

MINOR IRRIGATION AND WATER MANAGEMENT

(Item No. 3)

Tamil Nadu ranks 11th in size in the Country with 13 million hectares of geographical area. Half of the geographical area is cultivable and 6 million hectares are net sown area. Out of the total cultivable area 50% get irrigation (3 million hectares) from system canals (0.95 million hectares), tanks (0.90 million hectares) and wells including tubewells etc.(1.15 million hectares). Tamil Nadu having exhausted all its surface water potential for irrigation, there is very limited scope for major and medium irrigation projects. Thus, the future development in Tamil Nadu irrigation will be mainly on the water conservation, modernisation of the canal and tank irrigation, water management in the existing irrigation sources; and exploitation of minor irrigation sources.

02. There are 39202 tanks in Tamil Nadu, out of which 3697 are system tanks, 5242 are non-system tanks, 9850 are ex-zamin tanks and 20413 are Panchayat Union tanks. Government controls system and non-system tanks through Public Works Department. Panchayat Unions own the tanks where ayacut is less than 40 ha. and are called as Panchayat Union tanks.

03. Minor irrigation schemes implemented by the Government include Tank modernisation schemes. Phase I scheme at a cost of Rs.115 Crores is being executed from 1989 for improvement of rainfed tanks with ayacut between 100 to 200 Ha. and the scheme covers few ex-zamin tanks. Phase II of the same scheme involves modernisation of 50 tanks.

04. The Govt. have ordered the establishment of Water Resources Organisation (W.R.O.),in P.W.D., and decentralisation of Water management along the River Basin lines. It has been ordered that 'Basins' are to be headed by Basin Managers' in the cadre of Chief Engineers. The functional areas of the W.R.O. with Head Quarters are as follows:- (1) Plan Formulation, Chennai. (2) Design,Research and Construction Support, Chennai. (3) Operation and Maintenance, Chennai. (4) State Ground & Surface Water Resources Data Centre, Chennai. (5) Water Resources Organisation, Chennai Region, Chennai. (6) Water Resources Organisation, Trichy Region, Trichy. (7) Water Resources Organisation, Pollachi Region, Pollachi. and (8) Water resources Organisation, Madurai Region, Madurai. The Engineer-in-Chief, W.R.O., Chennai co-ordinates with the Basin Managers and other Chief Engineers in all matters relating to Irrigation Management, Irrigation Research Institutions and other activities in Water Resources Organisation. The Engineer-in-Chief monitors the functional specialisation in all line divisions with key functional operations, maintenance and Regulations.

05. The Tamil Nadu Panchayat Act explicitly provides certain powers to Village Panchayats and Panchayat Unions. Those are:-

“ Subject to such conditions and control as may be prescribed the Govt.may transfer to any village panchayat or to any P.U.council protection and maintenance of any irrigation work, the management of turns of irrigation or the regulation of distribution of water from any irrigation work to the fields depending on it,” (Section 133(1)).

“ The village panchayat or the P.U.council shall have power, subject to such instructions and control as may be prescribed, to execute Kudimaramat in respect of any irrigation source in the village and levy such fee and on such basis for the purposes thereof as may be prescribed.”

“ Provided that nothing contained in this section shall be deemed to relieve the village community or any of its members of its or his liability under the T.N. compulsory Labour Act 1858, in respect of any irrigation source in the village in case the village panchayat makes default in executing the Kudimaramat in respect of that irrigation source”(Section 133(2)).

“ Where the maintenance of any irrigation work is transferred under this section is fishery rights of Govt., in such work shall be transferred to and be vested in the village panchayat or P.U.council, as the case may

bc. subject to such terms and conditions including terms and conditions regarding the utilisation of the income as may be specified by the Government”(Section 133(3)).

