Sabha) on the Ministry of Works and Housing—National Water Supply Programme.

2. The Thirty-Eighth Report was presented to the Lok Sabha on the 26th April, 1973. Government furnished their replies indicating the action taken on the recommendations contained in this Report between 23rd August, 1973 and 3rd November, 1973. The replies were examined by the Study Group 'F' of the Estimates Committee at their sitting held on the 22nd December, 1973. The draft Report was adopted by the Committee on the 20th March, 1974.

3. The Report has been divided into the following Chapters:—

- I. Report.
- II. Recommendations which have been accepted by the Government.
- III. Recommendations which the Committee do not desire to pursue in view of Government's reply.
- IV. Recommendations in respect of which replies have not been accepted by the Committee.

4. An analysis of the action taken by Government on the recommendations contained in the Thirty-Eighth Report of the Estimates Committee (Fifth Lok Sabha) is given in Appendix. It would be observed therefrom that out of 65 recommendations made in the Report, 54 recommendations i.e. 83 per cent, have been accepted by Government and the Committee do not desire to pursue 3 recommendations i.e., 6 per cent, in view of Government's reply. Replies of Government in respect of the remaining 7 recommendations i.e. 11 per cent, have not been accepted by the Committee.

NEW DELHI;  
April 24, 1974  

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Vaisakha 4, 1896 (Saka).

R. K. SINHA,  
Chairman,  
Estimates Committee.

## CHAPTER I

### REPORT

#### Magnitude of the Problem

*Recommendations Nos. 1, 2, 4, 5, 36, 37 & 38.*

*(Para Nos. 1.16, 1.17, 2.19, 2.20, 3.19, 3.20 and 3.21)*

The Estimates Committee had observed in paras 1.16, 1.17, 2.19 and 2.20 of their 38th Report on National Water Supply Programme that wholesome and adequate supply of drinking water to the general public was now generally accepted as an essential civic amenity. Noting the position as it stood at that time, the Committee had stated that in rural areas piped water supply had thus far been brought within the reach of only 22,000 villages as ending March, 1972 comprising only 3.07 per cent of the total population of the country. In urban areas protected water had been made available only to 1282 towns out of 2921 towns in the country. Even in these towns the supply had been partial. Further, even at the end of the Fourth Plan, there would still be 1274 towns in the country without this basic amenity. Only 186 towns had so far been connected by sewerage full or partial. Considering the magnitude of the problem *viz.*, making available this basic necessity to a population of 55 crores and considering the backlog in the field, the Committee had considered the pace of progress too slow.

2. The Committee had strongly urged upon the Government to take concerted and positive measures at least from now onwards to ensure that this basic requirement of wholesome and adequate drinking water was made available to every village and hamlet in accordance with a perspective plan in the shortest possible and specified period.

3. The Committee were distressed to note the dismal situation of water supply prevailing in the rural areas of the country today. Even twenty-five years after Independence, 4.55 lakh villages out of 5.67 lakh villages in the country were still dependent on ancient means of water supply such as hand-pumps, tanks, wells, rivers, streams and springs. What was most deplorable was that there were still about 90,000 "scarcity" villages where water was not available within a depth of 50 feet or within a distance of one mile and there were still about 61,000 "health problem" villages where water was infected with various health hazards.

4. The Committee's observations in subsequent paras Nos. 3.19, 3.20 and 3.21 had also emphasised similar views. The Committee had noted that provision of safe water supply and sanitation had not received the attention it deserved in the Five Year Plans in spite of the fact that its importance had been emphasised early by expert bodies like Health Survey and Development Committee, 945 and by the Planning Commission itself. During the first two Plans, meagre allocations had been made and even those had not been fully utilised. Lower allocations had been made in the Third Plan as compared to the needs indicated by the expert bodies like Third and Fourth Conferences of Public Health Engineers in 1958 and 1960 and by the National Water Supply and Sanitation Committee in 1961 and even the Health Ministry had all along been pressing for higher allocation for water supply. The Committee were also surprised to note that in this vital sector of nation building activity no specific targets—physical or financial had been fixed before the Fourth Plan. Naturally not much progress could have been expected.

5. The Committee had expressed a hope that this sector of the Programme would henceforward receive appropriate place in the plans and the allocation would be such as to ensure that the basic facilities of safe water supply and sanitation were made available throughout the country in a phased manner by a specified date, at any rate before the end of the next decade.

6. Government have in reply to these recommendations noted the observations made by the Committee. Government have, however, clarified that the piped water supply in rural areas is not the only method for providing protected drinking water to the rural community. Tube-wells with hand-pumps and sanitary wells provided with hand-pumps also constitute adequate sources for safe water supply.

7. Government have furnished the following table giving an approximate estimate of the coverage of rural population with drinking water supply by various methods as at the end of the Fourth Plan:—

No. of villages	Percentage of supply	Population 1971	Type of supply
1	2	3	4
0·39 lakhs.	5%	2·0 crores	Tubewells with handpumps and piped water supply-safe.
2·39 lakhs	46%	20·0 crores	Adequate and fairly safe water supply through simple wells and

1	2	3	4
1·85 lakhs	· ·	36%	16·0 crores
1·13 lakhs	· ·	13%	5·6 crores
5·76 lakhs	· ·	100%	43·8 crores

hand-pumps. Some villages are also covered with piped water supply which is safe.

Simple wells.

Problem villages yet to be covered

8. In this connection it has been pointed out on the basis of the above table that only 1,13,000 villages with a population of 5.6 crores are categorised as problem villages where there is no perennial source of drinking water within one mile distance or 50 feet depth or where the existing source of supply suffers from public health hazards.

9. As would be seen from the reply to the Recommendations at Serial Nos. 1, 2, 4 and 5, there are as many as 1.85 lakh villages with 16 crores of population comprising about 36 per cent of the rural population served by simple wells. These villages have been distinguished from the villages provided with adequate, safe or 'fairly safe' water. In addition, there are 1.13 lakh villages with a population of 5.6 crores categorised as problem villages. Whereas most of the problem villages were proposed to be covered during the Fifth Plan, the Committee wanted to know when the villages in the former category were to be provided with safe and adequate water and whether any long term programme for providing safe water as also sanitation to the entire population of the country had been prepared by Government. It has been stated by Government in reply as follows:—

“In the Fifth Plan, an outlay of Rs. 573 crores has been made for rural water supply under the Minimum Needs Programme. It is proposed to cover most of the problem villages (namely, villages without any source of drinking water or village where the existing source of drinking water suffers from health hazards etc.) with this provision. However, with the escalation in the prices of materials and labour costs, it is anticipated that it would be unlikely to cover all the problem villages in the Fifth Plan period. The problem will remain to be tackled in the Sixth Plan period also.

In view of the constraints of resources and the big backlog of tackling the more serious problem of "No source" and "Health Hazard" villages, it has not been possible to make provision in the 5th Plan for providing water supply through safe sources in other villages. 1.85 lakh villages referred to in the reply sent earlier are shown as those served by simple wells. That does not mean that all these villages are either having inadequate source of water or this water is totally unsafe. One way to ensure safe water would be to either take up piped water supply schemes in these villages or to have tube wells. Both these are expensive modes of providing water supply and it is estimated that to cover these villages with such systems would require nearly Rs. 1250 crores. Further piped water supply schemes are very expensive to create and maintain. There are, however, several other methods by which the existing simple wells can be turned into sanitary wells and the water made fairly safe for drinking purposes. These methods involve the construction of parapet around the wells, covering the well, sanitary arrangements for drawing water together with regular cleaning and disinfecting the well. The Ministry proposes to issue comprehensive guidelines for converting the simple wells into sanitary wells through local effort. In this manner, the existing sources can be made fairly safe without much public investment."

**10. The Committee note the clarifications put forth by Government that the piped water supply in rural areas is not the only method of providing protected drinking water to the rural community and that tubewells with handpumps also constitute adequate sources for safe water supply. In this connection the Committee wish to point out that even according to these estimates, safe water in the strict sense of the term is available to a mere 5 per cent of the rural population, which cannot be considered very hopeful although adequate and 'fairly safe' water is available to another 46 per cent of the rural population. Again 36 per cent or 16 crores of the rural population has to make do with simple wells, which is not claimed to be adequate, safe or even 'fairly safe'. Further 13 per cent or 5.6 crore people have either no water within a reasonable range or if they have, it is full of health hazards. It may also be pointed out that these figures are liable to further increase as a result of representations being received from the State Governments.**

**11. The Committee further note that in the Fifth Plan an outlay of Rs. 573 crores since revised to Rs. 564 crores by the Planning Commission has been made for rural water supply under the**

Minimum Needs Programmes and it is proposed to cover most of the problem villages (namely, villages without any source of drinking water or villages where existing sources of drinking water suffers from health hazards etc.) within this provision. However, the Committee are disappointed to note that with the escalation in prices of materials and labour costs, it is unlikely even to cover all the problem villages in the Fifth Plan period and the problem will remain to be tackled in the Sixth Plan period also. The Committee are therefore constrained to observe that agony and sufferings of the people inhabiting these unfortunate areas will consequently be prolonged for another plan period.

12. The Committee would like to point out that the present high costs and the mignitude of the problem have been reached mainly due to the fact that this problem has continued to be ignored all along as already pointed out by the Committee in their original report. With the increase in population and escalating prices, the problem will continue to grow unless it is tackled quarely and on a priority basis. With this and in view the Committee reiterate their earlier recommendation and hope that Government would ensure that the basic facilities of safe water as also sanitation are made available to the entire population in accordance with a perspective plan in the shortest possible and specified period and at any rate by the end of the next decade before the whole problem assumes still more serious proportions.

#### Implementation of Committee's Recommendations

13. The Committee would like to emphasise that they attach the greatest importance to the implementation of the recommendations accepted by Government. They would, therefore, urge that Government should keep a close watch so as to ensure expeditious implementation of the recommendations accepted by them. In cases where it is not possible to implement the recommendations for any reason, the matter should be reported to the Committee with reasons for non-implementation.

14. The Committee also desire that further information where called for in respect of recommendations included in Chapter-II may be intimated to the Committee expeditiously.

## CHAPTER II

### RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

#### **Recommendation (Serial No. 3, Para 2.11)**

The Committee note that there has been a steady increase in water supply in urban areas of the country during the last two decades. The percentage of urban population served by water supply has risen from 48.5 per cent in 1944 to 60 per cent in 1961 and to 77 per cent in 1971. The Committee also note that 1274 towns where there are no arrangements for safe water supply are intended to be covered with water supply during the Fifth Plan covering by and large the entire urban population. They further note that slum improvement schemes have been launched in 11 cities which will also take care of the water supply needs of these cities. However, the Committee are given to understand that no figures are available regarding the actual coverage of the urban population in different towns where water supply is available only partially. Thus while there would be as many as 1274 towns in the country without any organised system of water supply at the end of the Fourth Plan there may be large sections in other urban areas without water supply. Whereas such sections are likely to increase further in view of the tendency of expansion of the cities and towns, the Committee hope that necessary data in this regard also will be collected and adequate provisions made to cover such population simultaneously.

#### **Reply of the Government**

This recommendation has been accepted. The State Governments and the Union Territories have been addressed to collect the data of actual coverage of urban population by piped water supply in towns/cities and use the same for drawing up of plans for augmentation of water supply in partially covered towns with a view to achieving the full coverage of urban population. A copy of the circular is annexed. (Appendix I).

[Min. of W. & H. O. M. No. H. 11013½19/73-PHE Dated the 22nd  
October, 1973]

### Recommendation (Serial No. 6 and 7 Paras 2.30 and 2.31)

The Committee note that the scheme of Special Investigation Divisions was initiated in 1962 to investigate the problem of rural water supply in difficult and scarcity areas of the country so that priorities could be determined. It is disturbing to note that according to initial investigations about 13 crores of rural population should be either without a source of water within a reasonable distance or depth or if water was available it would not be safe to drink.

The Committee note further that there is a difference of opinion in regard to the number of scarcity and problem villages between the Central Health Ministry now Works and Housing and some of the State Governments. In some cases such as in the case of Rajasthan there is wide disparity in the assessment. The Committee therefore, suggest that the matter should be re-examined in all its aspects and agreed conclusions arrived at and priorities determined accordingly. The Committee hope that this assessment work will be completed before the end of the Fourth Plan so that necessary steps could be initiated in time to make safe water available to the remaining areas during the Fifth Plan.

### Reply of the Government

The observation made in Recommendation No. 6 has been noted. Recommendation No. 7—The matter was taken up with the Government of Rajasthan. The Government of Rajasthan have again reiterated that the information compiled by the then Union Health Ministry regarding the number of permanently disadvantaged villages in Rajasthan at 4277 and the villages infested with guinea worm and other water borne diseases at 6480 is not correct and appears to be based on old and outdated reports. The Government of Rajasthan have stated that out of a total of 33305 villages in the State, 22334 is the number of disadvantaged villages at the end of the 4th Plan. They have given the following break up of 22334 villages:

(i) No source and brackish areas	9262
(ii) Disease affected areas	6945
(iii) Difficult and inadequate areas	3881
(iv) Areas consisting of weaker sections	2246

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Total:	22334
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2. These figures are to be finalised in discussions with the Government of Rajasthan. These discussions will take place shortly and the matter will be finalised soon.

[Min. of W & H No. H. 11013|10|73-PHE Dated the 26th  
October, 1973]

### **Comments of the Committee**

“The Committee hope that as suggested earlier a similarity of views will be arrived at in case of disparity, if any in case of other States also in regard to the factual information of the number of disadvantaged villages.”

#### **Recommendation (Serial Nos. 8 and 9 paras 2.34 and 2.35)**

The Committee take note of Special difficulties experienced by Hilly regions of Meghalaya. They also note that a new working definition of scarcity villages has been adopted in the case of Meghalaya viz. absence of a perennial sources of water within a hundred metre vertical distance.

The Committee suggest that this definition should be adopted in other hilly regions also.

### **Reply of the Government**

The suggestion of the Estimates Committee has been accepted and instructions have been issued to the State Governments accordingly. A copy of the circular letter is annexed. (Appendix II).

[Min. of W&H O.M. No. H. 11013|23|73-PHE Dated the 26th October,  
1973]

#### **Recommendation (Serial No. 10 Para 2.35)**

The Committee also take note of the findings of the Central Water and Power Commission that in the seismic zones construction of large reservoirs was not always safe. Apart from that the economies of pumping water from storage reservoirs to individual communities may not prove favourable. They further note that in view of economic conditions of the people in these regions and high costs of these works, the provision of drinking water had to be linked with the overall development of the region. The Committee welcome the suggestion of constructing storage tanks for a group of rural communities at suitable places in the Hilly regions. The Committee suggest that comprehensive proposals may be drawn up for implementation not only under the Accelerated Water Supply Programme but also under the regular programmes for execution during the Fifth Plan for the hilly regions.

### Reply of the Government

This recommendation of the Estimates Committee has been accepted. The State Government and Union Territories have been addressed to keep this recommendation in view while drawing up projects for rural water supply schemes in hilly regions. A copy of the circular is annexed. (Appendix III).

[Min. of W & H O.M. No. H. 11013|20|73-PHE Dated the  
19th October, 1973]

### Recommendation (Serial No. 11 Para 2.41)

The Committee note that the Drinking Water Board had in their interim Report in 1963 made a specific reference to the problem of Guinea-worm infested areas and had recommended adequate provision in 1964-65 budget to cover all these villages. In the absence of figures indicating the steps taken in implementation of the positive recommendations made by the Drinking Water Board in regard to guinea-worm infested areas the Committee are inclined to conclude that either no follow-up action was taken to implement the recommendation or there is no mechanism to gauge the progress actually made in the execution of the different programmes. Even though the Committee are given to understand that these areas will now be covered by the end of the Fifth Plan, the Committee feel that if some steps had been initiated in 1964-65, by this time the sufferings of the people in the guinea-worm infested areas could have been mitigated to a great extent.

### Reply of the Government

The observation of the Estimates Committee has been noted and has also been brought to the notice of the State Governments and Union Territories.

During the Fourth Plan, under the Central Scheme for accelerated rural water supply, schemes for providing safe water supply for guinea-worm infested villages in districts of Dungarpur and Banswara of Rajasthan have been approved for implementation. In the V Plan under the Minimum Needs Programme, it is proposed to cover most of the rural areas infested with guinea-worm with arrangements for safe water supply.

[Min. of W & H O.M. No. H. 11013|21|73-PHE Dated the  
12th October, 1973]

### **Recommendation (Serial No. 12 Para 2.42)**

The Committee desire that necessary mechanism should be evolved to keep a watch on the progress made in the execution of the schemes under the National Water Supply Programme.

#### **Reply of the Government**

Water Supply and sanitation is a State sector programme and the funds to the State Governments are being released during the IV Plan as block loans and block grants without any reference to Developmental heads. The Central Public Health and Environmental Engineering Organisation of the Ministry of Works and Housing is a technical wing for keeping a watch on the progress made in the execution of water supply and sanitation programmes. In the IV Plan, however, difficulty has been experienced in monitoring the progress of water supply and sanitation sector mainly because the provisions under this sector were very much stepped up during this Plan and in absence of any field organisation, the C.P.H.E.E.O. had to depend upon the reports and data fed by the State Public Health Engineering departments which were generally sent very late.

2. In the V Plan the water supply and sanitation sector would be of the order of Rs. 800 to 900 crores. For proper monitoring of the progress made by various States and Union Territories, the organisation would need strengthening Necessary steps would be taken in this direction.

[Min. of W & H O.M. No. H. 11013|35|73-PHE Dated the  
26th October, 1973]

### **Recommendation (Serial No. 13 Para 2.52)**

The Committee note that the National Water Supply and sanitation Committee (1960-61) of the Ministry of Health had recommended the highest priority to the provision of safe water supply to the rural population as in their opinion this could be one positive step for eradication of water-borne and fifth borne diseases. That Committee had desired that safe water should be provided within the reach of "every village and hamlet by the end of the Third Plan if possible, and before the end of the Fourth Plan in any case." The Drinking Water Board (1963) had also given the highest priority to the provision of water supply in the difficult and scarcity areas. In view of the importance of the matter the Board had chosen to give an interim report on the subject and had stipulated a period of five years for implementation of this phase of the programme. The Committee are, however, disappointed to note that this programme continued to be overlooked for want of funds.

### Reply of the Government

The observation of the Estimates Committee has been noted and brought to the notice of State Governments/Union Territories. A copy of circular is annexed. (Appendix IV).

[Min. of W & H O.M. No. H. 11013|25|73-PHE Dated the  
26th October, 1973]

#### Recommendation (Serial No. 14, Para 2.53)

The Committee note that the Approach paper of the Planning Commission envisages an allocation of Rs. 550 crores as against Rs. 650 crores asked for by the Ministry of Health and Family Planning (Now Works and Housing), for providing safe water supply in scarcity and health problem villages. More than the financial provision, the Committee feel that there was to be a greater stress on Physical achievement of the target, as what the Plan sets out to achieve, is the provision of safe water supply to as many as 1,24,000 villages, as compared to only 22,000 villages which have been provided piped water during the last 20 years. The Committee would like the Planning Commission and Government of all levels to prepare, without delay, plans and designs for implementation of the programme. There would also to be careful planning of material resources, particularly water pipes and pump sets etc., so that these do not become a constraint in the implementation of the programme. The Committee would also suggest that a detailed annual plan should be prepared indicating, *inter alia*, the complete schemes which are to be taken up and relative priorities. This would enable Government at various levels, not only to ensure timely implementation, but could also facilitate the task of monitoring and taking remedial measures where necessary, to ensure that the Plan targets do not slip.

### Reply of the Government

According to the proposals finalised by the Planning Commission, a provision of Rs. 550 crores is proposed for rural water supply under the Minimum Needs Programme. It is anticipated that with this provision, most of the problem villages would be covered. In the discussions with the States on the 5th Plan proposals, the Planning Commission also finalised the Annual Plan for next year, i.e., 1974-75. In finalising the proposals of the next year's annual plan, guidelines issued for the Minimum Needs Programme were kept in view. Exercises for detailed planning of material resources are going on. Instructions are also proposed to be issued to the

State Governments to draw up their annual plans in advance specifically indicating the schemes that are proposed to be taken up. In finalising annual plans in future, the recommendations of the Estimates Committee would be kept in view.

[Min. of W. & H. O.M. No. H.11013/36/73-PHE dated 26th October, 1973].

### **Comments of the Committee**

“The Committee trust that necessary instructions to State Governments would be issued expeditiously.”

### **Recommendation (Serial No. 15 Para 2.62)**

The Committee are greatly distressed to find that the Special Investigation Division which were set up as early as 1962, have been able to cover only 65,000 villages so far, out of about 1,52,000 scarcity and problem villages in the country. The Committee have, however, been given to understand that the remaining villages totalling 87,000 would be surveyed before the end of the Fourth Plan. This statement amazes the Committee, as it is proposed to achieve within the course of a few months, the survey of 87,000 villages, which is practically one and half times of what had been done in the earlier ten years. There has been obviously no close watch kept on the progress made by the Special Investigation Divisions in carrying out their work from year to year, and to take active measures to see that the work was speeded up. Apart from the speed, what has caused great concern to the Committee is the view expressed by knowledgeable authorities that the data collected through these survey in many cases, is not accurate or reliable. The Committee feel that this could and should have been avoided by issuing suitable guidelines for investigation work, right in the beginning, by contemporaneous review of the work carried out and by taking effective measures to bring about improvement. Even now, the Committee feel that where the data is not complete or accurate or reliable, no time should be lost in correcting it.

