RECOMMENDATIONS	FOR	ENTRUSTMENT	OF	POWERS	

CHAPTER IV

RECOMMENDATIONS FOR ENTRUSTMENT OF POWERS (ITEMS)

AGRICULTURE INCLUDING AGRICULTURAL EXTENSION

(Item No. 1)

01. Agricultural development in Tamil Nadu has achieved excellent progress. Gross cropped area has reached 71.58 lakh ha (1993-94) with 120.90% of cropping intensity. Production of foodgrains reached 97.42 lakh tonnes with rice at 76.85 lakh tonnes in 1994-95. In **Sugarcane** prductivity, **Tamil Nadu stands 1st in the country** (always more than 103 tonnes per ha). In 1994-95, oilseeds and cotton production reached 21.28 lakh tonnes and 19.70 lakh bales respectively. Agriculture faces few challenges:

- More cultivable area is getting diverted to non-agricultural purposes.
- Cultivable waste area is on the increase.
- Area under rainfed condition occupies more than 50% of the cropped area.
- Irrigation intensity at 125% is almost stagnant.
- Irrigated area is more dependent on system irrigation.
- Irrigation expansion is only possible by exploring the ground water resources.

In case of horticulture, fruits, vegetables, spices, flowers and plantation crops, cultivable area has been expanding, which, in 1994-95 stood at 1.86 lakh ha, 1.75 lakh ha, 1.65 lakh ha, 0.14 lakh ha and 1.77 lakh ha respectively. Agriculture sector development holds key to the development of rural areas and living standards of rural people.

The main objective of the Tamil Nadu Agricultural policy is to accelerate allround economic development and faster agricultural growth in the state. Emphasis is being given to rainfed agriculture, wasteland development, soil and water management, horticultural development, micro irrigation promotion, marketing promotion, sustainable agricultural development, applied agricultural research, farm mechanisation and promotion of agricultural credit. Broad based agricultural extension is the foundation for overall agricultural development.

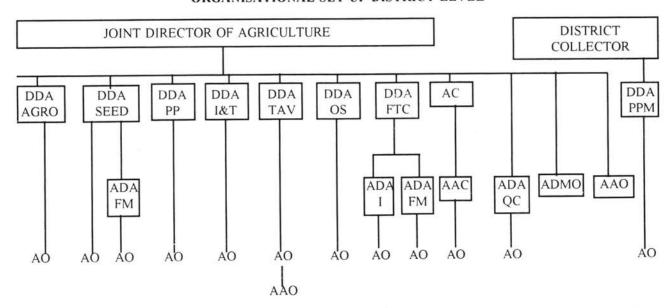
- 02. Agricultural Development is land based development activity which calls for a degree of cooperation, coordination and mutual understanding among several Departments, Rural Local Bodies, Universities, Agro-industries, Financing Institutions. NGOs and the farming community. The Agriculture Department serves as nodal agency for agricultural development in the state integrating and coordinating the activities of other Departments like Horticulture. Agricultural Engineering, Rural Development, Revenue, Animal Husbandary, Enviornment and Forest and Irrigation. The Agriculture Department is implementing many area specific and crop specific programmes adopting applied technologies like efficient use of water, organic farming, integrated nutrient and pest management to increase the production and productivity of millets, pulses, foodgrains, oilseeds, sugarcane, fruits, vegetables and spices through its broad based extension network. In addition, the Department is incharge of large number of various schemes for assisting the farmers which include distribution of inputs like seeds, fertilizers, organic manures, agricultural implements, etc. The Department extends assistance to small and marginal farmers by way of distribution of fertilizer minikits, pesticide minikits, power sprayers, tyre bullock carts, small tractors, trailors, power tillers, agricultural implements, storage bins, tarpaulins, bio fertilizer, green manure seeds, petromax light traps, chemicals for rodent control etc.
- 03. At the State level, these activities are looked after by Directorate of Agriculture, Directorate of Horticulture and Plantation Crops. Directorate of Seed Certification, Directorate of Agricultural Marketing, Chief Engineer (Agricultural Engineering) and State supported organisations, viz., Tamil Nadu Agro Industries Corporation (TAI), Tamil Nadu Agro-Engineering Co-operative Federation (ENCOFED), Tamil Nadu Co-operative Oilseeds Growers Federation (TANCOF) and State Agriculture Marketing Board (SAMB). Agricultural research and education comes within the domain of Tamil Nadu Agricultural University (TNAU) Agricultural Credit is looked after by the