06. In case of Minor irrigation and water management there are two types of activities -(i) Construction of irrigation sources and tanks and development of ayacuts ; and (ii) maintenance of irrigation sources. Panchayat Unions have been implementing the sinking of percolation ponds under JVVT schemes and Jeevandhara wells. By virtue of vesting of Powers to maintain irrigation tanks having ayacut of less than 40 hectares, Panchayat Unions are bound to take up such maintenance. Though Kudimaramath has been reiterated in the TN Panchayat Act 1994, its operationalisation remains to be seen. There is no statutory irrigation grant to Village Panchayats and Panchayat Unions but the Government under the Act may entrust to these local bodies management of turns of water distribution from irrigation source. These rural local bodies can also levy fee for the Kudimaramath purpose. It is clear that Panchayat Union is not expected to meet any expenditure from its own funds. Maintenance will, therefore, depend on the availability of grants from Government. Since this tank irrigation source maintenance power has to be entrusted to the Village Panchayats and Panchayat Unions. Government should develop regular cycle system for maintenance. First State Finance Commission has suggested a cycle of 5 years. In this background the District Panchayat needs to be given the role for irrigation and water management planning.

07. The District Panchayats (DP) may be empowered to formulate the Perspective District Plan on Minor Irrigation and Micro Irrigation including Command Area Development Programmes and to review and monitor the plan implementation through the standing Committee on Agriculture. The D.P. will also advise and recommend the Irrigation grants to be annually released to each Village Panchayat and P.U.C. The Panchayat Union will formulate, execute and assist the V.P.s., in selection of beneficiaries under various programmes, construction of check Dams, percolation ponds in its jurisdiction. The P.U.C. will also assist V.P.s. to implement Kudimaramath and collect fees for maintenance of Irrigation and Drainage Schemes. The Village Panchayats will identify the beneficiaries and execute various programmes including Kudimaramath for maintenance of irrigation sources in its jurisdiction. In addition, it will maintain all percolation ponds in the Village Panchayat and also execute rotational water supply (RWS) in the Command area. The Village Panchayats will assist in resolving local disputes, if any. The details of recommendation of the SPC group are furnished in the following Table:-

I. VILLAGE PANCHAYAT

<i>ACTIVITY</i> (1)	<i>ENTRUSTMENT OF POWERS</i> (2)
1. Development of Minor Irrigation, delivery system, drainage system, and water management.	<ul style="list-style-type: none"> i) Assist in Formulation of Irrigation Projects. ii) Execute community minor irrigation projects like Percolation Ponds, desilting and clearance of canals, tanks and drainages. iii) Construction of tanks and check dams including the projects assigned by the DP and PUC. iv) Enforce the inter-well distance (well density) as per the prescribed norms. v) Identification of beneficiaries under various programmes for minor irrigation Projects.
2. Develop micro irrigation systems.	<ul style="list-style-type: none"> i) Identify the farmers area, and crops to be provided with sprinkler and drip irrigation.
3. Maintenance of irrigation sources	<ul style="list-style-type: none"> i) Continue and strengthen the traditional methods of minor irrigation maintenance by the water users groups. ii) Implement Kudimaramath for maintenance of irrigation Sources in it jurisdiction, specially entrusted by the Govt.

<i>(1)</i>	<i>(2)</i>
	iii) Maintenance of all percolation ponds in Panchayat Village. iv) Execute turn system (Rotational water Supply) in the irrigation Command Area Projects in collaboration with water users groups.

II. PANCHAYAT UNION

<i>ACTIVITY</i> <i>(1)</i>	<i>ENTRUSTMENT OF POWERS</i> <i>(2)</i>
1. Development of Minor Irrigation, delivery system, drainage system, and water management including micro irrigation schemes.	i) Formulation and technical appraisal of minor irrigation minor irrigation projects proposed in PUC plan. ii) Execution of Minor Irrigation Projects included in PUC Plan and the schemes assigned to it by Government and other Agencies. iii) Construction of percolation ponds, and check dams, not entrusted to Village Panchayats. iv) Assist Village Panchayats in the selection of beneficiaries under various programmes for Minor Irrigation Projects and micro irrigation projects and to recommend for sanctioning subsidy and Bank loans.
2. Maintenance of minor irrigation sources including Panchayat Union Tanks.	i) Assist Village Panchayats to implement Kudimaramath and collect fees for the maintenance of irrigation and drainage systems. ii) Maintain Panchayat Union tanks with the Government grants. iii) Levy fees on the ayacutdars for maintenance of irrigation sources assigned to it by Govt iv) Assist water users Council for effective implementation of turn system in water distribution (Rotational water supply) and maintenance of minor irrigation sources.
3. Review of Minor and Micro irrigation schemes.	i) Supervision, Monitoring and review of the progress, and quality of works under minor and micro irrigation schemes. Executive Engineers of PWD (WRO), Agriculture Engineering Department and Asstt. Director of Agriculture will attend review by Panchayat Union Council. ii) Co-ordination between various line departments/agencies funding for Minor Irrigation and Micro Irrigation Projects.