### **Reply of the Government**

The survey work for Rural Water Supply to be undertaken by the Special Investigation Divisions were of preliminary nature to identify the problem of drinking water in rural areas to enable a broad idea of the problem and a rough cost of estimates to be prepared. These units were not meant for the task of preparing accurate and realistic estimates. The work done by the S.I.D.s was evaluated from time to time by the Central Public Health and

Environmental Engineering Organisation of the Ministry of Works and Housing. A detailed appraisal was made in 1971 and comprehensive instructions were issued to the State Governments in 1971 so that the work of S.I.D. and collection of data could be standardised and expedited. Considering the problem of investigation at hand, the allocation of 4th Plan was increased from Rs. 2 crores to Rs. 3.5 crores. Wherever required the existing divisions were strengthened and new divisions were also sanctioned. Annual meetings of the Engineers incharge of the S.I.D.s were also held to review the performance as well as for providing suitable advice wherever any deficiencies were noted. The Estimates Committee's observations about the inaccurate and un-reliable data collected by the S.I.D. has recently been brought to the notice of State Chief Public Health Engineers with the request that all efforts should be made to remove these deficiencies. A copy of the letter issued is annexed. (Appendix V).

[Min. of W. & H. O.M. No. H. 11013/12/73-PHE dated 29th September, 1973]

### **Recommendation (Serial No. 16 Para 2.63)**

The Committee are also concerned to note, on the one hand, the plea put forward by several State authorities that the staff sanctioned for the Special Investigation Divisions is inadequate and, on the other, the view of the Central Ministry that the staff for the investigation work are diverted to other assignments. The Committee would like to stress that there should be an agreed approach in this matter and both the Centre and the States should ensure not only that the work of investigation is completed according to a detailed programme to be drawn up in that behalf but that the data collected and collated are completely reliable to provide the basis for detailed planning and designing.

### **Reply of the Government**

As already intimated to the Committee, instances had come to the notice of the then Ministry of Health and Family Planning regarding deployment of staff of the Special Investigation Divisions for execution of schemes and other work. It has already been intimated by the Ministry of Health, that comprehensive instructions were issued to the State Governments in 1971 regarding deployment strategy of the Special Investigation Divisions. The Special Investigation Divisions were also strengthened in a few States. The directive to the States was that the work of investigation must be

completed by the end of the Fourth Plan. Whereafter the Special Investigation Divisions will cease to exist. As intimated in reply to item Nos. 17 and 18, work of preparing plans and designs for water supply schemes as well as investigation work, wherever it may be necessary, would be done in the Fifth Plan period by the Planning and Design Units. As regards the reliability of data attention is invited to the reply to recommendation No. 15.

[Min. of W.&H. O.M. No. H. 11013/28/73-PHE dated 23rd October, 1973].

**Recommendation (Serial No. 19 and 20 Paras 2.70 and 2.71)**

The Committee note that a centrally-sponsored scheme of Planning and Design Units, has been put into operation during 1972 to ensure that at the beginning of the Fifth Plan an adequate number of properly investigated and designed schemes are available for being taken up for implementation without any loss of time. The Committee hope that these units will be ready with a sufficient number of schemes in advance for implementation towards the end of the Fourth Plan and the beginning of the Fifth Plan.

The Committee also hope that the norms prescribed for preparation of these schemes will be re-examined to ensure that they are realistic.

**Reply of the Government**

The working of the planning and design units has been found to be satisfactory. In 1972-73 rural water supply projects having total cost of Rs. 40.41 crores covering 5,941 villages with piped water supply arrangements were prepared by these units. This performance is as per norms fixed for this scheme and in a few States these targets have even been exceeded. The States are being approached to give their comments on the performance as well as the prescribed norms of work from the experience they have gained on working of this scheme for about 2 years. If need be, the norms of work will be revised.

[Min. of W.&H. O.M. No. H. 11013|12|73-PHE dated 29th September, 1973].

**Recommendation (Serial Nos. 21 and 22, Paras 2.84 and 2.85)**

The Committee note that sewerage facilities in urban areas do not exist in several States like Assam, Jammu and Kashmir, Meghalaya, Nagaland, Tripura, Manipur and Andaman and Nicobar Islnds. In some other States such as Andhra Pradesh, Bihar, Hima-

Uttar Pradesh, Kerala, Orissa and Rajasthan the facilities are only nominal. None of these States has more than 3 cities which have any sewerage arrangements even partially. In all, there are 186 towns in the country today which are seweraged out of a total number of 2921 towns. Even in these cities there are areas which are unsewered. Considering the fact that the number of towns and cities covered by the facility of water supply has reached 1282 in March, 1971 benefiting a population of 841.71 lakhs and another 500 towns are targetted to be covered during the Fourth Plan period further benefiting about a crore of people and there is further a proposal to cover all the remaining towns in the country with water supply during the Fifth Plan, the Committee feel that it is high time that adequate steps are taken to provide sewerage facilities to the towns which are already covered by water supply. The Committee note that according to the Ministry of Health and Family Planning the total cost of covering 2735 towns with sewerage facilities will amount to Rs. 1346 crores. That Ministry have in their Approach paper for the Fifth Plan proposed to cover 83 towns with a population of one lakh by sewerage facilities at an estimated cost of Rs. 970 crores. In addition the Ministry have asked for Rs. 400 crores to cover about 150 towns with solid waste disposal arrangements during the Plan period. Realising the magnitude of the task ahead and considering the financial difficulties of the municipalities, the Committee, do not wish to recommend that the progress of water supply programmes should be stalled to meet the sewerage needs. They would, however, like to stress the point that time-lag between water supply and sewerage facilities has to be reduced and care has to be taken to ensure that the slums are not allowed to spread. The Committee, therefore suggest that a phased programme may now be chalked out to make available this facility early, beginning with cities endemic to filth-borne diseases like filariasis and cholera etc.

While the setting up of the Water and Sewerage Boards recommended elsewhere in the Report will go a long-way in making these operations self-paying, ways and means have to be devised to find finances at the local levels also.

### **Reply of the Government**

These recommendations of the Estimates Committee have been communicated to the State Governments and Union Territories for implementation. A copy of the circular is annexed. (Appendix VI).



2. During the Fifth Plan period it is anticipated that a provision of Rs. 250 crores would be made available for urban water supply and sanitation schemes. The water supply and sanitation is a State Sector Programme and it is left to them to formulate schemes and implement the same. It is hoped that the State Governments would keep in view the advice of the Estimates Committee and accelerate the provision of sewerage facilities.

3. In the Fifth Plan, under the Minimum Needs Programme a provision of nearly Rs. 100 crores is expected for the programme for environmental improvement in slum areas in cities having a population of 3 lakhs and above. Stress has also been laid on the conversion of dry latrines to sanitary latrines in unsewered areas and every State has been asked to make a provision for this provision in their State Plans. This Ministry has also proposed a pilot scheme for conversion of dry latrines to sanitary latrines at a cost of Rs. 14 crores and an urban waste disposal scheme costing Rs. 11.50 crores for inclusion in the Fifth Plan. These schemes will also be helpful in achieving the objective outlined in the recommendation of the Estimates Committee.

[Min. of W. & H. O.M. No. H. 11013|24|73-PHE dated 22nd October, 1973].

#### **Recommendation (Serial No. 23 Para 2.86)**

The Committee feel that the Public Health Engineering Research Institute as well as other national health laboratories should address themselves urgently to the problem of evolving suitable equipment for sewage digestion, so as to do away with the need for importing Sewage Digesters. The Committee note that some progress has already been made in this direction by evolving Oxidation Ponds, Oxidation Ditch and lagoons etc. The Committee need hardly stress that if these progresses are efficacious, they should be pressed into service without delay and improvements effected, in the light of experience. The Committee would also stress that continued research should be made, with a view to simplify and reduce the cost of treating the sewage, so as to keep the economic burden within the reach of local population.

#### **Reply of the Government**

The C.P.H.E.R.I., Nagpur is actively engaged in developing low cost methods of sewage treatment and is already working on the development of low cost methods such as Oxidation Ditch, Aerated Lagoons. The Institute has issued information for general use in the form of booklets, pamphlets, seminar proceedings etc. The new methods on which research is being conducted are:—

Rotating Disc (Biological Discs).

Floating Rotor Aeration System

The State Governments have been asked to make use of these processes and to seek assistance of CIPHERI wherever considered necessary.

[Min. of W. & H. O.M. No. H. 11013/11/73-PHE dated 24th  
October, 1973].

### **Recommendation (Serial No. 24 Para 2.101)**

The Committee note that a comprehensive Water Pollution Bill is pending before a Joint Select Committee of Parliament. The Committee have no doubt that the bill would take care of all aspects of water pollution, with particular reference to the health hazard which is being created at an increasing pace, by rapid industrialization of the country. With the advance in modern technology, there is no reason why we should not be able to eliminate this health hazard and pollution right in the beginning, instead of letting it become a problem of gigantic proportions, as is the case in some of the advanced countries. The legislation is as effective as its implementation. The Committee would, therefore, like the Ministry of Health and Family Planning (now Works and Housing) to work out in detail, the machinery which would be required to implement the legislation on water pollution, so as to ensure that it is effectively administered in the interests of public health.

### **Reply of the Government**

The above recommendation of the Committee has been noted for necessary action. The following steps have, in the meanwhile, already been taken:—

- (1) The Department of Science and Technology has been asked to work out a programme for a coordinated research programme in the fields of the control and prevention of water pollution.
- (2) Steps to identify laboratories to perform the role assigned in the Bill has already commenced.
- (3) A specific term of reference has been included in the terms of the "Committee on Urban Wastes" to study and recommend methods of urban wastes disposal which will reduce or eliminate the effects of pollution.

[Min. of W. & H. O.M. No. H. 11013/11/73-PHE dated 22nd  
October, 1973].

### **Recommendation (Serial No. 25 Para 2.104)**

As has been mentioned earlier out of 5.67 lakhs villages, a mere 22,000 have been provided with piped water supply and an overwhelming majority have to make do with traditional sources of supply viz., dug-wells, pumps, ponds, tanks etc. The Committee consider that the least that can be done by Government, is to ensure that the water actually being used by these villages is periodically tested, in order to determine its suitability for human consumption, and remedial measures taken as necessary, to improve its quality till safe water supply can be provided on assured basis. The Committee would like the Central/State Governments to draw up pilot schemes in this behalf which, after being tested in the field, could be extended to other areas in the shortest possible time. The Committee need hardly point out that the tests for checking the quality of water should be simplified to the extent possible, with the help of research institutes, so as to enable the local civic authorities to undertake this task of testing.

### **Reply of the Government**

The C.P.H.E.R.I., Nagpur is actively engaged in the field of better management of the water quality by water works. The area for above research includes development of package plants for iron removal, chemical analysis kit, a cheap indigenous inexpensive chloroscope and disinfection tablets.

Instructions have been issued to the State Governments for periodically checking the quality of drinking water being used in the villages and to draw up pilot schemes as recommended above. The C.P.H.E.R.I. have been requested to indicate simple tests for checking the quality of water which will be circulated to the States in due course.

[Min. of W. & H. O.M. No. H. 11013|11|73-PHE dated 26th October, 1973].

### **Comments of the Committee**

“The Committee may be apprised, after a period of one year, of the progress achieved in the matter of drawing up and execution of the pilot schemes for checking the quality of water on the basis of the simple tests evolved by C.P.H.E.R.I.”

### **Recommendation (Serial No. 26 Para 2.109)**

The Committee have dealt, earlier in this Section, with the proposed legislation to prevent pollution. It is of the utmost importance that the factors which cause pollution, should be thoroughly investigated by research and other allied institutions, so as to find

efficacious remedies to pollution which results from industrial processes, particularly from the discharge of their wastes and effluents. The Committee are concerned to find that out of 12 problems listed for urgent research in the context of preventing pollution, work is at present going on only in respect of 4 or 5 aspects, while the remaining have not received attention. The Committee would like Government to review the matter comprehensively, in consultation with the research institutions and all others concerned and draw up a meaningful and time bound programme with proper priorities, for intensifying research to find efficacious answer to the problem of pollution so that this could be given effect to in the interest of public health.

### **Reply of the Government**

As the above para pertains to research in the factors causing pollution and as the Research Institutions like CPHERI, Nagpur are under the control of the Department of Science and Technology, the Department of Science and Technology have been requested to take note of the observations of the Committee for doing the needful in the matter.

### **Further Information called for by the Committee**

Steps taken by the Department of Science and Technology in implementation of the recommendation may be intimated to the Committee.

[Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 24-12-1973].

### **Further Reply of the Government**

The National Committee on Environmental Planning and Coordination and the National Committee on Science and Technology of the Department of Science and Technology have already taken steps to identify the research and development projects in the field of water quality. The research and development projects in the field of this subject have been included in the 5th Plan proposals of the Department of Science and Technology and the Council of Scientific and Industrial Research. In the Science and Technology 5th Plan proposal for the Central Public Health and Environmental Engineering Organisation, a provision of Rs. 1 crore has been made for sponsoring research in the field of water pollution. The details of other public health engineering projects included in the Science and Technology 5th Plan having a bearing on the subject of water pollution have been given in reply to further information on Recommendation No. 62.

For effecting coordination with research institutions, universities, and State government organisations a high level committee is being constituted under the National Committee on Environmental Planning and Coordination. This Committee will farm out the research projects to these organisations.

[Ministry of W. & H. O.M. No. H.11013|2|73-LSG dated 4th January, 1971].

### Recommendation (Serial No. 27 Para 2.138)

The Committee note that at present 178 million gallons of drinking water is available to a population of 36 lakhs in the Capital which works out to 49.8 gallons per capita per day. It would appear from the facts brought before the Committee that so far all efforts towards water supply in Delhi have been based on an average supply of about 50 gallons per capita per day. In this connection the Committee wish to point out that the Naskar Committee appointed by the Government of India to give recommendations regarding augmentation of water supply in Delhi had recommended in their Report in 1965 an average per capita per day supply of about 70 gallons. Calculated on the basis of the recommendations of the Naskar Committee, the present day requirement for Delhi would work out to about 200 m.g.d. Thus Delhi is short of the requirements by about 120 m.g.d. The Committee are not aware of the considerations for which action for augmentation of water supply in Delhi is based on 50 gallons per capita per day. Further in some colonies of Delhi and in cantonment area 100 gallons of water is being consumed on an average per capita per day; and in some places in New Delhi adding both filtered and unfiltered water average consumption ranges to 180 gallons a day. The Committee hope that Government will keep these consideration in view while formulating future plans in regard to augmentation of water supply in Delhi.

### Reply of the Government

At present 183 million gallons of water is supplied per day in the urban area of Delhi. The source and plants from which this quantity of water is supplied are as follows:—

1. Chandrawal I Plant	• • • • •	35 MGD
2. Chandrawal II Plant	• • • • •	55 MGD
3. First Wazirabad Plant	• • • • •	40 MGD
4. Second Wazirabad Plant	• • • • •	40 MGD
5. Okhla Plant	• • • • •	6 MGD
6. Tubewells & Ranney wells	• • • • •	7 MGD
	TOTAL	183 MGD

On the basis of a population of 36.6 lakhs as per 1971 census figures, this works out to a per capita per day supply of 50.4 gallons. The Naskar Committee in 1965 had no doubt recommended the figure of 70 gallons per capita/per day but the Committee of Secretaries on Delhi Affairs recommended the supply of about 60 gallons per head per day. The Five Year Plan proposals of Delhi Municipal Corporation are, however, based on a per capita per day figure of about 3 gallons for a population of 56.95 lakhs by the end of 5th Plan. The present per capita consumption of water in Delhi compares favourably with other major cities in the country.

Until 1952, the water supply in Delhi was entirely drawn from the river Jamuna while at present, it is mainly from the river. At the beginning of the first Plan there were two filtration plants at Chandrawal and Okhla having an installed capacity of 30 MGD and 2 MGD respectively. To meet the increasing demand, the capacities of these Plants were increased to 60 MGD and 6 MGD respectively during the First Plan. In the Second Plan, the capacity of the Chandrawal Plant was further increased to 90 MGD and a capacity of 1 MGD was created by sinking tube-wells in Shahdara area, thus raising the capacity to 97 MGD in the year 1960-61. In view of the fast growth of demand due to increase in population, in the Third Plan, one 40 MGD Plant was installed at Wazirabad and a few more tubewells were sunk there by increasing the capacity to 140 MGD at the end of 1965-66. In the three annual Plans, the capacity was further increased to 143 MGD by sinking more tubewells in Sahadara, South and West Delhi. The intake capacity, is further, likely to increase to 203 MGD at the end of the Fourth Plan. The position as at the end of each plan period and likely to be at the end of the Fourth Plan over various Water Works is as under:—

(In million gallons per day)

Works	Capacity at the end of				
	First Plan	Second Plan	Third Plan	Three Annual Plans	Fourth Plan (likely)
Chandrawal	60	90	90	90	90
Wazirabad	..	..	40	40	80
Okhla	6	6	6	6	6
Tubewells	..	1	4	7	7
Ranney Wells	..	..	..	..	20
<b>TOTAL</b>	<b>66</b>	<b>97</b>	<b>140</b>	<b>143</b>	<b>203</b>

It is hoped that the anticipated requirements of 360 MGD by the end of Fifth Plan would be met by that time. As regards unequal distribution reply to Recommendation No. 29 may please be seen.

[Min. of W. & H. O.M. No. H.11013/18/73-PHE dated the 25th October, 1973].

### **Recommendation (Serial No. 28, Para 2.139)**

The Committee further note that the current availability of water supply does not take into account the rural population of the Capital. With just 4.14 lakhs of population residing in rural areas the water supply problem in the Union Territory of Delhi, though predominantly an urban water supply problem but with the city expanding fast and the rural and urban areas getting progressively interspersed, it is hardly possible to exclude this population for the purposes of availability of safe water supply. The Committee therefore, feel that assessment of future requirements of water supply for Delhi should also take into account, the rural population of Delhi.

### **Reply of the Government**

The water supply of rural area for a population of 4.14 lakhs at the rate of 15 gallons per capita per day works out to about 6 MGD which is expected to be met during the Fifth Plan period from the local tubewells and by supplying water from Rajouri Garden and Wazirpur Reservoir Scheme to Najafgarh and Kanjhawala Blocks. Provision of funds for supply of water to all the rural villages of Delhi area has been suggested by the Municipal Corporation of Delhi and agreed to by the Planning Commission under the Minimum Needs Programme also during the V Plan.

[Min. of W&H O.M. No. H. 11013|18|73-PHE Dated the 23rd October, 1973].

### **Recommendation (Serial No. 29) Para 2.140**

The Committee also note the difficulties being experienced by the people in Delhi on account of unequal distribution of water. The result is that there are localities in Delhi and New Delhi where the per capita per day water supply is 100 gallons and more and consequently there are colonies where water supply is less than the average of 50 gallons per head per day. This has happened as stated by Government on account of the distance of the colonies from the main headworks is going are at the northern end of the city and the expansion is going on towards southern and western areas. Further,

there are many old areas like the old city, Sadar and Paharganj where the distribution systems are stated to be very old and require remodelling. The Committee wish to observe that whatever may be the reason, whether for want of proper planning or for want of remodelling at appropriate stage of distribution systems, the citizen is hardly concerned and it is the duty of the planners and engineers to foresee such eventualities. In any case, the Committee note that some steps are already in hand such as putting up of regional overhead tanks in South Delhi and Rajouri Garden and installation of booster pumping stations at Ramlila-grounds and other places. The Committee hope that these programmes would be expedited so as to bring about early relief to the citizens.

### **Reply of the Government**

Efforts would be made by the Water Supply and Sewage Disposal Undertaking of the Municipal Corporation of Delhi to make more equitable distribution of water to the citizens of Delhi by the end of the Fifth Plan period and to get the work of installation of Booster Pumping Station at Ram Lila Grounds and other places completed expeditiously.

The details of the Regional Reservoirs with areas served are given below:—

1. *Hindu Rao Reservoir:*

This reservoir supplies water to City North, City South and Civil Lines Zones.

2. *Rani Jhansi Reservoir:*

This reservoir supplies water to City North, City South and Civil Lines Zones.

3. *Flag Staff Reservoir:*

This reservoir supplies water to Civil Lines Zone.

4. *Jhandewalan Reservoir:*

This reservoir supplies water to NDMC areas as well as City South, Sadar, Paharganj and Karol Bagh Zone.

5. *Industrial Area Reservoir:*

This Reservoir supplies water to Karol Bagh and West Zone.

6. *Talkatora Reservoir:*

This reservoir supplies water mostly in NDMC area.

7. *Hasanpur Reservoir:*

This reservoir supplies water mostly in NDMC area and parts of New Delhi South Zone.



8. *Cantonment Reservoir:*

This reservoir supplies water in Cantonment and NDMC area and also in the area of New Delhi South Zone.

9. *Ramjas Reservoir:*

This reservoir supplies water in the areas of Karol Bagh Zone.

10. *Shadipur Reservoir:*

This reservoir supplies water in Patel Nagar areas of Karol Bagh Zone.

