2. Agriculture and Allied Sector

Agriculture

Agriculture development is the key to poverty alleviation and development of rural areas. Agriculture continues to be important as it provides livelihood to about 40 percent of the State’s population. Even a minor setback in agriculture sector will have a profound impact on the economic growth of the State. The State has set a target of double digit economic growth with 5 percent growth in agriculture and allied sector during Twelfth Five Year Plan period.

Agriculture today is plagued with many problems such as pressure on cultivable land due to fragmentation, diversion of productive agricultural land to non agriculture purpose, high level of spatial and temporal variability in rainfall, dwindling ground water resources and shortage of farm work force. The GoTN with a serious concern to invigorate agriculture sector and to ensure food security and balanced nutrition for all, has brought in various path breaking initiatives. The State is to usher in Second Green Revolution so as to improve the farm productivity and increase the income of farmers. Concomitant to this vision, the Government is on the anvil of developing agriculture at farm level, by introducing farm level interventions, which would integrate the farmers, extension and research wing and ensure timely supply of quality inputs, complete adoption of technologies, crop growth monitoring, pest and disease surveillance and marketing linkages.

The pressure on land is increasing which results in shrinkage of net area sown. The Government has proposed to take prudent efforts to increase the cropping intensity by conversion of fallow lands suitable for agriculture, dry land farming etc. Integrated Farming System, wherein agriculture integrated with allied sectors viz., animal husbandry, poultry, aquaculture, sericulture etc will be given adequate thrust leading for supplementing and sustaining income of the farmers. Complementing these efforts, crop diversification i.e., switching from less remunerative crops to high remunerative crops, high water intensive crops to low water consuming crops which facilitate wide options to earn more returns to farmers will be promoted. Permeation of innovative
technologies viz:- System of Rice Intensification (SRI), Sustainable Sugarcane Initiatives (SSI), Improved pulses production technologies at farm level as a whole village concept, Millet Intensification Programme, Precision Farming, Micro irrigation etc., are focused to double the food grain production and triple the farmer’s income especially with respect to small and marginal farmers, SC/STs from the existing level.

In the Eleventh Five Year Plan (2007-12), target for food grains production fixed at 113.80 LMT from 42.5 L.ha at the terminal year. The production of Rice at 85.50 LMT (22 L.ha), Millets 21 LMT (10.5 L.ha) and Pulses 7 LMT (11.6 L.ha) had been programmed in the terminal year of Eleventh Plan period. Owing to the pragmatic steps and appropriate planning, the State has bagged the Krishi Karman Award (under 100 LMT categories) for 2011-12 from GoI for its gains in the food grain production. The actual food grain production during 2011-12 and 2012-13 (anticipated) was 101.52 LMT and 65.20 LMT respectively. The actual rice production during the same period was 74.59 LMT and 42.65 LMT respectively. Due to the severe drought faced during 2012-13 and delayed and insufficient release of Cauvery water by Karnataka, the production of food grains especially rice got reduced.

In Agricultural and allied sector, a slew of flagship schemes such as National Agricultural Development Programme (NADP), Irrigated Agriculture Modernisation and Water bodies Restoration and Management Project (IAMWARM), National Food Security Mission (NFSM), National Mission on Micro Irrigation (NMMI), National Horticulture Mission (NHM) are implemented in the State. The farmers are motivated to produce more through institution of awards. A farmer from Madurai has created record in rice production (8000 kg/ac.) through adoption of SRI method and received State award and price money for achieving maximum productivity.

With the objective to raise the productivity substantially, paddy (18700 MT) and millet (470 MT) seeds will be procured and distributed during 2013-14. Similarly, ongoing schemes like Increasing Production of Oilseeds (IPOS), Crop Insurance including Weather Based (WBCIS) and National Agricultural Insurance scheme (NAIS), will be continued during the year 2013-14. Individual farmer based crop insurance
scheme for immediate compensation to farmers will be implemented in Nemili block in Vellore district and Arupukottai block in Virdhunagar district as a pilot project.