Registrar of Co-operative Societies through Co-operative Banks. Here, we will briefly outline functions and organisational set up of Director of Agriculture, and Director of Horticulture. In case of Directorate of Seed Certification, activities include mainly regulatory and technical certification works. It is considered necessary to allow the existing position. Agricultural Engineering Department works have been generally covered in the activities "Land Improvement and Watershed Development" and "Minor Irrigation". The Directorate of Agricultural Marketing controls Regulated Markets, and Market Committees. In the part dealing with activity of "Markets and Fairs", rural local bodies and Regulated Market interface has been dealt with. Four State supported organisations include two Co-operatives (People's Organisation) one Corporation and fourth is a Board. Panchayat Union Council and District Panchayat can review their programmes and should not have any direct intervention.

DEPARTMENT OF AGRICULTURE-Organisational Set-up at District Level

04. There is a Joint Director of Agriculture incharge of all activities in the District. He is assisted by the Subject Matter Specialists on Training and Visit. Agronomy, Plant Protection and Information and Training to look after the Departmental extension activities. There is one Deputy Director of Agriculture (Seeds) and one Assistant Director of Agriculture (Quality Control) positioned in each district for monitoring Seed Production and distribution work and quality control work respectively. One Deputy Director of Agriculture looks after the Oilseed activities in the district and one Deputy Director of Agriculture looks after the Farmers Training Centre. The soil, pesticides, fertiliser analytical laboratories are functioning under the control of Agricultural Chemist/Assistant Agricultural Chemist. One Deputy Director of Agriculture has been recently positioned as Personal Assistant (Agriculture) to Collector in each district to coordinate the Agricultural Policy, Planning and Development Programmes among the line Departments. The organisational set up is explained in the following hierarchical tree:-

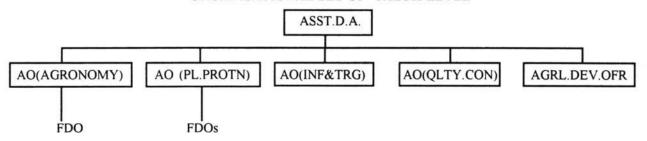
ORGANISATIONAL SET UP-DISTRICT LEVEL



Taluk Level

05. Each District is further divided into Revenue Divisions which comprise of two or more Taluks. Agricultural set up in each Taluk (Sub-division) is headed by an Assistant Director of Agriculture. He looks after all extension and scheme implementation activities. He is assisted by three Subject Matter Specialists in the cadre of Agricultural Officers looking after (i) Agronomy. (ii) Plant Protection and (iii) Information and Training. There are five or six Agricultural Officers in each sub-division to supervise the work of the Assistant Agricultural Officers. There are 159 Subdivisions in the State.

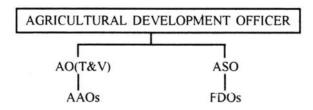
ORGANISATIONAL SET UP -TALUK LEVEL



Block Level (Panchayat Union level)

06. Development Block, as defined in the National Extension Service Scheme (NESS) is administratively and spatially coterminous with the Panchayat Union under Tamil Nadu Panchayat Act 1958 and 1994. All the schemes under the NESS are implimented by Panchayat Union Council. At this level, one Agricultural Development Officer is incharge of agricultural development activities and is vested with pay drawing and other financial powers over the agricultural staff of the block. There are one to three Agricultural Officers (Training and Visit) Assistant Seed Officer, Assistant Agricultural Officers and Field Demonstration Officers in each block under his control.