11. *Upper Ridge Reservoir:*

This reservoir supplies water in the areas of Karol Bagh Zone.

12. *New Rajinder Nagar Reservoir:*

This reservoir supplies water in the areas of Karol Bagh Zone.

13. *Kalkaji Reservoir:*

This reservoir supplies water in the areas of New Delhi South Zone.

14. *Pahari Dhiraj Reservoir:*

This reservoir supplies water in the areas of Sadar-Paharganj Zone.

15. *Shahdara Overhead Tank:*

Supplies water in Shahdara area.

16. *Srinivaspuri Overhead Tank:*

Supplies water in Kailash, Greater Kailash, D.D.A.'s East of Kailash Colony, Amar Colony and parts of Lajpat Nagar.

17. *Panchsheel Overhead Tank:*

Panchsheela, Hauz Khas, Malviya Nagar, Anand Lok, Journalists Colony, Supreme Court Colony, May Fair Garden etc.

Water supply hours from most of the reservoirs are from 4.00 A.M. to 11.00 A.M. and 4.00 P.M. to 10.00 P.M. The supply in each area, however, varies considerably depending on its elevation and distance from reservoir. The reservoir levels are recorded every two hours and proper watch kept over the reservoir level by water works staff. Whenever levels are found low suitable remedial measures are taken by the Plant staff.

[Min of W&H O.M. No. H. 11013|18|73-PHE Dated the 26th October, 1973].

**Recommendation (Serial No. 30, Para 2.141)**

The Committee feel the decision to set up a statutory autonomous Board by amalgamating the Delhi Water Supply and Sewage Disposal Undertaking, the Water and Sewage Disposal Wings of the New Delhi Municipal Committee and the Cantonment Board is in the right direction. The setting up of this Board should help solve distribution and other problems and also help in bringing about an integrated approach towards augmentation of water supply in Delhi. The Committee hope that necessary legislation in this regard will be brought before the Parliament early.

**Reply of the Government**

The Central Government have decided to set up a statutory autonomous Board for Delhi. Necessary legislation in this regard is being processed.

[Min. of W&H O.M. No. H. 11013|17|73-PHE Dated the 15th Oct., 1973].

**Recommendation (Serial No. 31, Para 2.142)**

The Committee note that some arrangements have been finalised with the State Governments of Uttar Pradesh and Haryana for 100 m. gallons of water and the treatment plant for this supply will also be ready by 1976. The Committee hope that necessary time schedule in putting into operation this plant will be adhered to. They also hope that further negotiations with State Government of Haryana for raw water in exchange of sewage and other schemes for requirements beyond 1981, such as Lakhwara Dam Project in Uttar Pradesh and Dadahu Kot Project in Haryana which are at present under consideration will also be finalised early so that necessary action for implementation of these programmes can be initiated at appropriate time.

**Reply of the Government**

Necessary action to complete the 100 MGD Plant near Halderpur by the end of 1796 is being taken by the Water Supply and Sewage Disposal Undertaking of the Municipal Corporation of Delhi. The Delhi Administration are also negotiating with the concerned State Governments for supply of raw water from Lakhwara Dam Project in U.P. and Dadahu Dam Project in Himachal Pradesh.

[Min. of W&H O.M. No. H. 11013|18|73-PHE Dated the 23rd October, 1973].

**Recommendation (Serial No. 32 Para 2.143)**

The Committee also note in this connection that the Government of India has set up a Committee to prepare a master plan for the development of water supply in Delhi during the next 30 years to be completed by three stages. The Committee suggest that a time schedule may be drawn for the completion of this plan which may be adhered to.

**Reply of the Government**

The suggestion has been noted for action.

[Ministry of W & H O.M. No. H.11013/18/73-PHE Dated the 27th October, 1973.]

**Recommendation (Serial No. 35 Para 2.146)**

The Committee have been assured during evidence that water supplied to Delhi is quite potable. They, however, note that River Jamuna is being grossly polluted in Delhi and that an Action Group is already on the job to take suitable steps to prevent pollution of the river with the help of Central Public Health Engineering Research Institute. The Committee hope that the nature and sources of pollution will be identified expeditiously and suitable measures taken to prevent water pollution in Delhi.

**Reply of the Government**

As mentioned by the Committee, the water supplied to Delhi is quite potable. Out of the 183 M.G.D. of water supplied in Delhi; 170 M.G.D. is taken from River Jamuna at Wazirabad Head Works where it is treated. At that point, the river is practically free from pollution.

There are four major factories discharging industrial wastes into Najafgarh Nalla which joins the River Jamuna downstream of Wazirabad Works:—

- (1) D.C.M. Chemical Works.
- (2) Swatantra Bharat Mills.
- (3) D.D.T. Factory.
- (4) Ajodhya Textile Mills.

At the instance of the Delhi Water Supply and Sewage Disposal Undertakings factories at (1), (2) and (3) have already started work on their industrial wastes treatment plants.

As regards Ajodhya Textile Mill, action is in progress against them for not providing treatment plant.

An Oxidation plant is being constructed near Wazirabad to treat about 35 cusecs of sullage from Najafgarh Nalla. The CIPHERI Zonal Laboratory will help in growing algae in the Oxidation Pond.

A Survey of Najafgarh Nalla is also being carried out to check the quality of various discharges coming into the Nallah and to see if they can be treated at the source. The help of CIPHERI will also be taken in this work.

A work order to construct a new 20 M.G.D. Sewage treatment plant near the existing plant at Keshopur in West Delhi has also been awarded. This treatment plant would treat about 36 to 40 cusecs of discharge.

Delhi Administration has also proposed a scheme to utilize sewage effluent of Okhla Sewage treatment plant near Mehrauli for irrigation purposes. This will avoid the pollution of River Yamuna and Agra Canal by this effluent.

The Prevention of Water pollution Bill is before the Parliament. As soon as it is enacted, it will be applicable to the Union Territory of Delhi also. A Board will be set up which will ensure effective control and prevention of pollution of River Jamuna.

[Ministry of W. & H. O.M. No. H-11013/3/72-LSG Dated the 27th October, 1973.]

#### **Recommendation (Serial No. 39, Para 3.24)**

The Committee note the difficulties experienced by the Public Health Engineering Departments in the States in regard to the procedures involved in getting the amounts released through local bodies. Even though the amounts are provided in the budget and vote on account of the legislature is obtained in the beginning of the year itself, the amounts are actually released to local bodies towards the middle or fag-end of the year as they have to go through a number of procedural formalities. Consequently, the Departments concerned are not able to sustain the tempo of work right through the year. The Committee desire that ways and means should be devised to place funds in time in the hands of the executing authorities in order to sustain the tempo in the implementation of the programmes.

### **Reply of the Government**

The State Governments and Union Territories have been requested to simplify the procedure for the release of funds to the local bodies/executing authorities for implementation of water supply and sanitation schemes. It had been suggested to them that at the latest the funds should be released by the month of August every year. A copy of the circular is annexed. (Appendix VIII).

[Ministry of W. & H. O.M. No. 11013/30/73-PHE dated the 26th October, 1973.]

### **Recommendation (Serial No. 40, Para 3.27)**

The Committee note that delays are at present being experienced in getting the allotted amounts released from the Government. The Committee note that the suggestions mooted by the Ministry of Health and Family Planning (now Works and Housing) for setting up of a "Task Force" with a view to help release funds expeditiously is at present under consideration of Government. The Committee would like the problem to be identified and work like procedures evolved to ensure timely release of allotted funds. The Committee would like to be informed within three months action taken or proposed to be taken to bring about the necessary improvement.

### **Reply of the Government**

Release of the funds for State Sector Programme during the Fourth Plan is being made on the pattern of block loans and block grants for all developmental heads including Water Supply Sector by the Ministry of Finance (Plan Finance Division) in instalments. The releases of funds for the U.Ts for the purpose is being made by the Ministry of Home Affairs/U.T. Administrations themselves as provided in the budget estimates. No difficulty in this regard has been reported.

To facilitate releases of funds for Water Supply and Drainage Scheme in Delhi it is proposed to authorise Lt. Governor of Delhi to issue financial sanctions against the provision made in the budget estimates provided the pattern of release/assistance has been finalised. This will do away with the delay inherent in the present procedure by which each instalment of loans/grants is sanctioned by this Ministry in consultation with the Internal Financial Adviser, to the Delhi Administration, who in turn sanction them to the executive agencies like the Municipal Corporation of Delhi etc.

As regards the Central Schemes including the Special Welfare Programmes like Accelerated Rural Water Supply Programme and P. & D. Unit of Rural Water Supply funds are being released by the Ministry of Works and Housing under the powers delegated to it, in consultation with the Internal Finance Unit. These releases are being made timely and no procedural difficulties have been experienced.

Task Force have also been constituted in the Ministry to streamline administrative procedures and to remove bottlenecks and bring out speedy progress. The Secretary of the administrative Ministry is the Chairman of the Task Force which has as its members Senior Officers of the Ministry including Financial Adviser of the Ministry of Finance (Expenditure Division). According to the recent instructions, Financial Advisers have been asked to regularly attend all the meetings of the Task Force and wherever necessary and possible, the Financial Adviser will obtain the orders of the appropriate authority in the Ministry of Finance on the proposals to be considered by the Task Force. It has also been provided that where the Financial Adviser disagrees with the Secretary of the administrative Ministry he would take the orders of Secretary, Ministry of Finance (Expenditure Division). The Task Force has also been expanded to provide for a representative of the Planning Commission to facilitate early clearance of new schemes. This Task Force will also consider matters concerning the National Water Supply and Sanitation Programme particularly cases requiring inter-ministerial consideration with a view to expediting decision, simplifying procedures etc.

[Ministry of W. & H. O.M. No. H-11013/4/73-PHE Dated the  
23 August, 1973.]

### **Recommendation (Serial No. 41, Para 3.31)**

The Committee note that Central assistance for water supply is available to the States uniformly under the existing pattern of block loans and grants irrespective of their respective stages of development. Assistance for water supply programmes is also available under the Accelerated Rural Water Supply Programme out of a total sum of Rs. 20 crores during 1972-73 and Rs. 40 crores during 1973-74 keeping in view the magnitude of the problem of the State, its stage of backwardness etc. Whereas the Committee agree that the States must exert themselves to make available this basic necessity to their people speedily they would also like the Central Government/CPHEEO to play a more active role in respect of such States with a view to help them achieve the objective.

### Reply of Government

The water supply is a State Sector programme. However the Ministry of Works and Housing as well as the CPHEEO has all along been making efforts to help the State Governments in achieving the objective of providing pottable water supply especially in rural areas.

The following supportive programmes besides the Accelerated Rural Water Supply Programme were initiated by the Ministry to help the State Governments:—

(1) *Training in Public Health Engineering:*

This was initiated to meet the needs of skilled workers in the field of Public Health Engineering as well as to provide the necessary orientation training and opportunity for the specialisation to the in-service personnel in Public Health Engineering field.

(2) *UNICEF/WHO Rural Water Supply Programme:*

Under this scheme deep boring rigs have been procured for hard rock/soil formation areas and have been distributed among the States for undertaking boring operation for drinking water in rural areas.

(3) *Centrally sponsored Scheme for Social Investigation Division:*

This scheme was initiated with cent per cent central grant-in-aid so that the problem of Rural Water Supply could be identified which would help the State Government to assess its magnitude and undertake firm planning for providing drinking water in rural areas.

(4) *P & D Units:*

This Central scheme has been initiated to ensure that sufficient detailed project reports for rural water supply schemes are ready with the State Government for implementation in the last 2 years of the 4th Plan as well as the 5th Plan.

Besides these regular schemes the State Governments have also been helped in getting the allotment of steel from the Joint Plant Committee for implementation of water supply scheme. Foreign exchange for the import of the steel as well as deep boring rigs spare parts and equipment was also released by the Ministry of Works and Housing to the States which came up with such proposals. The cases of release of cement for water supply programme have also been processed by this Ministry and allotments have been arranged through the concerned departments. The C.P.H.E.E.O. is

constantly making its expertise available to the State public health engineering departments in scrutinising their water supply and sewerage projects. From time to time meetings of the chief public health engineers have also been held to know their difficulties and for evolving common approaches to tackling various problems.

Incidentally, it may be mentioned that against the anticipated outlay of Rs. 40.0 crores for the Accelerated Rural Water Supply Programme this year only Rs. 15.0 crores were provided due to constraint of resources. Due to financial stringency this amount will be reduced further as a result of economy cuts.\*

[Ministry of W. & H. O.M. No. H. 11013/15/73-PHE Dated the 29th September, 1973.]

### **Recommendation (Serial No. 42, Para 3.37)**

The Committee note that no uniform pattern of local contribution in the financing of the Water Supply Schemes is being followed in the country. The Committee also note that the trend is towards liberalisation of assistance to rural communities by the States. It is also appreciated that a common policy by the Central Government to be followed by the whole country would not be of much help as in some States villages have been able to raise local contribution and it will not be desirable to discourage local contribution by those who can make it. Nevertheless the Committee feel that suitable guidelines should be evolved for the States to follow, keeping in view the size of the community, their economic condition, the long delays in implementation of schemes often caused in an effort to raise such contributions and other relevant factors.

### **Reply of the Government**

Broad guidelines for sharing of the cost of rural water supply schemes by the beneficiaries have been formulated and circulated to the State Governments and Union Territories. The circular is annexed. (Appendix IX).

[Ministry of W. & H. O.M. No. H.11013/26/73-PHE Dated the 12th November, 1973.]

### **Recommendation (Serial No. 43, Para 3.45)**

The Committee note that even though the cost of water supply has been steadily rising consequent to the rising capital investments

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\*At the time of factual verification the Ministry of Works and Housing stated that: "it would be worthwhile to report that the provision for the accelerated rural water supply programme in 1973-74 was resorted to Rs. 15 crores and no cut was imposed to ensure greater coverage of rural areas with water supply arrangements."



for setting up new high cost projects and for augmenting existing water supply systems there has been a general reluctance on the part of local bodies to raise correspondingly the water charges with a view to make the water supply schemes viable. The Committee note further that there is a demonstrated reluctance on the part of the local bodies who are operating water supply to depart from flat rates to meter rates because of administrative difficulties and apprehensions of unpopularity. Consequently there is hardly a major local authority in the country with the exception of Madras and New Deihi Municipal Committee that has not been incurring deficits which have to be made up from general revenues. This has in turn inhibited the initiative of the local bodies towards assuming responsibility for operating, maintaining and extending water works.

### **Reply of Government**

This observation have been brought to the notice of the State Government/Union Territories for necessary action. A copy of the circular is annexed. (Appendix X).

[Ministry of M. & H. O.M. No. H.11013/31/73-PHE Dated the  
26th October, 1973.]

### **Recommendation (Serial Nos. 44, 46, 47, 48 & 49, Para Nos. 3.46, 3.61, 3.62, 3.63 & 3.64)**

The Committee hope that with the setting up of Water and Sewerage Boards the problem of financing and management of water works would be solved to a great extent.

The Committee note that a number of expert bodies have from time to time recommended the setting up of autonomous statutory water and sewerage boards, on a Statewise or regionwise basis as an effective means for increasing efficiency of financing and operating municipal water supply and sewerage services. It is, however, unfortunate that even though the proposal was first put forth ever a decade ago, very little has been done in most of the States to implement the recommendations of such bodies as the Technical Co-operation Mission Team in 1960 and the Seminar of 1964. Such a Board has so far been set up only in Tamil Nadu.

The Committee also note that even the Central Government hardly evinced any interest in this important aspect of the problem. A high power Committee was set up in 1965 on the lines indicated by the National Water Supply and Sanitation Committee, 1960-61 and as reiterated by the Seminar in 1964, for setting out concrete measures to be taken by State Governments and to draft model enactment for setting up Statutory Boards, defining their powers

and duties and recommend appropriate methods of fund raising. It is indeed very sad to learn that this Committee never met and in 1968 it was even decided that this body need not be reconstituted.

Again, even though the working of the Board in Tamil Nadu has been considered to be on the right lines by the Central Government, they have not circulated any paper to the States apprising them of the experiences of the working of this Board.

At the moment the country is on the threshold of the Fifth Five Year Plan, which envisaged provision of basic facilities to the people and amongst these water supply is of paramount importance. It is about time that the necessary administrative machinery is geared up to implement the programme envisaged in the Plan. In the opinion of the Committee, the proposal in regard to the setting up of the Water and Sewerage Boards may help in finding a satisfactory solution to the whole problem of financing and management of the Water and Sewerage works. They recommend that Central Government Central Public Health Engineering Organisation should assume the leading role in this matter and persuade the State Governments to set up these Boards.

#### **Reply of Government**

These recommendations have been brought to the notice of the State Governments/U.Ts. with the request that they may take steps for constitution of water supply and sewerage boards. A note on the working and experience of the Tamil Nadu Water Supply and Drainage Board has also been circulated to them. A copy of the circular is annexed. (Appendix XI).

[Min. of W. & H. O.M. No. H. 11013|13|73-PHE Dated the  
27th October, 1973.]

#### **Recommendation (Serial No. 45, Para 3.47)**

The Committee suggest that a study of losses incurred by local bodies on account of prescription of flat rates and non-metering should also be taken up early. Since a study, will in the opinion of the Committee, be helpful in bringing home to all concerned the real implications of adhering to the policy of flat rates and non-metering.

#### **Reply of Government**

This recommendation of the Estimates Committee has been accepted. The National Centre for Training and Research in Municipal Administration at the Indian Institute of Public Administration,

New Delhi has been requested to undertake a sample study in respect of cities and towns with a population of above 50,000 or so to find out the losses incurred by local bodies on account of prescription of flat rates of water charges instead of levying charges on the basis of actual consumption by metering the piped water supply and matters incidental thereto.

[Min. of W. & H. O.M. No. N. 12020|72|73-UCD Dated the  
15th October, 1973.]

#### **Recommendation (Serial No. 50, Para 3.75)**

The Committee note that hardly any coordination exists at present amongst the different Central Ministries for the implementation of different programmes of water supply. The Committee need hardly emphasise the necessity of a coordinated effort in this field and welcome the decision for setting up a coordination authority for all the programmes connected with water supply. They would like to watch how successfully this coordination is effected in the interest of speedier implementation of water supply programme.

#### **Reply of Government**

For the purpose of achieving coordination amongst the different Central Ministries/Departments concerned with the implementation of water supply programme, a coordination Committee on Water Supply has been constituted in the Ministry of Works and Housing. This Committee will have representatives from the Ministries of Home Affairs, Irrigation and Power, Industrial Development, Finance, Departments of Agriculture, Food, Community Development, Central Ground Water Development Board and Planning Commission.

[Min. of W. & H. O.M. No. 11013|7|73-PHE Dated the  
29th September, 1973].

#### **Recommendation (Serial No. 51, Para 3.84)**

The Committee note that the position as regards the setting up of independent public Health Engineering Departments has improved to some extent since the recommendation of the National Water Supply and Sanitation Committee in 1961. However in most States separate independent Public Health Departments have yet to be formed. Further there has been little improvement in regard to the rationalisation of municipal services in most States. Partly this may be due to limited workload so far. The Committee feel that in view of the larger allocations envisaged for the Fifth Plan and also in view of the coming into operations of the Accelerated Rural Water

Supply Programme the remaining States should also be persuaded in their own interest to take steps to put the organisation of their respective Departments on a more rational footing as recommended by the National Water Supply and Sanitation Committee.

### **Reply of Government**

This observation has been brought to the notice of all the State Governments/Union Territories for necessary action. A copy of the circular is annexed. (Appendix XII).

[Min. of W. & H. O.M. No. H. 11013|32|73-PHE Dated the  
26th October, 1973.]

### **Recommendation (Serial No. 52, Para 3.88)**

The Committee are unhappy to note that the system of spending substantial amounts by Government towards construction of water supply and sewerage schemes leaving them to be managed by local authorities without making proper arrangements for their maintenance have led in some cases to very unsatisfactory results. The Committee desire that the Central Government should take up this matter with State Governments to ensure effective and efficient maintenance of all water supply in the interest of long life of plants, low maintenance cost, quality control and above all continuity of services.

### **Reply of Government**

This observation has been brought to the notice of all the State Governments/Union Territories for necessary action. A copy of the circular is annexed. (Appendix XIII).

[Min. of W. & H. O.M. No. H. 11013|33|73-PHE Dated the  
26th October, 1973.]

### **Recommendation (Serial Nos. 53 and 54, Paras 3.91 and 3.120)**

The Committee note that perspective plans have already been prepared by a few States *viz.* Gujarat, Tamil Nadu, Uttar Pradesh, Rajasthan and West Bengal on certain aspects of the water supply and sanitation programmes. The Committee also note that the State Governments have prepared long term water supply and sewerage schemes for larger cities. Keeping in view the advantage of perspective planning in implementation of the programmes, the Committee recommend that the Central Public Health Engineering Organisation should persuade other State Government also to prepare

similar plans. The Committee would like Government to lay down broad guidelines for formulating the perspective plan for guidance of the State Departments.

The Committee feel that apart from lack of adequate financial resources for implementing the programme for making available safe water supply and sanitation, the greatest constraint has been constituted by lack of availability in requisite quantities and in time of essential materials like rigs and pipes for implementation of the programmes. The Committee have recommended elsewhere that there should be perspective plan for making available safe water and sanitation in all parts of the country by a specified date, at any rate before the end of the next decade. The Committee feel that Government should work out a corresponding perspective plan in respect of materials. The Committee need hardly point out that unless there is integrated planning, there is no hope of the pre-programme being implemented fully by the target date.