Effective utilization of E-governance in agriculture has been proposed to keep the farming community abreast on latest farm crop technologies and other cultivation approaches. New initiatives such as Farm Crop Management System (FCMS), Farmers Integrated Hand Books, Touch Screen Kiosks, new software modules such as farmers database collection through mobile application, agro advisory services, farmers data updation through Interactive Voice Response (IVR), Scheme benefits tracking system and Online booking of farm machinery hiring system for effective individual farm planning, management of inputs and speedy transfer of extension activities under AGRISNET platform will be implemented. Further, it is proposed to impart training rural youths in operation and maintenance of agricultural equipment and machinery. Dry land agricultural production will be stabilized at a cost of Rs.24 crore under NADP. A special thrust will be given for farm mechanization. A special scheme for bringing fallow land under cultivation has been proposed during 2013-14 with NADP funds.

Uzhavar peruvizha is a multidisciplinary mass awareness campaign involving agriculture and allied activities. Involvement of other line departments in addition to the agriculture and allied departments was done in this mass awareness campaign with an ultimate aim to bridge the knowledge gap of farming community in all the revenue villages in 385 blocks. Around 38 lakh farmers participated in this campaign, 15838 revenue villages were covered, 5.60 lakh soil samples were collected and 2.98 lakh Farmers Integrated Hand books were distributed during the mass contact campaign. The Uzhavar peruvizha will be continued in 2013-14 at a cost of Rs.46 crore under NADP.

The farmers in Delta districts lost kuruvai crop due to non-availability of water in Mettur Dam. A special package has been announced to mitigate the hardship of the farmers and farm labourers and to protect their livelihood, and it also envisages strategies to increase the area and production of samba paddy in delta districts. The package has subsidy component to assist the farmers. Further, additional components under Special package for delta districts have been sanctioned for Rs.14.43 crore with
an aim to save the standing Samba and Thaladi crop from withering. Further, a High Level Committee has been constituted for assessment and providing necessary relief measures to the drought affected areas in Tamil Nadu, in view of the failure of the North East Monsoon and non-release of water from Karnataka and consequent delay in release of water from Mettur dam.

A mega vision for development of Horticulture parks in the State has been proposed. The vision aims at development of Horticulture parks for fruits, vegetables and spices across the State. Eco-Park projects have been proposed at Kanyakumari with a project cost of Rs.3.00 crore. A Rose Garden and Cut Flower demonstration Centre has been proposed at Kodaikanal with a project cost of Rs.3.50 crore. Also, Heritage Herbal Garden at Kolli Hills of Namakkal district is proposed at a cost of Rs.0.76 crore. The National Horticulture Mission is being implemented through cluster approach.

Soil conservation measures and rain water harvesting have been proposed in a big way to minimize soil erosion and to improve ground water recharge. Such an initiative would assist to improve the soil moisture regime for sustainable agriculture. The Government has proposed an innovative ‘Watershed Greening Project’ under this scheme, contiguous lands would be formed into a cluster and efforts are made to generate a higher income to the farmers by integrating various departmental schemes related right from seed to sale of the produce. Beneficiaries have been identified and training were conducted and Rs.0.56 crore has been released as first installment. Besides, soil and water conservation works through construction of check dams, farm ponds and water harvesting structures, percolation ponds, recharge shafts etc through the ongoing programmes like soil and water conservation in the catchment of river valley projects, TN IAMWARM project, Tractor and combine harvester scheme, Agricultural mechanization under NADP, Western Ghats Development Programme, Hill Area Development Programme, Execution of Soil Conservation Works through Rainwater Harvesting and Run off Management Programme and Soil conservation in Tribal areas will be done.
Farm mechanization programme is being taken up in a focused manner under Macro Management of Agriculture with an aim of popularizing the agricultural machinery among the farmers so as to supplement the availability of farm power, to reduce the drudgery due to shortage of farm work force, ensure timeliness in carrying out various farm operations and to increase agricultural production. GOI has approved a sum of Rs.
5.82 crore as subsidy assistance for purchase of key agricultural machinery and this includes the State share of Rs.
0.58 crore towards implementation of this programme during 2012-13 and the programme will be continued during 2013-14.

