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DECENTRALISATION OF RURAL WATER SUPPLY SCHEMES IN KERALA

REHABILITATION OF SCHEMES
IN GRAMA PANCHAYATS

A PROPOSAL

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WATER SUPPLY REHABILITATION IN GRAMA PANCHAYATS

1. Decentralisation of the administration and implementation of Panchayati Raj system giving more powers and responsibility of governance to the Grama Panchayats are being initiated in its true spirit, now by Govt. of Kerala. The Panchayats have identified supply of drinking water as one of the most important priority sectors in their local plans.
2. Grama Panchayats have been identified as the lowest administrative unit in the rural area for providing drinking water supply to the community. Water supply systems of three distinct categories will have to be utilised in combination in order to provide drinking water to all sections of the community.

The three categories are :

- Open wells, borewells and Tube wells with Hand pumps, springs and ponds with simple distribution system. The programme of rain water harvesting and recharging of sources also come under this category.
 - Piped water supply schemes that, cover one Panchayat or a portion of it.
 - Major piped water supply schemes of Comprehensive nature that cover more than one Panchayat, with treatment plants (in general), transmission mains and distribution net works.
3. The development and upkeep of the water supply system in the first category has been the responsibility of the Panchayats and continue to be so. The construction, operation and maintenance of the second category of schemes have been vested with KWA so far. But a large number of such schemes are proposed to be handed over to the Panchayati Raj system of administration. The KWA do not intend to construct, operate and maintain such schemes here after; but these activities will have to be organised by the Panchayath themselves. The water supply schemes under the third category will continue to be under the KWA.
 4. The Panchayats may have ability and resources to conduct the activities under category (1). The KWA will look after the major schemes (category 3) as has been the practice so far. But the schemes coming under category (2) requires more attention, as works related to these schemes - (both construction and maintenance) are not familiar works to the Panchayats.

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5. While for the new schemes, Panchayats have time and option for selecting and designing the desirable ones, in the case of old schemes to be handed over by KWA, they have to assess the viability of the scheme in all aspects, so that the schemes taken over should not be a liability to them and to the community.
6. The KWA is understood to have identified more than one thousand schemes for handing over to the Panchayats. But the Panchayats are not in a position to take over such schemes for the following reasons.
 - The Panchayats do not have the required technical capability to handle such schemes.
 - They do not know the present condition and potential of the schemes. A detailed evaluation (Assessment) of the schemes is required in order to ascertain their viability, need and possibility for rehabilitation, improvement etc.
 - They do not know the extent of financial commitment involved in making these schemes viable and for their operation and maintenance.
7. The technical, financial and social viability of these schemes, have to be assessed within a broad frame work, mostly common to all districts in Kerala. Standards and guidelines have to be formulated at the State level, within which alone, the transfer should take place.
8. The schemes to be handed over to the Panchayats can be broadly classified, as :
 - Good schemes, with satisfactory record of performance and could be taken charge of and run by the Panchayats, without much rehabilitation, or improvement works.
 - Schemes though not working satisfactorily, could be improved by strengthening the components of the scheme.
 - Schemes that could not be improved, by reasonable means of rehabilitation works.
 - While the first and second categories will become an asset to the Panchayat the last one will always be a liability. In such cases,

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alternative arrangements for supply of water to the community will have to be thought of.