### **Reply of Government**

Guidelines for water supply and sanitation including the material requirements have been prepared and circulated to the State Governments/Union Territories. A copy of the same is annexed. (Appendix XIV).

[Ministry of W. & H. O.M. No. H-11013/38/73-PHE Dated the  
27th October, 1973.]

### **Recommendation (Serial No. 55, Para 3.121)**

The Committee are greatly concerned to find that rigs of the requisite capacity and quantity are not available within the country with the result that Government had to enter into a special agreement with UNICEF for importing 100 rigs in connection with water supply schemes in hard rock areas as also for meeting the requirements of areas hit by drought conditions. The Committee would like to point out that both the Heavy Engineering Corporation and the Hindustan Machine Tools which have been set up at heavy cost from the public exchequer have surplus capacity. The Committee see no reason why with the advanced planning and proper coordination, the manufacture of rigs could not be undertaken in these public sector undertakings and other industries so as to meet in full the requirements of the country. The Committee would like the Government to set up a high-powered task force to work out urgently the requirements for rigs and to plan their production within the country. The Committee, should however, not be under-

stood as ruling out import of rigs to meet emergent requirements but what the Committee are keen to point out is that maximum effort should be made to put our manufacturing capacity to full use in the interest of meeting the urgent requirements of our country for rigs and such other essential equipment required for public service.

### Reply of Government

The matter was taken up with the Ministry of Heavy Industry who are concerned with the production of rigs in the country. That Ministry has replied as follows:—

“The undersigned is directed to refer to the Ministry of Works and Housing O.M. No. H-11013/3/73-PHE dated the 25th July, 1973 on the above subject and to say that adequate capacity for the manufacture of various types of rigs for drilling wells for drinking as well as irrigation purpose has been created in the country and paradoxically most of the capacity remains under utilised for want of orders for drilling rigs on the indigenous manufacturers. Hence it would not be correct to say that rigs of the requisite capacity and quantity are not available within the country. However, in the recent past, Government of India had to accept rigs from UNICEF etc. as gift because of drought situation in the country. The indigenous manufacturer are in a position to meet the country's demand of various types of rigs provided orders are placed on them well in advance in a phased manner. Regarding the possibility of getting these rigs fabricated by the Public Sector Undertakings like HEC or HMT, it is remarked that HEC are licensed to manufacture drilling rigs and they have indicated that they would be in a position to manufacture about 400 drilling rigs during the next 4/5 years provided orders were placed on them immediately. They contacted the concerned Departments of Rajasthan, U.P., Haryana, Tamilnadu, Gujarat, Kerala Andhra Pradesh and Punjab Governments, but no orders have been received by them so far. It will, therefore, be seen that unless the State Governments plan their requirements and place orders on indigenous manufacturers in a phased manner, the situation under which import of rigs had to be cleared recently may arise again.

Government do not consider it necessary to convert the existing capacity in the Heavy Engineering Plants, whether in Public or Private Sector, to produce drilling rigs on a large scale, as such a step would only result into further addition to unutilised installed capacity for the manufacture of drilling rigs.”

The needs of the rigs have been reassessed and a note sent to the Ministry of Heavy Industry. It is proposed to finalise the matter in consultation with them at the earliest. Our endeavour would

be to suitably plan our requirements in a manner that indigenous capacity is fully utilised and only such rigs which are not manufactured in the country are imported. The Ministry of Heavy Industry will be approached to consider starting indigenous manufacture of such rigs (particularly the hard rock drilling variety) which are not yet made in the country with a view to achieving self sufficiency in this field.

[Min. of W. & H. O.M. No. H-11013/22/73-PHE Dated the  
26th October, 1973.]

**Recommendation (Serial Nos. 56 and 57, Paras 3.122 and 3.123)**

As regards the C.I. pipes the Committee find that while the licensed capacity is 6 lakh tonnes, the installed capacity achieved so far is not more than 4.47 lakhs tonnes while the production has been only 2 lakh tonnes. It is therefore only natural that acute difficulty is being experienced all over the country in getting pipes for water supply. The Committee would like the Government to study urgently the reasons why it has not been possible to achieve the full production capacity of at least 4.47 lakh tonnes as per installed capacity. The Committee also find that the estimated requirement of C.I. pipes for water supply schemes alone during the Fifth Plan is estimated at 2½ times the actual total annual production attained so far. It is obvious that if we have to develop a capacity of this order, no time should be lost in preparing detailed schemes for implementation as a crash programme. This would need not only thorough investigation with reference to availability of raw materials, power supply and other infrastructures but also coordinated action for procurement of the requisite machinery for the manufacture. The Committee would also like to point out that the requirements of galvanised iron pipe for the Fifth Plan is estimated at 19 lakh tonnes as compared to 2.77 lakh tonnes of annual total present production, thus envisaging at least double the present manufacturing programme. As pointed out in the case of C.I. pipes, this can only be achieved if there is a fully worked out detailed scheme for implementation in an integrated manner.

The Committee would also like to draw attention to Asbestos Cement pressure pipes and other stoneware pipes which are required for sanitation works. Here too the water supply requirement in the Fifth Plan is double the present production and therefore it is imperative that detailed planning should be done without delay, so that the manufacturing capacity can be established and brought into effect by the Plan target dates. The Committee would like the Government to realise the serious implications of the targets envisaged

so that they press into service all their organisational and entrepreneurial skill to bring about the increase in the manufacturing capacity. The Committee need hardly point out that decision should be taken at the highest level about the setting up of these factories in the public and private sectors, and the location of these units so as to save time, and clear guide lines given for implementation.

### **Reply of Government**

The observations of the Committee have been noted. The requirements of C.I. pipes and ACC pipes during the Fifth Plan are being worked out in consultation with the Ministries/Departments concerned. After the total requirements are worked out, it will be examined in consultation with the concerned departments how to meet these requirements during the Fifth Plan. The exercise will be completed shortly.

[Min. of W. & H. O.M. No. H. 11013/41/73-PHE Dated the  
27th October, 1973.]

### **Further Information Called for by the Committee**

The Committee may be apprised of the results of the exercise, if finalised, as regards the requirement of C.I. pipes and ACC pipes during the Fifth Plan and also the ways and the means adopted to meet the requirements.

[Lok Sabha Secretariat O.M. No. 5/10/12/FCII/72 dated 29-12-1973.]

### **Further Reply of Government**

As assessment of the requirements of various types of pipes for water supply schemes during Fifth Plan has been made keeping in view the tentative Fifth Plan provision.

The assessed requirements are given below:

(i) C.I.	15 lakh M.T.
(ii) A.C.	5 lakh M.T.
(iii) G.I.	5 lakh M.T.
(iv) P.V.C.	1.5 lakh M.T.
(v) Steel	0.5 lakh M.T.



These requirements have already been discussed with the representatives of the Ministries of Heavy Industry, Steel and Mines and the DGTD and the concerned Ministries would take steps to ensure adequate supply of these materials.

[Min. of W. & H. O.M. No. H. 11013/41/73-PHE Dated the  
4th January, 1974]

#### **Further information received from Government**

The Central Public Health Environmental and Engineering Organisation have informed that the National Committee of Science and Technology has identified a research project relating to new pipe material in the public health engineering sector related to new pipe materials and jointing methods. A provision of Rs. 20,000 has been made for this project which is to be undertaken by the C.B.R.I., Roorkee/CPHERI, Nagpur who are under the administrative control of C.S.I.R.

[Min. of W. & H. O.M. No. H. 11013/11/73-PHE dated the  
20th March, 1974].

#### **Recommendation (Serial No. 58, Para 3.124)**

The Committee would also like the Government to take note of the advances which have been made in the other countries particularly in the use of PVC pipes so that consistent with its proven qualities it can be put to service in the interest of reducing the cost and speeding up the implementation programme.

#### **Reply of Government**

The question of increasing the production of P.V.C. pipes and securing a competitive rate for the same has been taken up with the Central Ministries concerned. The State Governments and Union Territories have already been advised to intensify the use of P.V.C. pipes wherever possible to tide over the shortage of small diameter cast iron pipes. A copy of the circular dated the 2nd December, 1971 is enclosed. (Appendix XV).

[Min. of W. & H. O.M. No. H-11013/37/73-PHE dated the  
26th October, 1973]

#### **Recommendation (Serial No. 59, Para 3.125)**

The Committee would also like the Government to intensify the research in a coordinated manner on all these materials particularly the pipes so as to reduce the cost of production and find alternative substitute which would bring down the cost.

## Reply of the Government

The recommendation has been noted for action and C.S.I.R. have been approached accordingly. The following facts are brought to the notice of the Committee:—

1. Work at C.P.H. E. R. I., Nagpur has established that from the bacteriological point of view, plastic pipes are as good as any conventional pipes.
2. With a view to provide information on the types of plastic pipes manufactured in the country, their properties, merits and demerits, the factors governing their choice for cold water supplies, methods of installation and testing, CIPHERI has brought out a brochure entitled "Plastic Pipes in Water Supply & Sewerage," giving all the relevant information.
3. CIPHERI is actively associated with the preparation of Indian Standards Codes of Practice for Plastic Pipes.
4. CIPHERI has been conducting a training course on "Plastic Plumbing" for the benefit of plumbers, users and contractors.

[Min. of W. & H. O.M. No. H. 11013/11/73-PHE Dated the 24th October, 1973]

### Recommendation (Serial No. 60, Para 3.126)

The Committee would suggest that in the Fifth Plan document Government should clearly indicate the concrete measures which they are taking to ensure the supply of materials particularly the pipes required for implementation of water supply and sanitation programmes so that the Members of Parliament and the public know the earnestness with which the Government are proposing to implement the scheme in a systematic and rational manner.

### Reply of Government

The suggestion has been noted and will be acted upon.

[Min. of W. & H. O.M. No. H. 11013/14/73-PHE Dated the 26th October, 1973]

### Recommendation (Serial No. 61, Para 3.128)

The Committee note that inadequacy of wagons has been one of the reasons for delay in sending the pipes to various Health Engi-

neering Departments. They also note that the matter has already been taken up with the Ministry of Railways for allotment of priority 'C' instead of priority 'E' for allotment of wagons for transportation of pipes etc. The Committee hope that an early decision will be reached and a higher priority will be allotted for the transportation of materials required for water supply.

### **Reply of the Government**

The point raised in this recommendation was taken up with the Ministry of Railways. That Ministry has informed that programme movement sponsored by the nominated officials of the State Governments concerned can move under priority Class 'C' as per existing provisions in the Preferential Traffic Schedule. The pipes required for the water supply and sanitation schemes by the various State Governments can also move under this priority. The State Governments and Union Territories have been informed of the position. A copy of the circular letter to the State Governments is annexed. (Appendix XVI).

[Min. of W. & H. O.M. No. H. 11013/14/73-PHE Dated the  
19th October, 1973]

### **Recommendation (Serial No. 62, Para 3.145)**

The Committee find that as many as 20 institutions all over the country are already engaged in research problems pertaining to water supply. The Committee feel that the lessons the nation has learnt in the matter of organising agricultural research and other scientific research should be applied in the field of water and health problems as well. This would call for an identification of the primary problems requiring intensified research, determination of priorities and a well-coordinated programme for allocation of these research problems to the research institutions for a meaningful, intensified and coordinated effort to achieve the necessary breakthrough in the shortest period. The Committee would like to stress that there should be an effective and meaningful, coordination at the Centre by a body which should have on it the best technical talent available in the field so as to provide proper guidance. The Committee would also suggest that the programme should be reviewed at least once a year and a well-documented account brought out for information of all concerned. The Committee would also like to stress that all these research centres should have close link with the extension centres so that practical solutions which can be applied are evolved. The Committee would also suggest that where there is need for foreign assistance for intensifying research, the help of

United Nations organisations such as W.H.O. and U.N.D.P. may be taken in a systematic and urgent manner so as to put it to maximum use.

### **Reply of the Government**

The views of the Estimates Committee have been noted. The identification of the problem needing intensified research with necessary priorities, institutions where such research work could be undertaken and the coordination of the work on similar projects by the other institutions like CIPHERI, ICMR Units etc. is being done as a part of the science and technology plan by the National Committee on Science and Technology. After finalisation of this plan further action would be taken on the basis of guidelines laid by NCST.

2. The Adviser (PHE) is a Member of the Executive Board of the Central Public Health Research Institute, Nagpur and in that capacity he has been bringing the requirements of the field organisations to the notice of the CIPHERI. Regional advisory bodies are also envisaged for guiding the research activities of regional laboratories of the CIPHERI and their coordination with other institutions/departments.

[Min. of W & H O.M. No. H-11013|42|73-PHE Dated the  
27th October, 1973]

### **Further Information Called for by the Committee**

The Committee may be apprised of the progress if any in drawing up or programmes for research work on health and water problems on the basis of the overall plan in this regard by the National Committee on Science and Technology and on the lines of the recommendations of the Estimates Committee.

(Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 29-12-1973).

### **Further Reply of Government**

The National Committee on Environmental Planning and Coordination and National Committee on Science and Technology of the Department of Science and Technology have already taken up the work of identification and, coordination of research and development work in the field of Public Health Engineering. The research and

development projects in this field have been included in the V Plan proposals of the Department of Science and Technology and the Council of Scientific and Industrial Research. A list of public health engineering projects identified by the Central Public Health Engineering Research Institute Nagpur is at Annexure I.

The Department of Science and Technology have made a provision of Rs. 4.00 crores in their V Plan for the Science and Technology Plan of the Central Public Health and Environmental Engineering Organisation, Ministry of Works and Housing details of the projects in this plan are given in the Annexure II.

The National Committee on Environment Planning and Coordination are also constituting a high level committee to farm out research and development projects to various agencies like the universities, Government laboratories and the State Government Organisations.

(No. H. 11013/42/73-PHE Dated the 4th January, 1974.)

### **Recommendation (Serial No. 63, Para 3.163)**

The Committee are greatly disappointed to note that during the 15 years that the training programme has been in vogue only a fraction of the target has been achieved. The Committee feel that inadequacy of the stipend which is said to be only Rs. 150/- can only be a part of the session. They feel that the whole curricula of the training programme should be thoroughly gone into in consultation with the State Governments so as to make it of practical use in every day work to the officers who are deputed for it. The Committee would also suggest that the training should be dispersed over various parts of the country so as to facilitate its implementation. The Committee would also suggest that the training programme for the Fifth Plan should be worked out on a realistic basis for various categories of staff laying special emphasis on problems which they would have to face in the execution of the Plan schemes and in the maintenance of the water supply and Sanitation equipment which could be installed. The Committee would like to be informed of the action taken in the matter within the next three months.

### **Reply of the Government**

Tentative proposals for Public Health Engineering Training Programme in the Fifth Plan period have been drawn up giving

due weight to this recommendation of the Estimates Committee. The different courses are proposed to be further dispersed throughout the country to facilitate the candidates of contiguous areas to undertake such training. A circular letter has already been addressed to the State Governments and the response is encouraging. The requirements of training for the different categories of P.H.E. personnel are being worked out keeping in view the actual needs of such personnel by the States as also their requirements during the Fifth Plan period. The final requirements of training for such personnel would be arrived at when the Fifth Plan proposals are finalised. The directions given by the Estimates Committee will be kept in view while finalising the proposals.

A proposal to set up a small committee consisting of teachers and representatives of employing organisations to suggest suitable curricula for the P.H.E. courses and training methodology is under consideration.

[Min. of W & H O.M. No. H. 11013|3|73-PHE Dated the  
23rd August, 1973]

#### **Further Information Called for by the Committee**

The latest position regarding the proposal to set up a Small Committee consisting of teachers and representatives of employing organisations to suggest suitable curricula for the PHE courses and training methodology may be intimated to the Committee.

[Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 29-12-73]

#### **Further Reply of the Government**

A Committee has since been constituted and asked to submit its report within six months.

[Min. of W & H O.M. No. H. 11013|3|73-PHE Dated the  
4th January, 1974]

#### **Recommendation( Serial No. 64, Para 3.164)**

The Committee note that it has not been possible so far to standardise the qualifications and training of plant operators of different grades in order to bring them under National Certificate Scheme recommended by the National Water Supply and Sanitation Committee in 1961 as there were not a sufficient number of trainees

available in the country. The Committee feel that it is high time that a beginning is made for proper organisation of training in this vital field so that properly trained operators are available to operate the various water and sewerage plants with maximum economy and efficiency.

### **Reply of the Government**

It is expected that by end of the V Plan 5,000 urban and rural water supply works will be in operation. The manning of these works would need trained personnel. By the end of IV Plan about 550 of such personnel would have been trained. In order to meet the increased requirements of such personnel during the V Plan it is proposed to decentralise training at regional centres which will serve contiguous States. Specialised courses would be organised at these centres. The capacity of the centres would be determined by the need to train as many plant operators as possible in the 5th Plan Period.

2. The views of the State Governments have been invited regarding the certificate scheme for training of different grades of water works supervisors. Replies from all the States have not been received and the matter is being pursued with them. After the views of the State Governments are received an assessment of the needs for the certificate course will be made.

[Min. of W & H O.M. No. H. 11013|39|73-PHE, Dated the 26th October, 1973]

### **Further Information called for by the Committee**

The Committee would like to be apprised of the latest position of the proposal regarding the Certificate Scheme for training of different grades of water works personnel and of the assessments made of the needs for certificate course.

[Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 29-12-73]

### **Further Reply of the Government**

The State Governments have already been approached for their views on the certificate scheme for training of different grades of Water Works Supervisors. The replies have been received from the

States of Madhya Pradesh, Orissa, Kerala and Andhra Pradesh. The defaulting States have been reminded to expedite a decision. The matter will be discussed at the next Chief Engineers (PHE) Conference.

[Min. of W & H O.M. No. H. 11013|39|73-PHE, Dated the  
4th January, 1974]

#### **Recommendation (Serial No. 65, Para 3.165)**

The Committee note that no careful or detailed assessment has so far been made as to the adequacy of the existing courses of study for Public Health Engineers to meet the needs of implementation of the National Water Supply Programme and to see whether the existing courses attain a comparable standard of training at all Centres and whether the facilities wanting in the institutions have been made up. The Committee recommend that necessary steps would be taken to make such an assessment early and initiate suitable measures to bring the standard up to the mark.

#### **Reply of the Government**

At present 4 institutions are conducting post-graduate training in public health engineering for in-service engineers with stipendary assistance from Central Government. Another 9 institutions are also providing the facilities for post-graduate training in public health engineering as part of their regular curriculum. The Central Public Health and Environmental Engineering Organisation, Ministry of Works and Housing have also been running a number of refresher courses in public health engineering to give orientation training to the in-service engineers in the public health engineering aspects. As indicated in reply to item 63 a small committee is proposed to be constituted to go into the curricula of public health engineering courses as well as training methodology. This Committee will also look into the standards for public health engineering courses.

[Min. of W & H O.M. No. H-11013|42|73-PIIE Dated the  
27th October, 1973]



### CHAPTER III

#### RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLY

##### **Recommendation (Serial Nos, 17 & 18, Paras 2.64 and 2.65)**

The Committee are not convinced of the merit of establishing a separate planning and design unit since 1972, for working out details of rural water supply, for implementation. The Committee feel that the work of Planning and designing should be made an integral part of the investigation units, which should be suitably strengthened where necessary, for this work.

Elsewhere, the Committee have noted Government's determination to ensure that safe water supply becomes available at least to all the 1,52,000 scarcity and problem villages. The Committee feel that this task can be performed only if there is detailed planning and designing, in advance. This under-scores the need for strengthening suitably, the Special Investigation Divisions to perform this work, according to a prescribed time-schedule. The Committee would stress that there should be a contemporaneous watch at high levels, to see that the work proceeds on the right lines to throw up reliable data and that correct remedial measures are taken where necessary, in time.

##### **Reply of Government**

The role of the SIDs has been mentioned in detail in reply to recommendation at serial No. 15 (para 2.62). The Planning and Design Units were sanctioned for a different purpose. They are meant for preparing detailed designs and project reports for individual water supply schemes in villages. In other words, the Planning and Design Units took over from where the S.I.D.s left. The main purpose of establishing the Planning and Design units was that those units will prepare sufficient number of schemes to be implemented in the remaining portion of the 4th Plan and the beginning of the 5th Plan in view of considerably enhanced provision for rural water supply made as a result a launching Accelerated Rural Water-Supply Programme and proposals for large provision in 5th Plan.

As a result of the detailed appraisal made in 1971 of the work of S.I.D.s, it was decided that a time bound target must be specified to the States in order that they may complete the work of investigating the problem which had been going on for the last nearly 10 years. Experience of the past indicated that unless such deadline is prescribed the S.I.D.s would continue to operate indefinitely and would thus fail to achieve their purpose, namely, of broadly identifying the problem areas. Accordingly, States were told that they must complete the work by the end of the 4th Plan thereafter the scheme would cease to operate. As a result of these instructions it is expected that the work of investigation will have been completed practically all over the country by the end of 4th Plan. The work of the P. & D. Units, as mentioned above, is different. However, it is possible that while preparing detailed project reports the Units may have to do some amount of survey and investigation as well. Further it is also possible that in certain States the work of S.I.D.s may not be complete. In such States the P. & D. Units may also have to do survey and investigation besides preparation of project reports. Detailed instructions on this role of P. & D. Units will be issued after the 5th Plan proposals are finalised. The Planning Commission have been approached for approval for maintenance of P. & D. Units in various States and their strengthening during the 5th Plan at an estimated provision of Rs. 4.15 crores.