Agricultural Marketing and Quality Control

Agricultural marketing has become the key driver of the agriculture sector due to new market realities posed by increasing globalization and liberalization, and privatization of the economy. Agricultural marketing is the system that provides the critical link between farm and non-farm sector. Prime emphasis is given on focusing on aspects of strengthening of market infrastructure and marketing development. In Tamil Nadu, there are 277 regulated markets, 15 check posts, 164 rural godowns and 188 godowns functioning under the 21 market committees. The prime objective is to help the farmers in marketing their agricultural produce in a fair manner and to ensure remunerative returns to them.

Under the World Bank assisted IAMWARM project, 258 infrastructures viz:- 19 Agri Business Centres, 87 storage godowns, 138 drying yards, 13 collection centres and one pack house were created apart from provision of machineries like moisture meter and electronic weigh scale.

Most of the physical targets under marketing sector such as strengthening of regulated markets, establishment of terminal markets, creation of integrated cold storage facilities (Uzhavar Sandhai) and training the farmers on post harvest management and good agricultural practices have been achieved through the marketing funds.

Under NADP, market complex with cold storage for vegetables and fruits at Mettupalaym, Kinathukadavu, Trichy, and The Nilgiris are being established. Similar
structures for grapes and chillies are being established at Cumbum and Sankarankoil respectively. Facilities like own building construction, transaction shed and trader shops were done in selected regulated markets. Infrastructure facilities would be upgraded in select agricultural markets and they will be functionally integrated at a cost of Rs.15 crore under NADP. These markets would also be integrated with commodity exchanges like MCX and NCDEX. During 2013-14, Rs.20 crore has been provided for promoting agro processing industries under National Mission on Food Processing.

In order to encourage Private investment for development of marketing as well as value addition, Modern Terminal Markets with all value addition facilities in Public Private Partnership (PPP) mode will be established. These Modern Terminal Markets will act in Hub and Spoke Model. In the Hub common Infrastructure facilities like modernized grading and packing line, cold storage, ripening chamber, quality control laboratories, electronic auction centre etc., will be developed. Collection centers located at production area with modern Infrastructure facilities will act as Spoke Farmers’ Hub, an information dissemination platform and centre for solving all the field oriented problems at one spot is being established in 10 districts at a cost of Rs.14.97 crore.

Agri Business Centres (ABC) constructed under IAMWARM project is focusing on market linkage arrangement through MoU between commodity group farmers and traders/firms/private entrepreneurs to realize better remuneration by the farmers. During the Eleventh Five Year Plan, about 2106 commodity groups were formed and 1473 MoUs were made between farmers and traders. By utilizing all the infrastructure facilities and capacity building trainings, so far 68352 commodity group farmers earned an additional income of Rs.19.83 crore.

The post harvest management and storage infrastructure like modern godowns and cold storage units are being constructed under NABARD-Rural Infrastructure Development Fund (NABARAD-RIDF) to minimize the post harvest losses in food grains and perishables and also to facilitate the farmers to store their produce during glut season and avail pledge loan facilities.
An Agri-Market Intelligence and Business Promotion Centre is being established at Trichy to empower the farmers on price forecasting, high price period, best price market, quality parameters, pre and post harvest technologies for different agricultural commodities and export opportunities. Crop and market advisory services will be rendered to the farmers through this centre.