ORGANISATIONAL SET UP - BLOCK LEVEL



DEPARTMENT OF HORTICULTURAL AND PLANTATION CROPS:

- 07. The Department of Horticulture and Plantation crops has been playing an important role in the rapid development of fruits, vegetables, spices, condiments, flowers and plantation crops in the State. The Horticulture Department is implementing many state and central sector schemes such as WGDP, HADP, ITDP, drip irrigation, polygreen houses, mushroom cultivation, commercial floriculture etc., One Assistant Director of Horticulture is in charge of implementing all schemes in the district, and he is assisted by Horticulture officers. There are 59 Horticultural farms functioning in the state and managed by the Horticultural Officers. In a recent Government Order, the Department has identified Panchayat Unions having importance in one or more or all the five specific areas of horticultural activites viz fruits, vegetables, spices, flowers, and Plantation Crops. Panchayat Unionwise number of AHO/FDO post have been sanctioned in the re-structured field organisation of the Department.
- 08. Role of Rural Local Bodies in agricultural development in the state has become vital inview of recent. Constitutional Amendment and election held to these institutions. These PRI should be entrusted with more powers in the implementationm of schemes for the development of agriculture and horticulture. It is justified that the local bodies which are rural and mostly farming milieu should be involved in the plan formulation for area and crop specific programmes, identification of beneficiaries for government schematic assistence, procurement of inputs and implements and also in the distribution of the same. Agricultural credit flow is a must for using available resources for optimum land and water utilisation to achieve the targetted crop production and raise the socio economic condition of small and marginal farmers and agricultural labourers. For the purpose of analysis of entrustment of powers to Panachayat Raj Institutions, agricultural activities may be dealt under the following heads; (a) increasing the agricultural production, (b) Estimation of area, production, and productivity (c) Supply of inputs (d) Agricultural Extension Activities (e) agricultural credit system and (f) post harvest management.

(a) Increasing Agricultural Production:

09. The major challenge the agricultural sector faces is to improve crop productivity, sustainability, and profitability of farming system. Towards this end proper planning is needed. At present Agricultural Development Officer (ADO)

in the Block attends to agricultural extension and scheme implementation. He is assisted by the Assistent Agricultural Officer (AAO) or Field Demonstration Officer (FDO). Village Panchayat has at least one AAO/FDO to serve the farmers and extend schematic assistance in the village.

(b) Estimation of Area, Production and Productivity

10. Agriculture Department in coordination with Dept. of Economics and Statistics, and Revenue, estimates the crop yield. Agriculture Officers in the Block along with Block Statistical Inspector and Village Administrative Officer conduct crop cutting experiments and arrive at the production and yield estimates. The Village Panchayat can assist in this matter. The services of the Panchayat Union Council can be utilised in crop area and yield estimation. District Panchayat should organise crop yield competition and give awards to the best farmers having highest yield in specified crops.

(c) Arrangement and Distribution of Inputs:

11. Timely supply of input to the cultivator is necessary to improve the crops production. Presently, Inputs viz: seeds, fertilizers, pesticides and green manures are supplied by many agencies. Some salient features of supply of inputs are highlighted below.

Seeds:

12. Production of genetically pure and quality high yielding seed is an exacting task which requires high technical skill. The breeder seed multiplication is being done by the Tamil Nadu Agricultural University. Foundation I and II seed multiplication is being done in the selected 44 State seed farms. Foundation seeds are supplied to the farmers for production of certified seed. The quality seeds are processed in the Government Seed Processing Units functioning with an annual capacity of 28,000 MTs. (16 major,3 medium, and 51 mini units). The seeds thus produced, processed, and certified are distributed to the farmers through the 750 Agricultural Extension Centres (depots). Achievement during 1995-96 on distribution of seed is given below:

(in Tonnoc)

	(in Tonnes)	
Стор	Achievement 1995-96	
1. Paddy	19,781	
2. Millets	409	
3. Pulsus	1,892	
4. Cotton	359	
5. Oilseeds	8,309	
Total	30,750	

Fertilizers

13. Application of chemical fertilizers to the crops at different stages in correct proportion gives the best yield. Organic manure and bio fertilizer promotion is encouraged as part of integrated nutrient management system. The consumption of chemical fertilizers is given below:-