[Min. of W & H O.M. No. H. 11013/12/73-PHE Dated the  
29th September, 1973]

**Recommendation (Serial Nos. 33 and 34, Paras 2.144 and 2.145)**

The Committee note that a number of organisations/Departments are concerned with Water Supply in Delhi in one way or the other, such as the Health Ministry (now Works and Housing) the Planning Commission, the Ministry of Irrigation and Power, the Ministry of Home Affairs, the Delhi Municipal Committee, the New Delhi Municipal Committee and the C.P.W.D. The Committee are surprised to note that coordination should be lacking among these bodies even in the Capital. The Committee, however, note that though much belated, some coordinating efforts have been initiated in this direction since June, 1972 and hope that these efforts will bring in the desired results.

The Committee, however, do not think such half-hearted measures could be of permanent value and feel that much more drastic measures are absolutely essential for the Capital for an effective, and overall coordination among all the organisations concerned not only with water supply but with all civic amenities such as electri-

city, transport, medical facilities, education etc. under a high power coordination authority. The Committee note that in Calcutta, Calcutta Metropolitan Development Authority has been formed with a view to achieve such coordination under the Health Ministry now Works and Housing. In this connection the Committee have in their report on "Housing" commended the suggestion in regard to vesting in the Lt. Governor all necessary powers of the Central Government for bringing about coordination among the different organisations engaged in providing various civic amenities in Delhi. The Committee hope this suggestion will also receive serious consideration by Government.

### **Reply of the Government**

The observations made in the recommendation No. 33 have been noted. Recommendation No. 34—The Committee's suggestion is linked with the recommendation on 'Housing' report for vesting on the Lt. Governor of Delhi all necessary powers of the Central Government for bringing about coordination among different organisations engaged in providing various civic amenities in Delhi. Accordingly a common policy decision will have to be taken on all these matters. This is being done in consultation with the concerned authorities.

[Min. of W. & H. O.M. No. H. 11013/6/73-PHE, dated the 4th January, 1974]

### **Further Information Called for by the Committee**

Latest position in regard to these matters may please be intimated to the Committee.

[Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 29-12-73]

### **Further Reply of Government**

*The position is indicated below:*

*Recommendation No. 33:* The Ministry of Works and Housing is actively taking steps to improve the water supply position in Delhi. A meeting in this regard was taken by Shri Om Mehta, Minister of State for Works and Housing on 8-11-73 with the representatives of the Municipal Corporation of Delhi, Delhi Administration, N.D.M.C., Cantonment Board and Delhi Water Supply and Sewage Disposal Undertaking. The conclusions reached at this meeting are being pursued with the concerned authorities.

**Recommendation No. 34:**

As already stated this recommendation was linked with the recommendation No. 57 of the Estimates Committee's report on Housing. The position has been explained in the reply given to this item, a copy of which is enclosed. (Appendix VII). As explained in that reply, the Lt. Governor of Delhi has been vested with requisite powers to coordinate the activities of the various public utility organisations in Delhi.

[Min. of W & H O.M. No. H. 11013|6|73-PHE, dated the  
4th January, 1974.]

## CHAPTER IV

### RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE.

#### **Recommendation (Serial Nos. 1, 2, 4&5 Paras 1.16, 1.17, 2.19 & 2.20)**

1. Wholesome and adequate supply of drinking water to the general public is now generally accepted as an essential civic amenity. As the position stands today, in rural areas piped water supply has so far been brought within the reach of only 22,000 villages as ending March, 1972 comprising a just 3.07 per cent of the rural population which constitutes about 80 per cent of the total population of the country. In urban areas protected water has been made available only to 1282 towns out of 2921 towns in the country. Even in these towns the supply has been partial. Further, even at the end of the Fourth Plan there will still be 1274 towns in the country without this basic amenity. Only 186 towns have so far been connected by sewerage full or partial. Considering the magnitude of the problem *viz.*, making available this basic necessity to a population of 55 crores and considering the back-log in the field, the Committee consider the pace of progress too slow.

2. Viewing from the angle of progress achieved in the industrial and technological fields, the country is still lagging far behind in the matter of availability of safe water supply to its citizens. As would be seen from facts given in the later Chapters of this report, realisation of the imperative necessity of ensuring supply of safe and wholesome water has been slow to come in. Allocations for water supply have been low, and implementation of various recommendations for organisational and procedural reforms made at several forums and by several bodies have been half-hearted for which both the Central and State Governments have to share the responsibility. The Committee cannot but strongly urge Government to take concerted and positive measures atleast from now onwards to ensure that this basic requirement of wholesome and adequate drinking water is made available to every village and hamlet in accordance with a perspective plan in the shortest possible and specified period.

4. The Committee are distressed to note the dismal situation of water supply prevailing in the rural areas of the country today..

Even twenty-five years after independence 4.55 lakh villages out of 5.67 lakh villages in the country are still dependent on ancient means of water supply such as hand-pumps, tanks, wells, rivers, streams and springs. What is most deplorable is that there are still about 90,000 "Scarcity" villages where water is not available within a depth of 50 feet or within a distance of one mile and there are still about 61,000 "health problem" villages where water is infected with various health hazards.

5. The Committee observe that although National Water Supply and Sanitation Programme is working for the last 18 years about 22,000 villages only have so far been covered with piped water supply benefitting a population of just 3.07 per cent of the rural population. It has yet to be fully realised that with 80 per cent of the country's population living in the rural areas, water supply forms the most important single factor for improving nation's health. Considering the long neglect in the past, the Committee urge that this subject will henceforward be allotted special importance and urgency in the National Plans.

### Reply of the Government

The observations made in paras 1, 2, 4 & 5 have been noted.

It may be clarified here that the piped water supply in rural areas is not the only method for providing protected drinking water to the rural community. Tubewells with handpumps and sanitary wells provided with hand pumps also constitute adequate sources for safe water supply.

2. The following table gives an approximate estimate of the coverage of rural population with drinking water supply by various methods as at the end of the Fourth Plan:

No. of villages	Percentage of population.	Population 1971	Type of supply
0.39 lakhs	5%	2.0 crores	Tubewells with handpumps and piped water supply—safe.
2.39 lakhs	46%	20.2 crores	Adequate & fairly safe water supply through simple wells and hand-pumps. Some villages are also covered with piped water supply which is safe.
1.85 lakhs	36%	16.0 crores	Simple wells.
1.13 lakhs.	13%	5.6 crores	Problem villages yet to be covered.
5.76 lakhs	100%	43.8 crores	

It will be noted from this table that only 1,13,000 villages with a population of 5.6 crores are categorised as problem villages where there is no perennial source of drinking water within one mile distance or 50 feet depth or where the existing source of supply suffers from public health hazards.

Considerable emphasis is being laid on provision of protected drinking water to problem villages in the fifth plan. Under the Minimum Needs Programme a provision of Rs. 550 crores for rural water supply sector is anticipated in the fifth plan which should cover most of the problem villages.

[Min. of W&H O.M. No. H. 11013|27|73-PHE dated the 26th October, 1973.]

**Recommendation (Sl. Nos. 36, 37 & 38 in Paras 3.19, 3.20 and 3.21)**

The Committee note that provision of safe water supply and sanitation has not received the attention it deserved in the Five Year Plans in spite of the fact that its importance had been emphasised early by the expert bodies like Health Survey and Development Committee, 1945 and by the Planning Commission itself. During the first two plans meagre allocations were made and even those are not fully utilised. Lower allocations were made in the Third Plan as compared to the needs indicated by the expert bodies like Third and Fourth Conferences of Public Health Engineers in 1958 and 1960 and by the National Water Supply and Sanitation Committee in 1961 and even though the Health Ministry now Works and Housing had all along been pressing for higher allocation for water supply. The Committee are surprised to note that in this vital sector of nation building activity no specific targets physical or financial were fixed before the Fourth Plan. Naturally not much progress could have been expected.

The Committee, however, note an encouraging trend in this regard since the beginning of the Fourth Plan in which Rs. 400 crores have been allocated for water supply and sanitation sectors out of which Rs. 123 crores have been earmarked for the Rural Sector. According to the indications against this allocation of Rs. 123 crores, for the rural sector, expenditure is likely to be of the order of Rs. 140 to 150 crores. The Committee also note in particular that the States have been giving an increasingly higher priority to this Programme.

The Committee hope that this sector of the Programme will hence forward receive appropriate place in the Plans and the allocations will be such as to ensure that the basic facilities of safe water supply and sanitation are made available through the country in a

phased manner by a specified date, at any rate before the end of the next decade.

### **Reply of the Government**

The observations made on items 36 and 37 have been noted.

### **Recommendation No. 38**

During the fifth plan under the Minimum Needs Programme a provision of Rs. 550 crores is anticipated for meeting the requirements of drinking water supply in problem villages. It is anticipated that with the proposed allocation for rural water supply, it should be possible to cover most of such problem villages in the fifth plan period.

[Ministry of W. & H. O.M. No. H.11013|29|73-PHE dated the 26th October, 1973].

### **Further Information called for by the Committee**

It has been stated in reply to recommendation Nos. 1, 2, 4 & 5 that there are as many as 1.85 lakh villages with 16 crores of population comprising about 36 per cent of the rural population served by simple wells. These villages have been distinguished from other villages furnished with adequate, safe or fairly safe water. In addition, another 1.13 lakh villages with a population of 5.6 crores are categorised as problem villages. While the problem villages (1.13 lakhs) are intended to be covered during the 5th Plan period, there is no indication when the villages in the former category are to be provided with safe and adequate water? Has any long term programme for providing safe water as also sanitation to the entire population of the country been prepared by Government?

[Lok Sabha Secretariat O.M. No. 5|10|12|ECII|72 dated 24-12-1973].

### **Further Reply of Government**

In the 5th Plan, an outlay of Rs. 573 crores has been made for rural water supply under the Minimum Needs Programme. It is proposed to cover most of the problem villages (namely, villages without any source of drinking water or villages where the existing source of drinking water suffers from health hazards etc.) with this provision. However, with the escalation in the prices of materials and labour costs, it is anticipated that it would be unlikely to cover all the problem villages in the 5th Plan period. The problem will remain to be tackled in the 6th Plan period also.



2. In view of the constraint of resources and the big backlog of tackling the more serious problem of "No source" and "Health Hazard" villages, it has not been possible to make provision in the 5th Plan for providing water supply through safe sources in other villages. 1.85 lakh villages referred to in the reply sent earlier are shown as those served by simple wells. That does not mean that all these villages are either having inadequate source of water or that this water is totally unsafe. One way to ensure safe water would be to either take up piped water supply schemes in these villages or to have tube wells. Both these are expensive modes of providing water supply and it is estimated that to cover these villages with such systems would require nearly Rs. 1250 crores. Further piped water supply schemes are very expensive to create and maintain. There are, however, several other methods by which the existing simple wells can be turned into sanitary wells and the water made fairly safe for drinking purposes. These methods involve the construction of parapet around the wells, covering the well, sanitary arrangements for drawing water together with regular cleaning and disinfecting the well. The Ministry proposes to issue comprehensive guidelines for converting the simple wells into sanitary wells through local effort. In this manner, the existing sources can be made fairly safe without much public investment.

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[Ministry of W. & H. O.M. No. H.11013/45/73-PHE  
date the 30th January, 1974].

### Comments of the Committee

The Committee note the clarifications put forth by Government that the piped water supply in rural areas is not the only method of providing protected drinking water to the rural community and that tubewells with handpumps also constitute adequate sources for safe water supply. In this connection the Committee wish to point out that even according to these estimates, safe water in the strict sense of the term is available to a mere 5 per cent of the rural population, which cannot be considered very hopeful although adequate and 'fairly safe' water is available to another 46 per cent of the rural population. Again 36 per cent or 16 crores of the rural population has to make do with simple wells, which is not claimed to be adequate, safe or even 'fairly safe'. Further, 13 per cent or 5.6 crore people have either no water within a reasonable range or if they have, it is full of health hazards. It may also be pointed out that these figures are liable to further increase as a result of representations being received from the State Governments.

The Committee further note that in the Fifth Plan an outlay of Rs. 573 crores since revised to Rs. 564 crores by the planning commission has been made for rural water supply under the Minimum Needs Programmes and it is proposed to cover most of the problem villages (namely, villages without any source of drinking water or villages where existing sources of drinking water suffers from health hazards etc.) within this provision. However, the Committee are disappointed to note that with the escalation in prices of materials and labour costs, it is unlikely even to cover all the problem villages in the Fifth Plan period and the problem will remain to be tackled in the Sixth Plan period also. The Committee are therefore constrained to observe that agony and sufferings of the people inhabiting these unfortunate areas will consequently be prolonged for another plan period.

The Committee would like to point out that the present high costs and the magnitude of the problem have been reached mainly due to the fact that this problem has continued to be ignored all along as already pointed out by the Committee in their original report. With the increase in population and escalating prices, the problem will continue to grow unless it is tackled squarely and on a priority basis. With this end in view the Committee reiterate their earlier recommendation and hope that Government would ensure that the basic facilities of safe water as also sanitation are made available to the entire population in accordance with a perspective plan in the shortest possible and specified period and at any rate by the end of the next decade before the whole problem assumes still more serious proportions.

NEW DELHI:

April 24, 1974

Vaisakha 4, 1896.

R. K. SINHA,

Chairman,

Estimates Committee.

## APPENDIX I

(Vide reply to recommendation at Sl. No. 3)

No. H. 11013|19|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 11th October, 1973.

To

All State Governments and Union Territories.

**SUBJECT:** *Estimates Committee—38th report of the Lok Sabha on National Water Supply Programme—Recommendation No. 3—Collection of data in regard to population not covered with water supply arrangements in cities|towns having pipe water supply.*

Sir,

I am directed to invite your attention to recommendation No. 3 (reproduced below) made by the Estimates Committee of the Lok Sabha in their 38th Report on National Water Supply Programme:—

The Committee note that there has been a steady increase in water supply in urban areas of the country during the last two decades. The percentage of urban population served by water supply has risen from 48.5 in 1944 to 60 per cent in 1961 and to 77 per cent in 1971. The Committee also note that 1274 towns where there are no arrangements for safe water supply are intended to be covered with water supply during the Fifth Plan covering by and large the entire urban population. They further note that slum improvement schemes have been launched in 11 cities which will also take care of the water supply needs of these cities. However, the Committee are given to understand that no figures are available regarding the actual coverage of the urban population in different towns where water supply is available only partially. Thus while there would be as many as 1274 towns in the country without any organised system of water supply at the end of the Fourth Plan there may be large sections in other urban areas without water supply. Whereas such sections are

likely to increase further in view of the tendency of expansion of the cities and towns, the Committee hope that necessary data in this regard also will be collected and adequate provisions made to cover such population simultaneously.

It will be noted that while the percentage of urban population served with piped water supply has increased considerably in the last 15 years, in almost all developing and important cities there may be considerable sections of population which have not been provided with piped water supply facilities though these cities|towns switched over to piped water supply much earlier. There is likelihood that in other smaller towns as well provided with piped water supply, due to paucity of resources or logistic difficulties, the entire population of the town may not be covered with piped water supply leaving a substantial section uncovered.

The number of such uncovered population is likely to increase further due to expansion of the cities and towns which is taking place at a faster pace and the limited capacity of the local administrations to provide the necessary civic amenities including water supply. Thus in most of the towns covered with piped water supply there will be sections of population who have not been provided with facilities of hygienic drinking water specially in wards in the fringe areas and newly added areas to the town from time to time since initial water supply scheme was executed.

Such pockets of population which have been denied safe water supply can be positive health hazards for the entire urban community of that city due to consumption of drinking water obtained from unsafe sources. In case of towns where only water supply has been provided but with no sewerage facilities there is a chance of contamination of sub-soil water by sullage rendering it unpotable and making the area prone for filariasis and mosquito nuisance.

In order to rectify this situation it is necessary to find out the actual coverage of population with piped water supply in cities and towns and the population that remains to be covered. As recommended by the Estimates Committee, it is requested that the State Governments|Union Territories may make earnest efforts to collect the necessary data in this regard townwise and make a realistic estimate of actual coverage of urban population by piped water supply. It is also requested that this data should be used by the State Government|Union Territories for drawing up plans for augmentation of water supply with a view to achieving full coverage of town's

population. It is also stressed that coverage of such areas should be accorded high priority and resources mobilise to undertake the schemes in hand early. This Ministry may be kept informed of the steps taken.

Yours faithfully,

Sd| -  
(SATISH KUMAR)  
*Deputy Secretary.*

Copy forwarded to:

- (i) Adviser (PHE) with 40 spare copies.
- (ii) Planning Commission, Urban Development and Water Supply Division, New Delhi.

Sd| -  
(SATISH KUMAR)  
*Deputy Secretary.*

## APPENDIX II

(Vide reply to recommendation at Sl. No. 9)

No. H.11013|23|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, the 26th October, 1973.

To

All State Governments and Union Territories.

**SUBJECT:** *Classification of villages having drinking water difficulties in the permanent hardship and problem areas.*

Sir,

I am directed to invite your attention to this Ministry's letter No. F.12-2|70-PHE dated the 12th May, 1970 (copy enclosed) wherein the following criteria were laid down for classification of villages as suffering from permanent hardship in supply of drinking water:—

- (a) Villages where the drinking water is not available within a depth of 50 feet or a distance of one mile.
- (b) Villages requiring protected water supply due to cholera endemicity or guinea worm infestation or other reasons.

2. The Estimates Committee of Lok Sabha in their 38th Report have made the following recommendations in this regard:—

- (8) The Committee take note of Special difficulties experienced by Hilly regions of Meghalaya. They also note that a new working definition of scarcity villages has been adopted in the case of Meghalaya viz. absence of a perennial sources of water within a hundred meter vertical distance.
- (9) The Committee suggest that this definition should be adopted in other hilly regions also.

3. In case of hilly region at places, it is found while there is a good source of surface water available within a distance of 1.6 K.M. (one unit) but it may be located at a vertical distance of 100 meters from

the village habitation. The inhabitants of such villages find it difficult to fetch the water from such vertical distances. This shortage of water for domestic purposes is also responsible for unhygienic conditions. It has, therefore, been decided to classify such villages in hilly regions as permanently disadvantaged problem villages for the purpose of classification for drinking water supply. It is requested that in para 1 of the letter dated the 12th May, 1970, the following may be added as sub-para (c):—

- (c) In case of hilly region villages where the perennial source of water is not available within a vertical distance of 100 meters.

Kindly acknowledge receipt.

Yours faithfully,

Sd|-

(J. A. SAMAD)

*Under Secy to the Govt. of India.*

1. Copy with 40 spare copies forwarded to the Adviser (PHE).
2. Copy to Planning Commission, U.D. & W.S. Division.

(J. A. SAMAD)

*Under Secretary to the Govt. of India.*

(COPY)

No. F. 12-2|70-PHE

GOVERNMENT OF INDIA

MINISTRY OF HEALTH & F.P. AND W.H., & U.D.  
(DEPARTMENT OF HEALTH)

*New Delhi, the 12th May, 1970.*

To

All State Governments and Union Territories.

**SUBJECT:** *Reclassification of villages having drinking water difficulties in the permanent hardship and problem areas.*

Sir,

As the State Governments are aware, Special Investigation Divisions were set up in the States with 100 per cent Central Assistance under the National Water Supply and Sanitation Programme for making an investigation of drinking water supply in the difficult and scarcity areas. Assessment reports were submitted by the various States in a general way grouping the villages in difficult and scarcity areas, specially backward areas, areas where the existing water sup-

ply was unsafe, unwholesome and inadequate. In order to collect data which may be utilised for purposes of comparison, the states were requested to furnish information under the following categories:—

- (a) Villages where the drinking water is not available within a depth of 50 feet or a distance of one mile.
- (b) Villages requiring protected water supply due to cholera endemicity or guinea worm infestation or other reasons.

This information has been received from most of the States. In the Fourth Plan, it is proposed to provide water supply to the rural areas under the following priorities:—

- (i) Continuing schemes.
- (ii) Villages suffering from permanent hardship in (a) saline (b) hilly and (c) sandy tracts.
- (iii) Cholera endemic and guinea-worm infestation.
- (iv) Provision of wells, tubewells etc.

Detailed information under the various categories mentioned above is not available to make a proper assessment of the problem and draw scheme-wise priorities with the resources available. No information is also available in regard to villages which suffer from high flouride and high iron bearing waters. It has also been observed that in the case of Cholera endemicity, entire villages in a district affected by Cholera have been included, instead of only those villages which are really cholera endemic. Similarly it is also necessary to have a classification of the permanent hardship areas, depending upon the distance of available source of water, depth from which water is available and also to the nature of area. This classification will be very useful to the State Governments etc. in drawing up priorities, allocating funds and executing the schemes.

It is, therefore, requested that the Special Investigation Divisions may be asked to collect the information as required in the pro formae sent herewith and furnish the same to the Adviser (PHE), Central Public Health Engineering Organisation, Ministry of Health, Family Planning and Works, Housing and Urban Development, Department of Health, Nirman Bhavan, New Delhi, by the 30th June, 1970, at the latest.