III. DISTRICT PANCHAYATS

<i>ACTIVITY</i> (1)	<i>ENTRUSTMENT OF POWERS</i> (2)
1. Development of Minor Irrigation schemes, Micro irrigation, Delivery systems, Drainage system, and water Management etc.	i) Formulation of the perspective District Plan on minor irrigation, micro irrigation and Command Area Development. ii) Review and Monitoring of the Minor and micro Irrigation schemes and Command Area Development project being implemented at the District level through the Standing Committee on Agriculture. iii) Preparation and submission of proposals to the respective Regional Chief Engineers' for obtaining appropriate funding from State Govt. and Central Govt. authorities.
2. Advise Government on the maintenance of irrigation systems.	i) Advise the Government on the list of tanks to be maintained by each each Village Panchayat and Panchayat Union. ii) Recommend to Government the Irrigation grants to be annually released to each Village Panchayat and Panchayat Union.

Administrative and Technical Implications

08. The entrustment of Powers envisaged above do not indicate any transfer of technical or other personnel to Panchayat Raj Institutions. The rural local bodies will need more intensive and extensive technical support facilities from the line departments in (a) implementation of minor, micro and other irrigation schemes and (b) maintenance of those irrigation sources. Panchayats will have to mobilise users/people's participation on the one hand and technical skills and financial support of the Government on the other for successful maintenance of tanks and other irrigation sources. Where the services of Line Departments are not readily available retired Engineers may be engaged for Technical guidance for specific work and for a specific period in order to avoid delay in execution. Certain percent of Govt. grant may be used for engaging the technical consultants.

Financial Implications.

09. The State Govt. provides funds for the "Minor Irrigation schemes" and are made available either to the Panchayat Raj Institutions or to the Regional Chief Engineers. The assistance are received from State Govt. for Non-plan schemes, State Plan schemes, C.S.S. schemes, World Bank aided schemes and Local Irrigation Grants. The Provision made for the State Minor Irrigation Project (S.M.I.P) is Rs.10.00 crores for the year 1995-96. Following funds were allotted under minor irrigation schemes. These do not include funding under District Decentralised Plans, micro irrigation schemes, Command Area Development Projects, Jeevan Dhara Schemes and Irrigation grants.

Financial outlay for Minor Irrigation (Rs.in lakhs)

<i>Name of the Scheme.</i> (1)	<i>1994-95</i> (2)	<i>1995-96</i> (3)	<i>1996-97</i> (4)
1. Standardisation and improvement of irrigation tanks having ayacut less than 100acres vested with P.U.s.	44.09	-	-
2. Special scheme for the improvement of Minor Irrigation Tanks in Rural Areas.	235.00	235.00	235.00
3. Reclamation of Ex-zamin Tanks.	211.01	-	-

(Rs. in lakhs)

	(1)	(2)	(3)	(4)
4. S.M.I.P.		370.91	510.00	559.00
5. D.C.R.		13.55	8.00	1.20
6. State Minor Irrigation Project-Ex-zamin Tanks.		-	500.00	500.00
7. State Minor Irrigation Project-P.W.D. Tanks.		-	500.00	500.00
Total		874.56	1753.00	1795.20

Source: Plan- Budget Link, 1996-97.

10. There are 12,584 Panchayats and 384 P.Us functioning in the State. The Village Panchayats and Panchayat unions have their own funds for maintainance of core activities and tasks empowered to them. Panchayat tanks maintenance should be included as one of the important acitivities.

11. According to Budget Provision under Demand No:27 of Rural Development Department the Panchayat Unions are maintaining 23,761 Minor Irrigation Tanks with an ayacut of 3,28,076 hectares. A programme for maintenance of all the Minor Irrigation Tanks in each Panchayat Union should be is drawnup adopting a five Year Cycle system. A provision of Rs.1.00 crore was made for the year 1996-97. Financial devolution should match the entrustment of powers. In case of irrigation works maintenance, the magnitude of grants hitherto released by Government. is considered to be inadequate. The State Planning Commission group suggests realistic assessment of irrigation grants.