SI.	Item No.		1993-94	1994-95 (In lakh tonnes)	1995-96
1.	N		4.44	4.56	4.18
2.	P		8.61	1.80	1.42
3.	K		2.06	2.39	1.96
		Total	15.11	8.75	7.56

Pesticides

14. The pests and diseases situation in Tamil Nadu, is being monitored constantly through systematic surveillance work. The field data are collected every week from 7356 locations. The data are processed and forewarnings are given every week. Government of Tamil Nadu in its G.O.Ms.No.150 Agri. (TNADP) Department Dt. 9.3. 93 have ordered that the Director of Agriculture shall not trade in pesticides throughout the State except as may be required for the national programmes and natural calamities including mass pest infestiation. The Government directed that the pesticides trading should be taken up by the co-operatives like TANFED, ENCOFED, PAC and TAI. However, the Agriculture Department is promoting Integrated Pest Management for Paddy, Cotton and Sugarcane crops throughout the State.

(d) Agricultural Extension and Farmers' Training

15. The objective of the agricultural extension is to impart technological training to the farmers in the latest developments in agriculture through village based trainings programmes. demonstrations, issue of farm bulletins, monthly news letters, farmers group disscussions, kissan tour, kissan mela, etc.. There are 12 FTC functioning in the State apart from the Krishi Vigyan Kendras and agriculturl research centres of TNAU. Every year each FTC conducts 22 village based trainings for farm men and women, 10 trainings for convenors for farmers discussion groups and 110 secondary demonstrations cum peripatatic training on various skills. During 1995-96 Rs.13.57 lakhs were spent for the above purpose. The target and achievements during 1995-96 and programme for 1996-97 are as follows:-

	Village	No. of training 1995-96		
		Target	Achievement	
1)	Village based training for farm men and women	264	259	
2)	Village based training for farmers discussion group convenor	120	151	
3)	Peripatetic Training cum secondary demonstration	1320	1311	

Generally agricultural extension work comprises of transmission of improved agricultural technologies, inputs supply, farmers training, demonstration, adoptive research, soil testing, organic manure promotion, fertilizer programme, plant protection measures, quality control, etc. The Identification of farmers for training, assistance for supply of inputs and implements, procurement and distribution of inputs under all agricultural schemes may be entrusted to Village Panchayats and Panchayat Union Councils. Agriculture Department should concentrate more on Agricultural Extension and Co-ordination with Panchayat Raj Institutions to implement agricultural schemes.

(e) Agricultural Credit:

- 16. The Institutional network for the short and medium term credit in Tamilnadu consist of the following three tiers:
 - 1. Tamil Nadu State Apex Coop. Bank at the State level.
 - 2. Central Coop. Bank at the District level.
 - 3. Primary Agricultural Coop.Bank at the village level.

Generally one Primary Agricultural Coop. Bank covers one or two Village Panchayats and all the Village Panchayats in the state are covered by these Banks. There are 4655 PACB functioning in the state which provide short term crop loan to the farmers , and medium term loan for undertaking subsidiary activities like dairying, sheep rearing, poultry farming etc.. The progress in the issue of short and medium term loans are given below:-

(Rs.in crores)

Year	Short term loan	Medium term loan
1992-93	340.86	45.75
1993-94	439.54	52.65
1994-95	561.74	61.97
1995-96	561.37	65.17

(f) Post harvest Technology:

- 17. In Tamil Nadu, consequent on the introduction of high yielding crop varieties and intensive agricultural practices and technologies high productivity in agriculture has been achieved. However, there is mismatch between production and post harvest efforts with the result neither the producers nor the consumers get the benefit of the increased production. It is reported that there is considerable loss of foodgrain during harvest and post harvest operations. Rural local bodies are the right agencies to promote schemes on post harvest technologies promotion and save grain campaign.
- 18. To summarise, the District Panchayat may be entrusted with the powers to (i) ensure timely availability of agricultural inputs, (ii) advise Government in the credit flow to agriculture, (iii) assist to assess the losses due to natural calamities and to formulate and supervise relief measures, and iv) draw up district agricultural plan. The Panchayat Union Councils may (i) arrange for the crop yield estimation and competition, (ii) creation of data on area, production and soil condition, (iii) advise suitable cropping system, (iv) organise the demonstration of new technologies. (v) create link between Village and District Panchayat and Agricultural experts for transfer of technologies, (vi) involve in assessment of input needs, procure and distribute the same through Village Panchayats, (vii) prepare and monitor the credit delivery system, (viii) monitor the extension staff, including soil testing and maintenance of godowns, (ix) operate agricultural depots and (x) implement all agricultural schemes. Village Panchayats may (i) assist in the estimation of crop yield, (ii) identification of beneficiary farmers for various schemes including credit support, (iii) distribution of inputs and implements under agricultural schemes, (iv) motivate farmers for taking up crop insurance. (v) reporting of loss due to natural calamities, and (vi) supervision of relief measures and distribution of relief materials. The details of proposed entrustment of powers to 3 tiers of rural local bodies are furnished in the following tables:-

I. VILLAGE PANCHAYAT

	ACTIVITY (1)		ENTRUSTMENT OF POWERS (2)
1.	Increasing Agriculural Production	i)	Village Panchayat is mandated to prepare area Plan for economic development of the villages. Agricultural development is expected to be the core of the area plan at the village level. Husbanding and improving natural resources soil, water, vegetation will be the first step towards certain condition for progress of agriculture on sustainable basis.
		(ii)	Actual farming is done by the individuals. The role of Village Panchayat will be educational through extension education/assistance in respect of adoption of technologies, crop planning etc.
		(iii)	Inputs are marketed by trader Village Panchayat will provide infrastructural and other facilities to improve easy access of input required to farming population.
		(iv)	All the present agricultural activities/ scheme operating at village level will be entrusted to the Village Panchayat and reorientation to be consistant with village area plan.
		II. PAN	CHAYAT UNION
_	ACTIVITY (I)		ENTRUSTMENT OF POWERS (2)

Increasing Agricultural Production

 Panchayat Union Council will provide an overview of the agriculture situation in Union area and consolidate the Village Panchayat area plan in respect of agriculture. It will identify the gap and scope for further effort to realise the fuller

	(1)		(2)
			potential of agri- culture and improvement in the health of soil, water, vegetation and needed grazing grounds, water and fodder for the livestock in the Union area. To enable the Union to perform these functions Agricultural Development Officers (ADO) at the Panchayat Union level should act as Extension Officer(Agriculture) and the staff will come under the control of Panchayat Union Council.
		2)	Help in crop yield estimation through maintaining link with various agencies and VPs and farmers.
		3)	Create the data base on area, production and productivity of crop grown in the area.
		4)	Advise suitable cropping system based on location specific characteristics.
		5)	Organise farmer fairs, kisan mela, technology, transmission and act as a link between DP and VPs for transfer of knowledge and technologies.
		6)	Organise on-farm verification trials and demonstration of new technologies.
		7)	Coordinate activities of field level extension workers and officials (AO,AAOs and FDOs)
2.	Assessment and distribution of inputs.	1)	Assessing inputs needs for distribution of VPs and facilitate inputs. distribution of inputs intime.
		2)	Assist the input supplying agencies to have adequate storage and transport facilities and maintain close monitoring of input delivery system.
3.	Credit support	1)	Prepare agricultural credit plan and coordinate with lead Bank for providing timely credit from the financial institutions.
		2)	Monitor credit delivery system and help in strengthening of the co-operative credit institutions in the Panchayat Union areas.
4.	Extension support	1)	Prepare plan for visit of extension workers and monitor their work and ensure better linkages between farmers and extension staff.
		2)	Identify extension officials for skill improvement training.
5.	Soil Testing.	1)	Monitor soil testing work and assist the Village Panchayats in identifying locations for soil testing work, and prepare soil map for the Panchayat Union.
		2)	Help farmers for improvement of soil fertility as per the soil testing results.
6)	Post harvest management.	1)	Identify the needs for agricultural markets including cooperative and regulated markets and Panchayat Union area.
		2)	Organise post harvest trainings and workshop for farmers in food processing.
		3)	Identify the infrastructures needs for agro-processing and agri- business and promote such infrastructures through appropriate

agencies.