In this Ministry's letter No. 8-95/68-PHE dated the 13th January, 1970, the State Governments were addressed on the collection of statistical details in respect of rural and urban water supply and sewerage schemes. Copy of this letter together with copies of the communications on this subject were also sent to the Chief Engineers for compilation of the information by engaging the staff of the Special Investigation Division. The details are of vital importance not only to assess the achievements and needs from time to time but also to help in answering questions in the Parliament. It is also necessary to have regular progress reports about the physical and financial achievements during the Fourth Plan. As the State Government are aware, from 1969-70, rural water supply scheme is an earmarked sector with specific allocation which cannot be diverted to any other sector or programme. It is therefore necessary to ensure that the States execute the required programmes and make full use of the provisions. The Planning Commission have suggested that this Ministry should get detailed programmes of specific projects and periodically watch the progress both in terms of physical and financial targets. The Special Investigation Division may be asked to furnish to the Government of India quarterly progress reports giving the following information:—

1. Allocation for the year.
2. Schemes taken up/proposed to be taken up.
3. Allotment for each scheme.
4. Progress of expenditure.
  - (a) during the quarter.
  - (b) upto the end of the quarter.
5. Physical achievement.
  - (a) during the quarter.
  - (b) upto the end of the quarter.
6. Population covered on completion.

Further more the ground water development programme has to be taken up on a large scale on receipt of drilling rigs from UNICEF and it would be necessary to conduct survey and investigation work for exploration of ground water in consultation with G.S.I. and E.T.O. The Special Investigation Divisions may be assigned these tasks immediately.

The need for advance planning of projects for rural water supply and provision of staff for this purpose was discussed with the Planning Commission who stated that there are no restraints on the State Governments as regards Staff required for the Planning and Implementation of Water Supply Schemes. The Commission have stated that while staff for investigation has already been provided, the preparation of projects could be considered as plan activity for which staff could be sanctioned by the State Governments out of the State Plan provisions, according to their needs. In view of this, the State Governments may, if necessary, set up separate divisions for Planning and designing of Water Supply Projects under the Plan from the State Plan provisions and permit the Special Investigation Divisions to carry out the tasks mentioned in the preceding paras.

Receipt of this letter may kindly be acknowledged.

Yours faithfully,  
Sd|- SATISH KUMAR  
*Under Secretary.*

F. No. 12|2|70-PHE

Copy (with 40 spare copies) forwarded to the Adviser (PHE) with the request that he may kindly follow up this with the State Governments.

Sd|- SATISH KUMAR  
*Under Secretary.*

*Statements Showing the Water Supply Problem in Villages Situated in (i) Saline Tracts, (ii) Hilly & Mountainous Regions and (iii) Sandy Zones*

(Separate statement may be furnished for each of the above categories).

No.	Name of Village	Distt.	Population 1961 census.	Is there a source Yes/No.	What is the type of source— well/spring/ pond/river etc.	Does source dry up any part of the year— Yes/No.	Is the source at a distance between 1-2 miles/ 2-3 miles/ 3-5 miles/ 5-10 miles/ Over 10 miles.	If it is well, is water normally available at a depth of 50-100 ft. below/ 100-200 ft. above/ 200-300ft. or below.	If Hilly village, is the course 500/ 1000/ or more than 1000' above W. S. etc.	Type of water supply Scheme proposed— well and pump/tube well piped W. S. etc.	Cost of providing W. S. Scheme	Remarks.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												

*Statement showing the water supply problem in Villages which are Exposed to Health Problem such as (i) Cholera endemicity, (ii) Guinea-worm Infestation, (iii) Excess Fluorides, (iv) Excess Iron and (v) Excess Hardness.*

(Separate statement may be furnished for each of the categories.)

No.	Name of Village	Name of Distt.	Population in 1961 census	Is there a source— Yes/No.	What is the type of source— well/spring/ pond/river etc.	What is the quality of water 'x' fluoride 'x' iron 'x' hardness.	Result of analysis if tested.	Type of scheme proposed— well & hand pump/tube well piped W. S. etc.	Cost of the scheme	Remarks
4				5	6	7	8	9	10	11

## APPENDIX II

(Vide reply to Recommendation at Sl. No. 10)

No. H.11013|20|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 9th October, 1973.

To

All State Government| Union Territories.

**SUBJECT:** *Estimates Committee—38th Report of the Lok Sabha on National Water Supply Programme—Construction of water reservoirs in Seismic Zones.*

Sir,

I am directed to invite your attention to the recommendation No. 10 (reproduced below) of the Estimates Committee of the Lok Sabha in their 38th Report on National Water Supply Programme:—

The Committee also take note of the findings of the Central Water and Power Commission that in the seismic zones construction of large reservoirs was not always safe. Apart from that the economies of pumping water from storage reservoirs to individual communities may not prove favourable. They further note that in view of economic conditions of the people in these regions and high costs of these works, the provision of drinking water had to be linked with the overall development of the region. The Committee welcome the suggestion of constructing storage tanks for a group of rural communities at suitable places in the hilly regions. The Committee suggest that comprehensive proposals may be drawn up for implementation not only under the Accelerated Water Supply Programme but also under the regular programmes for execution during the Fifth Plan for the hilly regions.

The Estimates Committee have suggested that in view of the fact that construction of large reservoirs in seismic zones is not always safe and due to high cost of pumping water from such a large

storage reservoirs to individual communities, it will be desirable that storage tanks may be constructed for a limited group of rural communities at suitable places in hilly regions.

It is requested that the above recommendation of the Estimates Committee may kindly be kept in view while drawing up projects for rural water supply schemes in hilly regions during the V Plan and storage tanks for small groups of rural communities at suitable places may be provided as far as feasible.

Kindly acknowledge receipt.

Yours faithfully,

Sd/- (J. A. SAMAD)

*Under Secretary.*

Copy forwarded to:—

1. Adviser (PHE) with 35 spare copies.
2. Planning Commission, New Delhi.

Sd/- (J. A. SAMAD)

*Under Secretary.*

## APPENDIX IV

(Vide reply to Recommendation at Sl. No. 13)

No. H.11013|25|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 18th October, 1973.

To

All State Governments|Union Territories.

**SUBJECT:** *Estimates Committee—38th Report on National Water Supply Programme—Item No. 13 of the recommendation—Highest priority to the provision of safe water supply to the rural population.*

Sir,

I am directed to invite your attention to the recommendation No. 13 (reproduced below) of the Estimates Committee of the Lok Sabha made in their 38th report on National Water Supply Programme:—

The Committee note that the National Water Supply and Sanitation Committee (1960-61) of the Ministry of Health had recommended the highest priority to the provision of safe water supply to the rural population as in their opinion this could be one positive step for eradication of water-borne and filth-borne diseases. That Committee had desired that safe water should be provided within the reach of "every village and hamlet by the end of the Third Plan if possible, and before the end of the Fourth Plan in any case." The Drinking Water Board (1963) had also given the highest priority to the provision of water supply in the difficult and scarcity areas. In view of the importance of the matter the Board had chosen to give an interim report on the subject and had stipulated a period of five years for implementation of this phase of the programme. The Committee are, however, disappointed to note that this programme continued to be overlooked for want of funds.

The Estimates Committee have observed that National Water Supply and Sanitation Committee (1960-61) had recommended that highest priority may be accorded to the provision of safe water supply to the rural population, as this could be a positive step for eradication of water borne and filth-borne diseases from the rural areas. The Estimates Committee has further stated that the programme for rural water supply was not given a right emphasis due to paucity of funds.

In the 5th Five Year Plan under the minimum needs programme provision is being made for coverage of most of the problem category of villages with safe drinking water supply arrangements in rural areas which are characterised by scarcity of water or their existing sources of water supply suffers from public health hazards. It is hoped that the due emphasis for the water supply in rural areas under the Minimum Needs Programme would be continued by the State Governments and U.Ts. at the implementation stage so that the targets fixed for the same are achieved within the specified period.

Kindly acknowledge receipt.

Yours faithfully,

Sd/- (J. A. SAMAD)

*Under Secretary-*

Copy to:—

1. C.P.H.E.E.O. with 40 spare copies.
2. Planning Commission (Urban Development and Water-Supply), New Delhi.

Sd/- (J. A. SAMAD)

*Under Secretary-*



## APPENDIX V

(Vide reply to Recommendation at Sl. No. 15)

*Copy of letter No. Z.16025|48|73-CPHEEO, dated the 25th August, 1973, from Shri A. N. Sharma, Assistant Adviser (PHE), CPHEEO, Ministry of Works and Housing, New Delhi, addressed to All the State Chief Engineers (PH) and copy to PHE Section.*

**SUBJECT: Recommendations of the Lok Sabha Estimates Committee 38th Report.**

In continuation to this Ministry's letter No. H.11013|3|73-PHE, dated 25th July, 1973, I am to refer to para No. 15 of the Estimates Committee Report—"Apart from the speed, what has caused great concern to the Committee is the view expressed by knowledgeable authorities that the data collected through these surveys (by Special Investigation Divisions) in many cases, is not accurate or reliable", and request that it may please be ensured in your State that the divisions do accurate and reliable survey.

Guidelines have already been issued vide letter No. O-11016|1|71-PHE, dated 18th December, 1971 from this Ministry (then Health and F.P.) for doing the survey work and details were also discussed in the Annual Meeting of the Special Investigation Division Officers in November, 1971 and December, 1972.

Where the data is considered not complete or accurate or reliable, no time should be lost in correcting it and the finalised information furnished at a very early date.

**APPENDIX VI**

(Vide reply to recommendation at Sl. No. 22)

No. H. 11013|24|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 9th October, 1973.

To

All State Governments|Union Territories.

**SUBJECT:** *Estimates Committee—38th Report of Lok Sabha on National Water Supply Programme—Recommendations Nos. 21 and 22—Reduction of time-lag between the supply of water and sewerage facilities.*

Sir,

I am directed to invite your attention to recommendations Nos. 21 and 22 (reproduced below) of the Estimates Committee of the Lok Sabha in their 38th Report on National Water Supply Programme on the above subject:—

*Item 21.*—The Committee note that sewerage facilities in urban areas do not exist in several States like Assam, Jammu and Kashmir, Meghalaya, Nagaland, Tripura, Manipur and Andaman and Nicobar Islands. In some other States such as Andhra Pradesh, Bihar, Himachal Pradesh, Kerala, Orissa and Rajasthan the facilities are only nominal. None of these States has more than 3 cities which have any sewerage arrangements even partially. In all there are 186 towns in the country today which are sewered out of a total number of 2921 towns. Even in these cities there are areas which are unsewered. Considering the fact that the number of towns and cities covered by the facility of water supply has reached 1282 in March, 1971 benefiting a population of 841.71 lakhs and another 500 towns are targetted to be covered during the Fourth Plan period further benefiting about a crore of people and there is further a proposal to cover all the remaining towns in the

country with water supply during the Fifth Plan, the Committee feel that it is high time that adequate steps are taken to provide sewerage facilities to the towns which are already covered by water supply. The Committee note that according to the Ministry of Health and Family Planning the total cost of covering 2735 towns with sewerage facilities will amount to Rs. 1346 crores. That Ministry have in their Approach paper for the Fifth Plan proposed to cover 83 towns with a population of one lakh by sewerage facilities at an estimated cost of Rs. 970 crores. In addition the Ministry have asked for Rs. 400 crores to cover about 150 towns with solid waste disposal arrangements during the Plan period. Realising the magnitude of the task ahead and considering the financial difficulties of the municipalities, the Committee, do not wish to recommend that the progress of water supply programmes should be stalled to meet the sewerage needs. They would, however, like to stress the point that time-lag between supply and sewerage facilities has to be reduced and care has to be taken to ensure that the slums are not allowed to spread. The Committee, therefore, suggest that a phased programme may now be chalked out to make available this facility early, beginning with cities endemic to filth-borne diseases like filariasis and cholera etc.

*Item 22.*—While the setting up of the Water and Sewerage Boards recommended elsewhere in the Report will go a long-way in making these operations self-paying, ways and means have to be devised to find finances at the local levels also.

The Committee have impressed that after the piped water supply is provided in a town|city the sewerage facility should also be provided and the time-lag between providing these two facilities should be reduced to the minimum to prevent filaria endemicity etc. The Committee has recommended that a phased programme should be chalked out for providing sewerage facilities to towns already covered with piped water supply and beginning in this regard may be made in cities which have become endemic to filth-borne diseases like filariasis etc.

I am to request that these observations of the Estimates Committee of the Lok Sabha may kindly be kept in view while drawing up the schemes for water supply and sanitation for implementation in urban areas.

Yours faithfully,

Sd|-

(J. A. SAMAD)

*Under Secretary.*

1. Copy forwarded to Adviser (PHE) with 40 spare copies.
2. Copy to Planning Commission (Urban Development and Planning Division).

Sd|-

(J. A. SAMAD),

*Under Secretary.*

## APPENDIX VII

(Vide reply to Recommendation at Sl. No. 34)

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

(NIRMAN AUR AWAS MANTRALAYA)

*Statement showing the action taken on the recommendations|conclusions contained in the 37th Report of the Estimates Committee (5th Lok Sabha) on the Ministry of Works and Housing—Housing.*

### Recommendation (Sl. No. 57, Para 6.20)

6.20. The Committee are surprised to learn that even in a city like Delhi which is the Capital of the country and seat of the Central Government, such coordination has been lacking with the result that in many cases simultaneous action to provide facilities of provision of water, electricity, drainage, transport, medical facilities, education, etc. has not been taken. The Committee recommend that immediate action to remedy the situation should be taken. In this connection, the suggestion made by the representative of the Delhi Development Authority that the Lt. Governor of Delhi may be made head of these organisations and should enjoy all the powers of the Central Government so as to bring about necessary coordination, merits serious consideration by Government.

### Reply of Government

[Vide Ministry of Works and Housing O.M. No. 15 (7) |73-H. II, dated 30-10-1973]

Further to the reply already given, the Ministry of Home Affairs have since stated that subjects like electricity, water and sewage disposal, are at present being dealt by the statutory bodies under the Delhi Municipal Corporation. The powers of the Central Government under the Delhi Municipal Corporation Act, 1957 are already being exercised by the Lt. Governor. In respect of Transport, the Lt. Governor is the Chairman of the Delhi Transport Corporation. Similarly, the Lt. Governor is also the Chairman of the Delhi Development Authority. After the constitution of the Corporation

for Delhi Electricity Supply Undertaking and Delhi Water and Sewage Undertaking, it has been decided that several powers of the Central Government will be delegated to the Lt. Governor. Subjects like medical, education, etc. are transferred subjects, but the Lt. Governor generally presides over the meetings of the Executive Council and he can also disagree with the Councillors and make a reference to the Government of India. His advice and guidance is always available to the Councillors and the Officers of the Delhi Administration. Thus, in actual fact, the Lt. Governor of Delhi has been vested with considerable powers to coordinate the activities of the important organisations in Delhi.

[Forwarded under this Ministry's O.M. No. 15 (7) |73-H.II, dated the 3rd January, 1974].

## APPENDIX VIII

(Vide reply to Recommendation at Sl. No. 39)

No. H.11013|30|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

(NIRMAN AUR AWAS MANTRALAYA)

*New Delhi, the 26th October, 1973.*

To

All State Governments and Union Territories.

SUBJECT: *Estimates Committee—38th Report on National Water Supply Programme—Recommendation No. 39 on delay in placing the funds for water supply schemes with the local bodies.*

Sir,

I am directed to invite your attention to the recommendation No. 39 (reproduced below) of the 38th Estimates Committee's Report:—

39. The Committee note the difficulties experienced by the Public Health Engineering Department in the States in regard to the procedures involved in getting the amounts released through local bodies. Even though the amounts are provided in the budget and vote on account of the legislature is obtained in the beginning of the year itself, the amounts are actually released to local bodies towards the middle or fag-end of the year as they have to go through a number of procedural formalities. Consequently, the Departments concerned are not able to sustain the tempo of work right through the year. The Committee desire that ways and means should be devised to place funds in time in the hands of the executing authorities in order to sustain the tempo in the implementation of the programmes.

It will be noted that the Estimates Committee were critical of the delay that takes place in releasing funds by the State Governments| Union Territories to the local bodies|executing authorities for meeting expenditure on water supply and sanitation schemes.

2. Appropriation Acts of the Budget are generally passed in the States by the end of May every year and the State Governments are in a position to release the funds to the local bodies thereafter. If there is any delay, it is due to the procedural difficulties or lack of advance action in finalising the allocations for local bodies.



## APPENDIX IX

(Vide reply to Recommendation at Sl. No. 42)

No. H.11013|26|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 12th November, 1973.

To

All State Governments|Union Territories.

**SUBJECT:** *Estimates Committee—38th Report on National Water Supply Programme—Recommendation No. 42—Rural Water Supply Provision in the 5th Plan—Pattern of financing—Share to be borne by beneficiaries.*

Sir,

I am directed to invite your attention to item No. 42 of the recommendation of the Estimates Committee of the Lok Sabha, reproduced below:—

The Committee note that no uniform pattern of local contribution in the financing of the water supply schemes is being followed in the country. The Committee also note that the trend is towards liberalisation of assistance to rural communities by the States. It is also appreciated that a common policy by the Central Government to be followed by the whole country would not be of much help as in some States villages have been able to raise local contribution and it will not be desirable to discourage local contribution by those who can make it. Nevertheless the Committee feel that suitable guidelines should be evolved for the States to follow, keeping in view the size of the community, their economic condition, the long delays in implementation of schemes often caused in an effort to raise such contributions and other relevant factors.

The State Governments and Union Territories at present have laid down different patterns for raising the contribution from beneficiaries for financing the rural water supply schemes. While in

some States the contribution has been provided for in the shape of cash, in other States contribution has been restricted to providing land or providing labour. The cash contribution also differs from State to State. In case of some States the rural piped water supply schemes are being implemented with cent per cent grant from the State Governments without any contribution from the beneficiaries.

Keeping in view the recommendation made by the Estimates Committee and to ensure that the State assistance for rural water supply schemes become available to all eligible weaker sections of the community the guide-lines as indicated in the Annexure are suggested for working out details of the beneficiary contributions. I am to request that the State Governments may kindly consider these guidelines for adoption for their rural water supply schemes. Kindly acknowledge receipt and report action taken in due course.

Yours faithfully,

Sd/-

(J. A. SAMAD)

*Under Secretary.*

Copy with 40 spare copies forwarded to Adviser (PHE).

Copy also forwarded to:—

1. Planning Commission
2. Ministry of Home Affairs.
3. Ministry of Agriculture (Department of C.D.).

Sd/-

(J. A. SAMAD)

*Under Secretary.*

### *Guidelines for adoption for Rural Water Supply Schemes*

The general principle to be observed should be that wherever local contributions can be raised, it will not be desirable to discourage such contributions which would go to meet at least a part of the cost of the Scheme. The added advantage would be a sense of participation on the part of the rural community in their Water Supply Scheme. However, the beneficiaries may not be required to make the contribution in cash only. The contribution may be in the form of land, labour and cash or a combination of these in suitable proportions to meet the prescribed level of contribution.

2. There cannot be one yardstick for the whole country for the minimum contribution that should be levied in view of the varying economic conditions of the rural communities in various parts of the country. The States should, however, evolve a graduated scale of contribution from the rural communities. This could be based on (a) size of the community and (b) its economic condition as judged by, say, the income of the Panchayat, etc. Here too, categorisation may have to be done with regard to the terrain condition which reflect upon the cost of the Scheme. For instance, schemes in desert areas and in hard rock hilly areas may be much too costly and percentage of contribution relative to the cost of this scheme may have to be different for such hard areas as compared to the other areas.

3. Subject to the contents of guidelines at paras 1 and 2, exceptions from making beneficiaries' contribution fully or partially could be made in the following cases:

- (a) Areas inhabited predominantly by weaker sections of society like the scheduled caste and scheduled tribes.
- (b) Very small communities (generally of population not exceeding 250) located in difficult areas like hills not easily accessible or desert, etc.

## APPENDIX X

(Vide reply to Recommendation at Sl. No. 43)

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING

No. H. 11013/31/73-PHE

Dated the 26th October, 1973.

To

All the State Governments & Union Territories.

SUBJECT: *Estimates Committee—38th Report on National Water Supply Programme—Problem of management of water supply Schemes.*

Sir,

I am directed to invite your attention to the observation at serial no. 43 (reproduced below) made in the 38th Report of the Estimates Committee (Fifth Lok Sabha) on National Water Supply Programme:

43. The Committee note that even though the cost of water supply has been steadily rising consequent to the rising capital investments for setting up new high cost projects and for augmenting existing water supply systems there has been a general reluctance on the part of local bodies to raise correspondingly the water charges with a view to make the water supply schemes viable. The Committee note further that there is a demonstrated reluctance on the part of the local bodies who are operating water supply to depart from flat rates to meter rates because of administrative difficulties and apprehensions of unpopularity. Consequently there is hardly a major local authority in the country with the exception of Madras and New Delhi Municipal Committee that has not been incurring deficits which have to be made up from general revenues. This has in turn inhibited the initiative of the local bodies towards assuming responsibility for operating, maintaining and extending water works.