9. The approach to the rehabilitation assessment should not be limited to a study of the schemes in question alone. It should include exploration of the traditional sources of drinking water in the area and possibility of integrating them with the scheme so that, the water supply needs of the community are fully satisfied.
10. This type of activity is an entirely new concept. It is not wise to organise such an activity on a State wide level. It is proposed to select one district as a Model and carry out the assessment study based on the preliminary standards evolved. Based on the experience gained in the Model work, the standards evolved themselves will have to be improved and perfected making them more adaptable to the prevailing conditions. Moreover, a methodology can be developed based on the activity in the model district. This methodology can be adopted or replicated in the districts also.
11. The scheme^s to be handed over in the model district may be divided conveniently into groups for the purpose of the Assessment work. Each group shall be entrusted with an Assessment team, so that, simultaneous progress could be achieved and the entire programme can be completed within a period of 10 months.
12. The parameters relevant to the Assessment work, are enumerated separately in Appendix - I. This should serve as a general basis for assessment work; but other aspects essential for formulation of an integrated water supply system for the community shall also be considered and incorporated in the study.
13. At the District level there shall be an Assessment Engineer, a Support Engineer and staff with an office. For the field work, each team shall consist of a Team Leader and 4 nos. Draftsman/Field workers.
14. Taking Thrissur District, as a sample, an estimate has been prepared for the assessment study, taking into account, the basic requirement of Man power, office, Transportation etc. There are about 75 schemes proposed to be transferred in Thrissur District. The total estimated cost for the District is Rs.21.00 lakhs and cost per scheme is Rs.28000/-.
15. For formulating the standards and norms for Rehabilitation a State level body will have to be set up consisting of the following experts.

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1. Social Expert
2. Financial Expert
3. Technical (water supply) Expert.
4. A Senior Engineer from KWA.
5. Expert on Water Conservation
6. Expert on peoples planning and Implementation.
7. Team Leader.

This team of Experts shall formulate the standards for Rehabilitation Assessment and evolve the preliminary methodology for the Model working. This team shall help Govt. of Kerala to issue necessary orders for the Rehabilitation programme.

- This is an area requiring Donor support and involvement.
- Secondly the Model Assessment work in the selected District will require Donor Support.
- After the Assessment work the implementation part is supposed to be taken up and completed by the Panchayats.
- On completion of the implementation, the results of the integrated approach to the water supply in the context of Rehabilitation work will have to be evaluated.

APPENDIX - I

A) Viability Assessment :

1. Financial :

- Whether the scheme is financially viable?
What is the unit cost of water produced/supplied?
- Whether the Local body will be able to meet the recurring expenditure and whether the resources available with Panchayat is sufficient.
- What are the financial terms to be agreed upon between KWA and Panchayat.
- How much revenue can be generated from the scheme itself.

2. Social/Infrastructure :

2.1 Community satisfaction :

- Whether the scheme caters to the needs of all strata of the community.
- It not what are the changes needed in the structure of the scheme.
- Possibility of combining other sources of water (well, bore wells with hand pumps etc.) with the scheme in order to attain 100% coverage of the community.
- Need and ways to generate community awareness in proper utilisation of water, reducing wastage, hygienic habits etc.
- Set levels of consumption of water (water demand) for different strata of society and for different structures.
- How peoples participation in implementing and running the schemes can be incorporated in the system.

2.2 Peoples Representation :

- Identify the schemes that needs priority in consideration.
- Project the needs of the people from an angle different from that of the officialdom.
- Explore how the assets generated and existing are put to use to the maximum advantage of the people in the area.
- Ways, means and needs for preserving and up keeping the water supply systems as the property of the community.
- Coordination among various agencies (KWA, Panchayath, Govt. etc.) involved.

3.0 Technical :

- ### 3.1
- Whether the source is sufficient and sustainable.
 - If not, possibility of improving the source, finding additional source for the scheme.
 - Where adequate source is not available, ways and means to reduce the scope of the scheme - by reducing consumption or by reducing coverage.
 - Assess the various components of the scheme for their adequacy and strength.
 - Assess the need for replacement or improvements to the components of the scheme.
 - Explore and suggest possibility of utilising other sources of water so as to attain full coverage of the scheme area.
 - Work out and identify the requirement of the staff for running the scheme.
 - Work out the project cost, operating cost and cost per unit quantity of water produced/supplied.

- Assess and ensure quality of raw water as well as treated water.
- Produce proper project proposal for implementation.
- Prepare As-laid and as built records as part of evaluation of the scheme.

3.2 Water Conservation :

- Whether the proposed extraction of water will deplete the water potential of the area.
- If so, to suggest means to extract water required for the scheme without affecting the potential.
- Explore and suggest practical methods for recharging ground water and conserving surface water.
- Suggest, possible ways of recycling of water.