(1)			(2)		
7.	Risk Management	1)	Estimate crop losses due to natural calamities and monitor relief operations.		
		2)	Assist in extension of crop insurance schemes.		
8.	Schemes Implementation	1)	Review all State, Central and Externally funded Projects/ schemes/programmes implemented at the Panchayat Union area.		

III. DISTRICT PANCHAYAT

	ACTIVITY (1)			ENTRUSTMENT OF POWERS (2)
1.	Agricultural Planning	and Development.	1)	Draw up a perspective District agricultural plan taking in to account inputs for Village Panchayat and Panchayat Union area.
			2)	Draw up a District Plan on agro- processing, agri-business and agri-infrastructures needed and advise the Government in the matter.
			3)	Formulate strategies for operational plan indicating sphers of action by Village Panchayat Union, District Panchayat and the State Govt.
			4)	Review agricultural development in the district.
			5)	Facilitate timely availability of inputs including credit.
			6)	Assist in assessing losses due to natural calamities and formulate relief plan and co-ordinate with Revenue Official in relief works. Monitor and supervise relief operations.

Administrative Implications

19. The entire agricultural networks viz., transfer of technology, training, demonstration, procurement and distribution of input and implements, identification of farmers for all schemes are carried out by the Assistant Agricultural Officers/FDOs at the village level. At the Panchayat Union level they are under the control of Agricultural Development Officers.

Previously one Agricultural Officer for each Panchayat Union was incharge of agricultural activities who was administratively controlled by Block Development Officers. Under the Agricultural Officer there were some Extension Officers who were doing the extension works at village level. Later, the administrative and technical control of Agricultural Officer. All officers and staff presently work under the control of Agriculture Department.

20. It is necessary that the technological component of the Agricultural Extension, Demonstration and Training should continue with Agriculture Department. Identification of beneficiaries under crop based schemes, procurement and distribution of the subsidised item may be entrusted to Panchayat Union, ADO with staff can be attached to Panchayat Union Councils. The AOs, AAO/FDOs prossessing special training will assist the Agriculture Office. At district level, the Joint Director of Agriculture will supervise, review and monitor the activities of Agricultural Development Officer. The Joint Director of Agriculture technically report to the Directorate but for scheme review and monitoring will report to Agriculture and Horticulture staff so deputed to Panchayat Unions should continue as Government Servants. Further all agricultural depots, presently located in the office area of Panchayat Unions, should also be transferred to Panchayat Union Council along with staff.

Financial Implications:

Agriculture sector gets financial allocations from State and Central plans. However, it is difficult for the PRIs to take up the implementation of all schemes. Agriculture Department wide their letter No.49274/B&P/96-7 Dt.07-02-97 have conveyed that the following schemes may be entrusted to Panchayat Unions for implementation.

- 1. Community Thrashing Floor.
- 2. Local Manuring Resources by utilizing sewage/sullage.
- 3. Distribution of coconut seedling to school going children.
- 4. Setting up of sappling/vegetable seeds under Integrated Horticulture Development Scheme.

Further 10 more schemes from Agriculture and Horticulture Department have been delineated. In the first stage under these schemes Village Panchayat and Panchayat Union can identify the beneficiaries in Panchayat Villages and subsidised items procured by the Departments can be distributed. Once the implementation procedure is stabilised, entire scheme operation can be entrusted to these local bodies.

(Rs. in lakhs).

SI.	.No. Schemes	Financial Performance in 1995-96	
01.	Integrated Cereal Development Programme	604.050	
02.	Intensive Cotton Development Programme	232.312	
03.	National Pulses Development Programme	190.200	
04.	Oilseeds Production Programme	1848.222	
05.	Oil Palm Development Programme	170.657	
06.	Sugarcane Development Programme (SUBACS)	99.989	
07.	Integrated Programme for Cashew	134.930	
08.	Integrated Programme of Tropical and Arid Zone fruits	84.62	
09.	Integrated Programme for Development of Spices	152.00	
10.	Drip Irrigation for horticulture crops	500.00	