I request that this observations may kindly be noted by the State Governments/Union Territories. Efforts be made to ensure that the water supply schemes are operated by the local bodies on commercial lines.

Yours faithfully,

Sd/-  
(SATISH KUMAR)

*Deputy Secretary..*

1. Copy with 40 spare copies to the Adviser (PHE).
2. Copy with 5 spare copies to R.O. (LSG).

Sd/-  
(SATISH KUMAR)

*Deputy Secretary..*

## APPENDIX XI

(Vide reply to Recommendations at Sl. Nos. 44, 46, 47, 48 and 49)

GOVERNMENT OF INDIA

MINISTRY OF WORKS AND HOUSING,

No. H-11013/13/73-PHE      New Delhi, dated the 27th October, 1973.

To

All the State Governments (Except Tamil Nadu)/U.Ts.

**SUBJECT:** *Estimates Committee—38th Report on National Water Supply Programme—Recommendation Nos. 44, 46, 47, 48 & 49—Constitution of Water Supply and Sewerage Boards in the States.*

Sir,

I am directed to invite your attention to the following recommendations of the Estimates Committee made in their 38th Report on National Water Supply Programme:

44. The Committee hope that with the setting up of Water and Sewerage Boards the problem of financing and management of water works would be solved to a great extent.
46. The Committee note that a number of expert bodies have from time to time recommended the setting up of autonomous statutory Water and Sewerage Boards, on a State-wise or region-wise basis as an effective means for increasing efficiency of financing and operating municipal water supply and sewerage services. It is, however, unfortunate that even though the proposal was first put forth over a decade ago, very little has been done in most of the States to implement the recommendations of such bodies as the Technical Cooperation Mission Team in 1960 and the Seminar of 1964. Such a Board has so far been set up only in Tamil Nadu.
47. The Committee also note that even the Central Government hardly evinced any interest in this important aspect of the problem. A high power Committee was set up in 1965 on the lines indicated by the National Water Supply

and Sanitation Committee, 1960-61 and as reiterated by the Seminar in 1964, for setting out concrete measures to be taken by State Governments and to draft model enactment for setting up Statutory Boards, defining their powers and duties and recommend appropriate methods of fund raising. It is indeed very sad to learn that this Committee never met and in 1968 it was even decided that this body need not be reconstituted.

48. Again, even though the working of the Board in Tamil Nadu has been considered to be on the right lines by the Central Government, they have not circulated any paper to the States apprising them of the experiences of the working of this Board.
49. At the moment the country is on the threshold of the Fifth Five Year Plan, which envisaged provision of basic facilities to the people and amongst these water supply is of paramount importance. It is about time that the necessary Administrative machinery is geared up to implement the programme envisaged in the Plan. In the opinion of the Committee, the proposal in regard to the setting up of the Water and Sewerage Boards may help in finding a satisfactory solution to the whole problem of financing and management of the Water and Sewerage works. They recommend that Central Government Central Public Health Engineering Organisation should assume the leading role in this matter and persuade the State Governments to set up these Boards.

2. In these recommendations the Estimates Committee has stressed that constitution of water supply and sewerage boards may be helpful in finding a satisfactory solution to the problem of financing and management of water and sewerage works which are now gaining more and more prominence in our five year plans. I request that the State Governments|Union Territories may kindly take note of these suggestions. They may consider taking steps for constitution of water supply and sewerage boards.

3. I am also enclosing a note on the working of Tamil Nadu Water Supply and Drainage Board for your information and consideration.

Kindly acknowledge receipt.

Yours faithfully,  
Sd|  
for (SATISH KUMAR)  
Deputy Secretary.

Copy with 40 spare copies to the Adviser (PHE).

Sd/-  
for (SATISH KUMAR)  
Deputy Secretary.

*Note regarding working of Tamil Nadu Water Supply and Drainage Board*

Prior to 1969 the field of water and sewerage was uncared for sector in the State's economy and administration. There were quite a number of organizations dealing with this subject, both in the Centre and in the States, not exclusively devoted to the subject but looking after it, among many others, as one. There was no organization, well enough organised to devote its energy exclusively to this sector. It was not given the due priority in planning and nation building, with the result, the finances available were grossly inadequate, the infrastructure neglected and research and development almost absent.

The Statement of objects and reasons stated by the Chief Minister of Tamil Nadu while moving the Bill for creating the Tamil Nadu Water and Drainage Board clearly brings out the reasons for creating the Tamil Nadu Water Supply and Drainage Board:

"The importance of providing for protected drinking water and adequate drainage facilities to urban and rural areas, alike, has been engaging the attention of the Government for quite some time past. At present, matters connected with drinking water supply and drainage schemes are being dealt by several Departments. The Government considered that for effective planning an execution of drinking water and drainage schemes, it was essential that these were brought under the purview and control of a single agency for purposes of investigating, preparing and executing water supply and drainage schemes. Accordingly, the Government constituted the Tamil Nadu Water Supply and Drainage Board to achieve the above object.

Government are of the view that if the Board could be set up as an autonomous body on a statutory footing, it will conduce the speedier planning, investigation and execution of schemes and also enable it to raise substantial



resources from financing institutions and in the open market, with a view to providing drinking water and drainage facilities to urban and rural areas in the State of Tamil Nadu within the shortest possible time. The Bill provides for the constitution of an autonomous Tamil Nadu Water Supply and Drainage Board to be entrusted with powers and functions to investigate, prepare and execute water supply and drainage schemes throughout the State and matters connected therewith".

After receiving the assent of the President of India on 24th March, 1971 to the Tamil Nadu Water Supply and Drainage Board Act, the Board was constituted by the Government on 14th April, 1971—the Tamil New Year's day. This Board is the first of its kind in the whole of the country. The Board provides for 10 Directors as follows:—

- |  |   |
|--|---|
| (1) Chairman.  | Who can be an official or non-official to be appointed by the Government.   |
| (2) Managing Director.   | Who should be an I.A.S.-Officer in the Senior Scale or above with not less than ten years of service.   |
| (3) Secretary to Government, Public Works Department (E.O.)  | These are the four departments which are directly or indirectly concerned with the subject of water supply and drainage and, therefore, at the highest official levels have been given representation.  |
| (4) Secretary to Government Rural Development and Local Administration Department (E.O.)   |   |
| (5) Secretary to Government, Health and Family Planning Department. (E.O.)   |   |
| (6) Deputy Secretary to Government, Representative of the Secretary to Government, Finance Department, not below the rank of a Deputy Secretary to Government (E.O.) |   |
| (7) Commissioner, Corporation of Madras (E.O.)   |   |
| (8) Chairman of the Chamber of Municipal Councils, Tamil Nadu (E.O.)   |   |
| (9) President, Tamil Nadu Panchayat Union (Ex. officio).   |   |
| (10) Technical Director.   | A person with wide experience in the field of Public Health Engineering with reference to water supply and drainage or disposal of Industrial waste who is not employed by the Government or a local authority or a Corporation owned or controlled by the Government. He is nominated by the Government. |

Usually the term of nominated Directors is one year. The terms and conditions governing their Travelling Allowance, Dearness Allowance and other allowances are yet to be framed by the Government. The Board is the highest policy making body and gives directions on all matters of administration of the Board. The Chairman or, in his absence, the Managing Director presides over the meetings of the Board. The Tamil Nadu Water Supply and Drainage Board has by convention decided to meet once in a month on a fixed date, with the result that the chances of its not meeting for want of quorum are few.

The Managing Director is the Chief Executive Officer of the Board and supervises the acts of all the employees of the Board. The official business of the Board is organised into a Secretariat and the Officers of the two Chief Engineers one for Veeranam Project and the other for the rest of the schemes. Under the Chief Engineer, the Superintending Engineers, the Executive Engineers etc., are working.

The Board has framed its rules and regulations governing the conditions of service etc., of its staff. Although, to begin with, most of the rules and regulations are based on the rules and regulations of the Government; yet a variation was made for encouraging more fresh blood than was provided for in the Government rules. Currently the Board is inclined to think that its organisation should be more on commercial lines than on public service lines so that the economy and efficiency may be maintained and the Board should be in a position to render services to the local bodies. The exercise is not yet over.

Chapter IV of the Tamil Nadu Water Supply and Drainage Board Act provides for the investigation, preparation and execution of the schemes by the Board. The normal procedure followed in the execution, etc., of schemes is as follows:

On a representation from the people or from their representatives, the concerned local body/bodies in whose jurisdiction the area lies, or on a *suo moto* resolution of the local body requesting the Board to prepare a scheme for water supply or drainage, the Chief Engineer of the Board prepares an investigation estimate to conduct preliminary investigation. The local body is asked to pass a resolution entrusting the work of investigation to the Board and to meet the cost of investigation as indicated in the investigation estimate. In the case of Municipalities and Town Panchayats it is insisted that the investigation cost must be paid from out of the local body funds. However, in the case of poor Panchayats, Townships and very deserving Town Panchayats, which cannot afford to

pay the cost of investigation from out of their own resources, the Government of Tamil Nadu provides for giving loans to such local bodies for taking up the investigation of these schemes by the Board. It has been decided as a matter of policy that in all such cases the cost of investigation should be included in the cost of the scheme, if and when such a scheme is ultimately implemented. If, however, these schemes are not implemented the loan will be treated as a short-term loan to be repaid in five years. The cases, however, where the schemes are ultimately not implemented have been so far 'nil'. In the case of Village Panchayat, where work is being done under the Accelerated Rural Water Supply Scheme or under the UNICEF assisted deep bore well scheme, no investigation charges are collected since the investigation is carried on by the Special Investigation Division, sanctioned and financed by the Government of India.

After the local body passes the resolution, the investigation is sanctioned by the Managing Director with the concurrence of the Chairman. The concerned Executive Engineer incharge of Investigation and Designs is asked to take up the investigation after the local body deposits the estimated amount (in some cases the local bodies are given options to deposit the amount for Investigation in instalments and as soon as the first instalment is paid the investigation work is taken up). The preliminary investigation consists in locating water source by method of trial bores. Recently, however, more modern technology namely the use of Earth Resistivity Meters and Terra Meters has been adopted increasingly. The survey of the population is conducted and projections for 30 years hence are also made. The town or village survey is conducted for providing the distribution system, based on the field statistics, an outline proposal is prepared by the field staff indicating the existence of sources, their deficiencies, new source proposed, the broad category of work which has to be executed, the approximate cost of the scheme and the approximate maintenance cost.

This outline proposal after being processed by the Executive Engineer, the Superintending Engineer and the Chief Engineer, is sent to the Board. From the Board's Secretariat, which fixes the priority of taking up the scheme, the copies of these outline proposals are sent to the concerned local bodies for their scrutiny. The local bodies are asked, if they agree to the proposals in outline, to pass resolutions:—(1) to accept the scheme and to authorise the Board to execute the same; (2) to agree to bear the cost of the scheme and the cost of maintenance subsequently, from out of its own resources, since it has been decided as a matter of policy that the water supply scheme should be a self supporting proposition.

and (3) to indicate the resources from out of which it will pay the annuities and bear the cost of maintenance. The Local bodies are asked to pass resolution specifying the date of raising additional resources, if necessary, and fixing up the water charges and water rates.

Along with the resolution passed and financial statements for the last three years, the local bodies sent back the proposals to the Board. The financial implication, the repaying capacity and the adequacy of resources raised are analysed by the Board Secretariat and after fully satisfied that the schemes can be made self supporting, the Board is moved to pass a resolution approving the scheme and recommending it to the Government for sanction, under Section 20 of the Tamil Nadu Water Supply and Drainage Board Act.

This procedure, however, is not followed in the cases of grant schemes like the Accelerated Rural Water Supply Scheme and UNICEF assisted Deep Bore Well Scheme, whether the only resolution that the local body is asked to pass is to shoulder the responsibility of maintenance. Nor is this procedure followed in the case of Industrial Water Supply Scheme which are directly sanctioned by the Government. In the case of Accelerated water supply schemes, the villages to be taken and the type of schemes to be implemented are approved by the Government of India. In the case of UNICEF Assisted Scheme the list of such schemes had been approved by the Government and forms a part of the agreement between UNICEF, Government of India and Tamil Nadu Government. The Managing Director has been delegated powers to omit from or include in these lists such schemes as necessary.

After the scheme is approved by the Government, the Investigation and Design wing of the Engineering Department of the Board prepares the detailed design and technical estimates. These detailed design and the technical estimates are sanctioned by the Chief Engineer and depending upon the value of component parts, the Chief Engineer, the Superintending Engineer or the Executive Engineer call for tenders for the various supplies and works. Mostly the work is executed on contractual basis departmental execution being resorted to only in case the contractors are not forthcoming. The drilling operation under UNICEF scheme and the Accelerated Water Supply, however, are done departmentally since the drilling equipment is available with department. An attempt is always made that all water supply and drainage schemes must be completed within three years from the date of sanction since this is the period of moratorium on the loans given by the Life Insurance Corporation.

## FINANCING

The major difficulty in achieving the break-through in the field of Public Health has been the non-availability of adequate finances. Although accurate statistics are not easily available, yet it has been ascertained that the total investment on urban water supply and drainage schemes in Tamil Nadu starting from the year 1870 to 1951 has been of the order of Rs. 3.00 crores. During the first Plan period the expenditure was Rs. 1.4 crores. During the second Plan it was Rs. 6.6 crores. During third Plan it was Rs. 6.00 crores. During the three annual plans, 1966-67 and 1967-68 and 1968-69 it totalled upto Rs. 4.7 crores. It was in the year 1969, when the non statutory Board was set up and subsequently in 1971 that the Public Health activity in the State picked up momentum. In fact, this is one of the avowed objectives for the formation of the Board that it should raise adequate resources from the public and financing institutions. Fortunately the Life Insurance Corporation responded generously and agreed to give 2/3 of the total estimated cost of the Projects as loan, towards the protected water supply and drainage schemes. From the year 1969-70 till 1972-73, the Life Insurance Corporation has released Rs. 1212.09 lakhs by way of loan towards these schemes. The Board has in the year 1972-73 successfully floated a non-guaranteed loan of Rs. 5.00 crores with the active assistance of the nationalised banks. Similarly, in the current year, the Board is proposing to float a sizeable loan for pushing through its schemes. It was due to the assistance given by the Life Insurance Corporation and the Banks that we could be in a position to spend on water supply and drainage schemes more than the amount provided under the Fourth Five-Year Plan.

At present, the Board's securities are not Trust Securities. The Board is actively considering approaching the Government of India for amending provisions of the Trust Act to make its Securities as Trust Securities. During all these years, the Government of Tamil Nadu has been generous giving ways and means advances to the Board and loans to the local bodies for executing these schemes thereby enabling the Board to earn the Life Insurance Corporation's share in sizeable proportions. The Board is also considering other methods for raising resources by way of deposits, direct loans for the water supply schemes and public contributions etc.

Another important aspect of the Board's activities is procurement of scarce materials, which is being done now in a centralised fashion at the level of the Board. The Board has been successful in entering into direct Rate Contracts with the pipe manufacturing

companies thereby avoiding the long and arduous delay in getting its requirements of pipes through the Director General of Supplies and Disposal. The Board is also taking action for procurement of steel and cement on priority basis. Being not strictly bound by Government regulations the Board tried the technique of advance planning and encouragement to Producers by way of financial assistance in order to obtain materials on priority basis. Even in the matter of execution of works, the Board has been quite successful in encouraging new contracting agencies by financial assistance (interest bearing loans to contractors which saves the contractors from borrowing in the open market at higher rate of interest and thereby pushing the pricing bids by the contractors and thus making the scheme costlier. By its progressive and well through out methods the Board has been able to sponsor private entrepreneurs in setting up pipe factories.

In the matter of research and development, the Board has taken a progressive step in encouraging greater amount of research by its own staff and encouraging such other organisations which do research in fields connected with water supply and sewerage. It has established better contracts with the Engineering Colleges to the mutual benefits of both. It has progressively sent large number of Engineering personnel for Post Graduate trainings, Short-term courses and Fellowships. Even in the matter of recruitment by advance action the Board was able to enlist the services of Civil Engineers in a much better way than other Government Departments.

## APPENDIX XII

(Vide reply to recommendation at Sl. No. 51)

No. H. 11012|32|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS & HOUSING

NIRMAN AUR AWAS MANTRALAYA

New Delhi, the 26th October, 1973

To

All the State Governments and Union Territories.

**SUBJECT:**—*Estimates Committee—38th Report on the National Water Supply Programme—Recommendation No. 51—Independent Public Health Engineering Departments.*

Sir,

I am directed to invite your attention to the recommendation No. 51 (reproduced below) of the 38th report of the Estimates Committee of the Lok Sabha:—

The Committee note that position as regards the setting up of independent public Health Engineering Departments has improved to some extent since the recommendation of the National Water Supply and sanitation Committee in 1961. However, in most States separate independent Public Health Departments have yet to be formed. Further there has been little improvement in regard to the rationalisation of municipal services in most States. Partly this may be due to limited workload so far. The Committee feel that in view of the larger allocations envisaged for the Fifth Plan and also in view of the coming into operations of the Accelerated Rural Water Supply Programme. The remaining States should also be persuaded in their own interest to take steps to put the organisation of their respective Departments on a more rational footing recommended by the National Water Supply and Sanitation Committee.

I request that the State Governments|Union Territories may kindly take steps to implement the suggestion made by the Estimates Committee.

Yours faithfully,

**SATISH KUMAR**

*Deputy Secretary to the Govt. of India.*

Copy with 40 spare copies to the Adviser (PHE).

**SATISH KUMAR**

*Deputy Secretary to the Govt. of India*



### APPENDIX XIII

(Vide reply to recommendation at Sl. No. 52)

No. H. 11013|33|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS & HOUSING

New Delhi, dated the 26th October, 1973.

To

All the State Governments and Union Territories.

SUBJECT: *Estimates Committee—38th Report on National Water Supply Programme—Recommendation No. 52—effective and efficient management of water supply.*

Sir,

I am directed to invite your attention to the recommendation No. 52 (reproduced below) of the 38th Report of the Estimates Committee of the Lok Sabha:

The Committee are unhappy to note that the system of spending substantial amounts by Govt. towards construction of water supply and sewerage schemes leaving them to be managed by local authorities without making proper arrangements for their maintenance have led in some cases to very unsatisfactory results. The Committee desire that the Central Government should take up this matter with State Governments to ensure effective and efficient maintenance of all water supply in the interest of long life of plants, low maintenance cost, quality control and above all continuity of services.

I request that the State Governments|Union Territories may kindly take steps to implement the suggestion made by the Estimates Committee.

Yours faithfully,

SATISH KUMAR

*Deputy Secretary to the Govt. of India.*

1. Copy with 40 spare copies to the Adviser (PHE).
2. Copy with 5 spare copies to R.O. (LSG).

SATISH KUMAR

*Deputy Secretary to the Govt. of India.*

**APPENDIX XIV**

(Vide reply to recommendation of Sl. Nos. 53 and 54)

No. H. 11013|38|73-PHE

GOVERNMENT OF INDIA

MINISTRY OF WORKS & HOUSING

To

All the State Governments and Union Territories.

Dated the 27th Oct., 73.

**SUBJECT:** *Estimates Committee—38th Report on National Water Supply Programme—Recommendation Nos. 53 & 54—Perspective plan for community water supply and sanitation in state sector.*

Sir,

I am directed to invite your attention to the recommendations No. 53 and 54 of the Estimates Committee of the Lok Sabha made in their 38th Report on National Water Supply Programme reproduced below:—

53. The Committee note that perspective plans have already been prepared by a few States *viz.* Gujarat, Tamil Nadu, Uttar Pradesh, Rajasthan and West Bengal on certain aspects of the water supply and sanitation programmes. The Committee also note that the State Governments have prepared long term water supply and sewerage schemes for larger cities. Keeping in view the advantage of perspective planning in implementation of the programmes, the Committee recommend that the Central Public Health Engineering Organisation should persuade other State Government also to prepare similar plans. The Committee would like Government to lay down broad guidelines for formulating the perspective plan for guidance of the State Departments.
54. The Committee feel that apart from lack of adequate financial resources for implementing the programme for making available safe water supply and sanitation, the greatest constraint has been constituted by lack of availability in

requisite quantities and in time of essential materials like rigs and pipes for implementation of the programmes. The Committee have recommended elsewhere that there should be perspective plan for making available safe water and sanitation in all parts of the country by a specified date, at any rate before the end of the next decade. The Committee feel that Government should work out a corresponding perspective plan in respect of materials. The Committee need hardly point out that unless there is integrated planning, there is no hope of the programme being implemented fully by the target date.

In keeping with these recommendations of the Estimates Committee, guidelines for perspective planning for water supply and sanitation programme have been prepared. A copy of the same is sent herewith. I am to request that the State Governments|Union Territories may kindly take action for preparation of the perspective plans for water supply and sanitation and materials based on these guidelines.

Kindly acknowledge receipt.