B. Conditions of Transfer :

- Whether the assets are transferred by KWA to Panchayats free of charge (It should be free)
- What will happen to the liabilities on the scheme - loans etc. (It should be taken care of by the State Govt.)
- What will be the fate of past dues? (It should be negotiated and settled - Dues for the last 5 years shall be paid by the Panchayats; beyond 5 years shall be written off by KWA - otherwise, the entire dues shall be taken care of by the State Govt.)
- Status of staff engaged :-

The staff as identified to be required shall be transferred to the Panchayats. The seniority and lean of such staff transferred shall vest with KWA. The administrative control shall be with Panchayats. KWA shall absorb the staff that are identified as not required. But Panchayats shall make fresh recruitment only if KWA cannot spare such staff, District wise.

- C) Mode of Implementation :
- Shall be the same as set forth for implementing the projects under peoples campaign, as contemplated in G.O.(MS).N.29/98/IRD dated Trivandrum 19.3.1998 of Government of Kerala.
- D) Panchayats to be equipped with running of the schemes :
- Panchayat shall have an engineering wing. In the beginning it shall be constituted by transfer of staff from KWA, keeping their lean with KWA and administrative control and payment with Panchayats.
- The entire activity of drinking water supply within a Panchayat (from wells to piped water supply and also source regeneration/recharging) shall be brought under this engineering wing. They shall be given proper training in orientation as well as in methods and procedure in technical activity.
- E) Need and Area for Donor support :
- The entire Water Supply Rehabilitation evaluation and preparation of proposals for implementation is an area requiring Donor support.
 - Scheme implementation for Water Supply Rehabilitation in selected Model Districts/Panchayat is another area requiring Donor support - in the second stage.
 - The evaluation of the total effect of the activity in the Water Supply sector is an area requiring Donor support - in the third stage.

APPENDIX - IIWATER SUPPLY REHABILITATIONData to be collected

1. Source :
 - I) Details of Well/Tube well/Intake works.
 - ii) Details of Treatment works.
 - iii) Details of pumpsets
 - iv) Pumping hours per day for 1 year
 - v) Yield/Rate of pumping
 - vi) Whether source goes dry and duration.
 - vii) Scope for improvement.
2. Pumping main : Size, type, length, valves (Air/sluiice/Scour, age)
3. Service tank : Type, Height, capacity, condition.
4. Distribution system : As laid details.
General condition/leakage/breakage.
5. Street taps : No./condition/Availability of water in them.
6. Workers/Staff : Details of staff engaged for the schemes.
7. Beneficiaries : No. of households/No. of persons as per actuals/last census. No. of persons as per design.
Opinion/complaints about the scheme.
Requirements of beneficiaries/Panchayat Members/Ward Sabha.
8. General : Design parameters/population benefitted/Demand in lpcd/capacity of scheme/design Whether the scheme is independent on part of a larger one.
Overall condition.

APPENDIX - 111 (A)
ESTIMATE - DISTRICT LEVEL

Rehabilitation Assessment of 75 nos. scheme

Duration - 10 months

1)	20 Draftsman/Field workers-20 x 10 x 3500 =	7,00,000.00
2)	5 nos. Supervisors - 5 x 10 x 6000 =	3,00,000.00
3)	1 no. Director - 1 x 10 x 10000 =	1,00,000.00
	1 no. T.A. (Tech. Asst.) - 1 x 10 x 8000 =	80,000.00
4)	27 nos. Travel Expense - 27 x 10 x 1000 =	2,70,000.00
5)	L.S. Transportation - 200 x 500 =	1,00,000.00
	(200 visits)	
6)	L.S. Office equipments L.S. =	2,00,000.00
7)	L.S. Stationery - 10 x 3000 =	30,000.00
8)	L.S. Office expenses. - 10 x 4000 =	40,000.00
9)	L.S. Printing and Binding - 20 x 75 x 150 =	2,25,000.00
	Total	----- 20,45,000.00 =====

Cost/Scheme = 20.45 = Rs.27,260 Say = Rs.28,000/-
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 Say : Rs.28,000/- scheme
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