Yours faithfully,  
SATISH KUMAR

*Deputy Secretary to the Govt. of India.*

1. Copy with 40 spare copies to the Adviser (PHE).

SATISH KUMAR

*Deputy Secretary to the Govt. of India.*

#### ANNEXURE

##### *Guidelines for Perspective Planning for Water Supply and Sanitation*

The State Plan can be conceived only as a part of the National Plan broadly reflecting the same priorities and compulsions. The States are, however, permitted to plan their own strategy of development. Planning to be realistic, effective and continuous has to be viewed as a process in a wider perspective, longer than that of a more five-year period, say fifteen years, so that a definite direction towards the achievement of certain well-defined goals is given to the efforts. In the planning era, perspective planning is a compelling necessity especially for developing countries|States. Planning is a continuous process. The successive plans roll out of the previous plans and merge into the future plans. Because of competing demands on meagre resources, a definite long-term strategy has to be

evolved to take developmental efforts towards the objective in view. Well defined objectives lend effective support and provide purpose, direction and shape to planning. Since planning for community water supply and sanitation as integral part of general environmental improvement inclusive of water and air pollution prevention, has to be viewed as part of overall developmental planning, objectives in the case should flow from the wider objectives of National Planning.

Thus, while doing perspective planning there should be clear vision of the objectives, ideals and levels that the State should achieve over a period of 15-20 years in the context of the potential and requirements. The broad objectives of the 15 year plan could be spelt out as:—

- (i) providing safe, wholesome and adequate water supply throughout the day and night within easy reach of everybody at the earliest in rural and urban communities for domestic needs, community needs and for industry etc.
- (ii) disposal of community wastes safely without polluting water resources etc. by providing water-borne sewerage and its treatment.
- (iii) conservation of environment by preventing water, air and noise pollution etc.
- (iv) removing regional imbalances in the levels of development by accelerating the pace of development in the priority deserving areas by a need based programme.

The objectives being clearly spelt, extent of problem should be identified. As already four five year plans are nearly over, an appraisal of the progress achieved so far will serve as a base on which the perspective for the next developmental period can be viewed. The assessment and appreciation of the existing situation, determination of future line of direction and programme formulation has to follow as next steps.

Planning if not considered in relation to resources will be an academic exercise and abstract in character. Resource mobilisation is as much a part of planning as other programmes which need resources for their effective implementation. Thus, taking a realistic view of existing resources and future mobilization priorities should be laid and programme phasing done so that achievement is always in need based direction.

The study of allocation|expenditure pattern during the earlier plan periods indicate that resources for community water supply and sanitation have been allocated in inadequate and sometimes sporadic manner especially in case of rural water supply.

After formulation of the programme considering the above factors, implementation and evaluation are the next items deserving attention so that revision of policy followed may be done from time to time as required to give it a forwardlooking character. Before implementing practical elaboration and programming in conjunction with other national plans has to be considered. Appropriate action for implementation (Design and Planning, Budgeting etc.) has to be taken in due course, but the constraints and impediments likely to be encountered are to be taken care of in perspective planning.

The following additional items should be taken care of in preparation of perspective plans.

(a) *Population and its growth*: The total population as per previous census figures, the total number of towns and villages, size populationwise, densitywise, growth rate due to various factors has to be considered for a long-term planning.

(b) *Water supply position in urban and rural areas*: The augmentation, improvement and re-organization proposals for urban water supply should be based on studies of actual water supply position in different parts or zones of the town and not only on a general basis as it is seen in case of most of the towns that *per capita* water supply rate varies to a great extent and figures of general average supply is not going to satisfy the commuters residing in areas of low supply.

In case of rural areas preliminary investigation has been completed in most of the States to know the extent of the problem. This survey is of a very preliminary nature in the sense that it was based generally on response of local element with limited spot engineering surveys only. The different categories are as follows:

- (i) Scarcity and difficult villages: Where there is no perennial safe water supply source for even bare minimum needs say @ 2 to 3 gpcd within 1.5 Kms. distance or within 20 meters depth from ground level in rocky starts or within say 40 meters of depth from ground level in plain areas or within 100 meters vertical lift in hilly areas. This definition has not been accepted uniformly in all the

States and some of them have kept one K.M. as distance limit and 50 ft. depth even for plain areas.

- (ii) Cholera and Guinea-worm endemic areas: Villages where cholera has been endemic in the past and even now it is cholera-prone and sometimes sporadic cases are reported and villages where people are infested with guinea-worm have been kept in a separate category as these are very important water-borne diseases in this country affecting large masses in rural areas.
- (iii) Excess Minerals Affected Areas: There are villages where water supply is brackish or saline beyond the permissible limits, excess fluorides are present causing fluorosis, excess iron is present beyond permissible limit making it unpotable, unaesthetic and hazardous. Some villages may have acidic waters as in coal mining belts or grossly industrially polluted water along river banks in some States, etc.
- (iv) Areas where water supply is inadequate and unsafe: Where *per capita* water supply is quite insufficient seasonally (i.e. below 5 gpcd) and even otherwise insufficient through out the year but only bare minimum needs are satisfied. This category has now to be properly identified for VI Plan.
- (v) Areas where Water Supply is adequate but unsafe: In addition to cholera and guinea-worm, there are other water-borne diseases causing high morbidity but low-mortality and needs prevention. These areas at present get water supply from unsanitary public wells, public tanks, polluted rivers etc. Improvement of wells by constructing *pucca*, platforms, drains, repair of well sterning etc. was done under local development programme of Community Development etc. but still most of the wells continue to remain insanitary and water supply is unsafe. Generally, in these areas tapping of ground water is easy and once the people are motivated, they can be expected to provide tubewells with handpumps for individual household use at a moderate cost. According to density of population and community size, piped water supply can be considered in due course. Survey and rough cost estimate of this category has to be done for VI Plan.

(vi) Tribal Villages and Harijan Hamlets: Due to weaker economic condition, these people even living in otherwise normal areas may not be having their water supply source which has to be provided at the earliest without the consideration of abnormality criteria applicable in other cases. This is more applicable in case of harijan hamlets isolated in the normal villages. Tribal villages are mostly in problem category due to their geographical locations.

Even in urban areas harijan localities may be denied the standpost from town water supply earlier and should be provided with the same immediately now as a social justice.

The priority should be for all the problem villages first i.e. scarcity and difficult villages and health hazardous villages. Villages with inadequate water supply and adequate but unsafe, deserve the next priority only in that order.

However, it should be considered that resources are all the time meagre and so expenditure should be minimum to achieve the objective that is cost benefit ratio should be low. As such where a cheaper but reliable workable method can be evolved, the costlier although, more satisfactory method may be abandoned for the time being in the interest of service to the community at large. Some States have already spelled out measures to be adopted considering these factors which are as follows:

In case population is less than 500 persons in the village or in compact hamlets, scheme for tubewell with handpump 2 nos. preferably in plain areas or a sanitary well with two handpumps and covered completely otherwise should be considered.

The existing wells may be deepened in rocky areas and fitted with handpumps after making them sanitary otherwise. Open boring in the well may be done where sub-artesian conditions exist. However, if the water table is beyond 20 meters depth, a power-pump has to be fitted as manually operated handpumps would not work. In case of wells, this limit may be kept as 30 meters if at present water is being drawn by the use of animals and supplied from a small ground level cistern.

Where the ground water source is not easily available, regional piped water supply schemes for a group of villages with different population with public standposts has to be provided. If possible, provision for house connection should also be made which will make the maintenance remunerative. For villages with compact popula-

tion of more than 2000, piped water supply with separate tubewells has to be considered, if strata is not suitable for functioning of small dia. tubewells. Where ground water is not available, piped water supply from river etc. has to be given.

For villages with compact population of more than 2000, piped water supply is to be given if the required source is available in the same village or by a regional piped water supply if the cost benefit ratio is low. However, if the *per capita* cost is very high, for the time being tubewells with handpumps @ 150 to 200 persons may be provided as an exception.

Piped water supply systems being expensive, should be given priority after the problem and no-source villages have been covered through less expensive means.

### *Organisation*

In view of the increasing work load and importance of water supply and sanitation full fledged separate public health engineering departments may be established wherever not done already. On merit of each case, autonomous Boards may also be set up. The Tamil Nadu Water Supply and Sewerage Board, the Bangalore Water Supply Board and the Kerala Board are cases from which lessons can be learnt. The planning and design and store organisations in the PHE department should be suitably strengthened to undertake the magnitude of work.

*Materials, Tools and Plants:* To implement the planned programme, it is necessary to procure various tools, plants and materials like pipes, specials, valves, cement, steel bars etc. well in advance as it has been experienced that the procurement in time is one of the main bottleneck in implementation of such schemes and therefore, store divisions well dispersed over the State with Central organization should be considered along with necessary funds for advance purchase.

*Vehicles:* Planning for transport vehicles, adequate number in advance for investigation, survey, execution, operation and maintenance etc. is necessary to speed up the work.

*Pumping Machinery:* For bulk requirements of the pumping sets standardisation is quite essential and desirable for running and maintenance. The mechanical organization of the department should be planned accordingly.



The following relevant recommendations of the Twenty Fifth World Health Assembly are considered quite pertinent on this subject and are reproduced below for guidance.

1. adopt specific targets for both urban and rural water supplies;
2. institute the systematic collection of information relating to community water supplies;
3. establish the appropriate policies and infra-structure and allocate the financial and manpower resources to achieve these targets;
4. take such steps as would lead to increased allocation of resources to rural water supplies;
5. provide for the effective surveillance of drinking water quality by competent health authorities and for their association with the other cases in this field;
6. give priority to the collection and disposal of waste waters in satisfactory hygienic conditions, wherever community water supply programmes are instituted;
7. prepare guidelines, manuals and codes of practice on the planning, design and management of community water supply and sanitation services, with emphasis on the public health aspects and particular attention to rural areas;
8. intensify the research and development efforts of the organisation in the light of the needs and possibilities of developing countries.

## APPENDIX XV

(Vide reply to recommendation at Sl. No. 58)

No. F. 11-47/71-CPHEEO-VOL. II

MINISTRY OF HEALTH & FAMILY PLANNING

(DEPARTMENT OF HEALTH)

NIRMAN BHAVAN

J. M. Dave

Adviser (PHE)

New Delhi, the 2nd December 1971

In view of the persistent shortage of G. I. pipes, specially smaller sizes, which hinder the construction progress of the small rural and urban water supply schemes in the country, I would like to draw your attention to the use of other substitute for the same. The Ministry of Health has already issued the guidelines for design and operation of rural water supply system vide letter No. F-11-46/69-CPHEEO dated 18-9-1969, in which full details of PVC and polyethylene pipes are described. Also, we have emphasised in the Ministry's letter No. F-15-50/66-PHE dated 27-8-1966, the use of plastic pipes.

I would, therefore, suggest that wherever possible you may substitute PVC pipes in your water supply construction in order to avoid delay. This item has also been included in the agenda for the Chief Engineers Conference where we shall be able to thrash it out amongst ourselves. In the meanwhile in order to avoid delay, I would request you to issue necessary instructions to all the engineers who prepare plans and specifications in your State to keep this in mind.

With regards,

Yours sincerely,

Sd/-

(J. M. DAVE)

To

All Chief Public Health Engineers.

Encl: List of plastic pipe manufacturers.

**Principal Manufacturers of Plastic Pipes (Including Fittings) in India**

Manufacturers	Sizes of Pipes mfd.	Plastics raw material used	Std. Spfns.
1. Union Carbide India Ltd. Calcutta-1	12-75mm	LDPE	LS:3076-1965
2. ICI (India) Pvt. Ltd., Calcutta-16	12-75mm	LDPE	ISS:3076-1965
3. Wavin India Ltd. Ambattur Industrial Estate, Madras.	15-280 mm (Complete with fittings)	UPVC	BSS & ISS
4. Calico Chemical & Plastics Dvn. Anik-Chembur, Bombay-74.	12-160 mm (with fittings)	UPVC	DIN
5. Chemicals & Plastics (I) Ltd. Dhun Bldg. Mount Road, Madras-2.	15-100 mm (complete with fittings)	UPVC	ISS & BSS
6. Polyolefins Industries Ltd. Neville House, Ballard Estate, Bombay-1	32-200 mm	HDPE	DIN
7. Garware Plastics (P) Ltd. Dr. Annie Besant Road, Worli, Bombay-18	12-200 mm (with fittings)	LD & HDPE UPVC	ISS & BSS for LDPE, American CS. for rigid PVC
8. Emce General Industries, P-16, C. I. T. Road, Calcutta- 12	12-50mm (also taps, showers, symphons float balls etc.)	LDPE	ISS & BSS
9. Atlas Industries Co. P-3 Raja Rajkissen st. Calcutta -16	Pipe fittings, HDPE (including showers, sink wastes etc.)	HDPE	
10. Pioneer Plastic Works (P) Ltd. Calcutta.	12-75 mm	LDPE	BSS
11. Chandigarh Spun Pipe Co, 29, Industrial Area, Chandigarh.	12-50 mm	LDPE	ISS

## APPENDIX XVI

(Vide reply to recommendation at Sl. No. 61)

No. H. 11013|14|73-PHE

GOVERNMENT OF INDIA

### MINISTRY OF WORKS AND HOUSING

New Delhi, dated the 9th October, 1973.

To

All State Governments|Union Territories.

SUBJECT:—*Estimates Committee—38th Report—National Water Supply, Programme—Recommendation No. 61—Allotment of High priority for release of wagons for the transport of the material for water supply schemes.*

Sir,

I am directed to invite your attention to the recommendation No. 61 of the Estimates Committee of the Lok Sabha (annexed) where in the Committee had recommended a higher priority for allotment of wagons for the transport of the material required for water supply schemes.

This matter was taken up with the Ministry of Railways who have informed that priority class "C" as per existing provision in the Preferential Traffic Schedule is available for programmed movement sponsored by the nominated officials of the State Governments concerned. Under this category the material required for water supply schemes will also get this priority provided the state nominated officer sponsors the movement. A copy of Ministry of Railways O.M. No. 73|TT-III|62|NR, dated the 24th September, 1973, is enclosed.

It is requested that you may nominate the Chief Public Health Engineers|other suitable officers for transport of material for water supply schemes on Government account so that such movement gets the priority class "C" under the Preferential Traffic Schedule.

Yours faithfully,

Sd|-

(J. A. SAMAD)

*Under Secretary.*

1. Copy forwarded to Chief Public Health Engineers.
2. Ministry of Railways with reference to their O.M. cited above.

Sd|-

(J. A. SAMAD)

*Under Secretary.*

## ANNEXURE

61. The Committee note that inadequacy of wagons has been one of the reasons for delay in sending the pipes to various Health Engineering Departments. They also note that the matter has already been taken up with the Ministry of Railways for allotment of priority "C" instead of priority "E" for allotment of wagons for transportation of pipes etc. The Committee hoped that an early decision will be reached and a higher priority will be allotted for the transportation of materials required for water supply.

*Copy of O.M. No. 73|TT-III|62|NR, dated the 24th September, 1973, from the Ministry of Railways, Railway Board, New Delhi, addressed to the Ministry of Works and Housing, Government of India, New Delhi.*

**SUBJECT:—Estimates Committee—38th Report—National Water Supply Programme—Recommendation No. 61.**

The undersigned is directed to refer to O.M. No. H. 11013|14|73-PHE, dated the 6th September, 1973, on the subject noted above and to state that programmed movement sponsored by the nominated officials of the State Governments concerned, can move under priority class 'C' as per existing provision in the Preferential Traffic Schedule. Pipes required for the water supply and sanitation scheme of various State Governments can also move under this priority. It is, therefore, not necessary to provide separate provision for movement of pipes under priority class 'C' for this purpose on State Government account.

## APPENDIX XVII

(Vide reply to recommendation at Sl. No. 62)

### List of Projects Identified by CIPHERI

#### *Water Treatment*

1. Oxidation of sulphidic spent caustic from refinery and petrochemical effluents.
2. Fluoride contribution by foods grown in fluoride bearing areas.
3. Development of membrane filters of various porosities and their scale-up.
4. Wastewater renovation by absorption using activated carbon.
5. Analytical laboratory.
6. Reverse Osmosis.

#### *Sewage Treatment*

1. Oxygenation capacity of surface aerators.
2. Rural sanitation pilot project.
3. Water quality monitoring (sewage|Industrial wastes). Also proposed under Industrial wastes.
4. Sewage farming—studies on optimum utilisation of sewage effluents in agriculture.
5. Sewage treatment by biological disc.
6. Pisciculture in stabilization pond effluent.
7. Artificial media for trickling filters.
8. Evaluation of design criteria for facultative stabilisation ponds.

#### *Industrial Wastes*

1. Agricultural utilisation of Industrial wastes.
2. Water pollution survey and monitoring of river basins (see under Sewage Treatment also).
3. General surveys on the characteristics and treatment of different industrial wastes and feasibility report thereon.
4. Anaerobic filters for treatment of industrial wastes.
5. Evaluation of the performance of industrial waste treatment plants in India.
6. Processing of biologically resistant pollutants in waste waters by photooxidation.
7. Physico-chemical and biological studies on the treatment of pesticides bearing wastes.

8. Nitrogen and Phosphorus requirements for anaerobic treatment of organic wastes deficient in these nutrients.
9. Anaerobic digestion of organic wastes containing high salt concentration.
10. Bio-assay toxicity studies on industrial waste waters and pesticides (see under sewage treatment also).

## *MICROBIOLOGY*

### *Bacteriology*

1. Die-away of bacterial pathogens and parasites in full-scale sewage treatment plants.
2. Fate of enteric pathogens during composting and other refuse disposal methods.
3. Correlation of Salmonella and focal coliforms in polluted waters.
4. Studies on population dynamics of different metabolic groups of organisms in stabilization ponds.
5. Development of fluorescent antibody technique for the rapid identification of indicators of focal pollution.

### *Virology*

1. Viral pollution of drinking waters.
2. Development of filter aids for virus removal from drinking water.
3. Uptake and survival of human enteric viruses in clams and edible fish.

## *ENGINEERING TREATMENT*

### *Water Treatment*

1. Studies on Water filtration:
  - (a) Two layer filtration;
  - (b) Direct Filtration of coagulated high quality surface waters; and
  - (c) Declining Rate Filtration.
2. Correlation of 'C' value with age and quality of water carried by water mains.
3. Highrate sedimentation in water treatment.
4. Determination of optimum peak factor for use in the design of water distribution network for intermittent water supply.
5. Effect of time lag between dosing of alum and entry of alum dosed water in single stage filtration.

## Draft V Five Year Plan : SCIENCE &amp; TECHNOLOGY COMPONENT

## MINISTRY OF WORKS AND HOUSING

(Rs. 23.75 Crores for Housing and Environmental Improvement under the chapter on *Scientific Research*, in Draft V Plan; Planning Commission)

RDD Projects recommended by NCST for implementation in the S & T Component of V Plan.

Organisation : CENTRAL PUBLIC HEALTH AND ENVIRONMENTAL ENGINEERING ORGANISATION (CPHEEO)

Sl. No.	Project Index No.	Title of Project	Funds (Rs. in lakhs)
1	S <sub>18-1</sub> G <sub>1</sub> P	Sponsoring of RDD Projects relating to design and planning, Water Supply units in rural and Urban Areas. (Tube Wells, Pot Chlorinators; Treatment of brackish water; Water Storage systems for Arid Zones)	50.00
2	S <sub>18</sub> G <sub>3</sub> P	Sponsoring of RDD Projects relating to Human Wastes, Solid Wastes and Carbage disposal	150.00
		(a) Composting Units	
		(b) Incinerators	
		(c) Conversion of dry latrines to flush latrines	
		(d) Sanitary Privies etc. for liquid wastes in rural areas.	
		(e) Gobar Gas and Sewage Gas	
		(f) Sewage Treatment Plants.	
3	S <sub>18</sub> G <sub>5</sub> A <sub>1</sub> P <sub>10</sub>	Central Level Coordination for Rural Water Supply, drainage Sanitation RDD Centres. . . . . Sponsoring of schemes in 5 selected centres	30.00



1	2	3	4
4	S <sub>18</sub> ' <sub>1</sub> G <sub>8</sub> P	Feed-back studies on Water Supply, Sanitation Projects in IV & V Plan. Sponsored studies in selected institutions in different parts of the country . . . . .	20.00
5	S <sub>18</sub> P also S <sub>18</sub> ' <sub>1</sub> G <sub>8</sub> P	Sponsoring research on Water Pollution especially on sources of Water Supply by CPHHEO. Water Pollution Control Studies . . . . .	100.00
6	S <sub>18</sub> ' <sub>1</sub> G <sub>8</sub> P	Sponsoring research relating to prevention and control of air pollution, field programmes etc. . . . .	50.00
TOTAL : . . . . .			<u>400.00</u>

## APPENDIX XVIII

(Vide Introduction)

*Analysis of the action taken by the Government on the recommendations contained in the Thirty-Eighth Report of the Estimates Committee.*

### (FIFTH LOK SABHA)

I.	Total Number of Recommendations . . . . .	65
II.	Recommendations which have been accepted by Government ( <i>vide</i> recommendations at S. Nos. 3, 6 to 16, 19 to 32, 35, 39 to 65)—	
	Number . . . . .	54
	Percentage to total . . . . .	83%
III.	Recommendation which the Committee do not desire to pursue in view of Government's reply ( <i>vide</i> recommendations at S. Nos. 17, 18, 33 and 34)	
	Number . . . . .	4
	Percentage to total . . . . .	6%
IV.	Recommendations in respect of which replies of Government have not been accepted by the Committee ( <i>vide</i> recommendations at S. Nos. 1, 2, 4, 5, 36, 37 and 38)	
	Number . . . . .	7
	Percentage to total . . . . .	11%