Other Agricultural Activities

Agricultural Education and Research

Agricultural education and research play a key role in development of agricultural human resources and sustainability of agricultural sector. It is also an imperative to enhance agriculture and allied sectors for profitability and sustainability in conjunction with quality. This requires continuous flow of technologies to suit the fast changing developmental scenario.

Tamil Nadu Agricultural University (TNAU) - Coimbatore

Broad strategies envisaged for achieving targeted agricultural growth in Tamil Nadu would cover four categories; a) Agricultural education to cater to the globalising agriculture needs, b) Research for innovative solutions, c) Putting innovative solutions into practice and d) Promoting agribusiness

The outcome of the plan schemes is exhibited in the form of number of students passing out of the University, release of improved crop varieties, production technologies and farm implements. Dissemination of technologies either at the farm level or in the form of trainings conducted at the Tamil Nadu Agricultural University (TNAU) research centres, through 14 Krishi Vigyan Kendras (KVKs) and 5 Plant Clinic Centres. The University also provides affiliation to six agricultural colleges to offer degree courses and eight agricultural institutes to offer diploma courses. A two year Diploma course in Agriculture at State Agriculture Extension Management Institute (STAMIN), Kudumiyanmalai has been commenced during 2012-13.

An insect museum has been proposed for identification and description of new insects besides revision of existing taxa and beneficial insects identified will be put into
use. In short, the museum will serve as a digitalized data repository for all known insects of India.

In order to bestow research in grapes and for encouraging production and export, a new Grape Research Station was established at Mallingapuram alias Annamalaiyanpatty, Cumbum valley of Theni district during 2012-13.

TNAU will continue to undertake various research, education and extension activities in the year 2013-14.

**Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) - Chennai**

The Mandate of TANUVAS is to impart education in different branches of veterinary and animal sciences, food sciences and conduct of research and extension service to the rural people. During 2011-12 academic year, a total of 249 students were admitted to bachelor degree programmes in veterinary, food technology and poultry production technology courses. Blue tongue multivalent inactivated vaccine, lateral flow test kit for sero diagnosis of brucellosis, inactivated leptospira vaccine to control leptospirosis in bovines, namakkal chicken1, Nandanam Guinea Fowl 1, Nandanam Turkey II, SIS LIVESTAN i A data base CD, n-3 fatty acids enriched chicken egg and meat, Multiplex PCR detection kit were the major technologies developed by the University. New Veterinary University Training and Research Centres were established at Villupuram, Thiruvannamalai and Krishnagiri district and help in diagnose and solve the problem faced by the farmers in the field and assist in implementing advanced techniques in veterinary and animal sciences.

TANUVAS will continue to undertake the various research, education and extension activities in the year 2013-14.

**Tamil Nadu Fisheries University (TNFU) - Nagapattinam**

The Government took a major policy decision to establish a separate Fisheries University, with an aim to increase the fish availability in the State for local consumption through igniting innovations at all levels. The Tamil Nadu Fisheries University has come
into existence on 19th June, 2012. The University has a Fisheries College and Research Institute at Thoothukudi, 4 Fisheries Research and Extension Centre viz:- Tharuvaikulam in Thoothukudi, Madhavaram in Chennai, Parakai in Kanyakumari and Thanjavur, 3 Institute of Fisheries Technology viz:- Ponneri in Tiruvallur district, Nagapattinam and Chennai; a Maritech Research and Extension Centre, Tharuvaikulam in Thoothukudi and a Staff Training Institute at Chennai

TNFU will continue to undertake various research, education and extension activities in the year 2013-14

**Plan Outlay for 2013-14**

For the year 2013-14, a sum of Rs.1231.85 crore is proposed for Crop husbandry, Rs.387.14 crore for Agricultural Research and Education, Rs.58.45 crore for Soil and Water Conservation and Rs.74.41 crore for Agricultural Marketing and Quality Control.

**Animal Husbandry**

Livestock and livelihood are closely interconnected in rural households. Livestock sector contribute significantly in generating employment especially self employment and increasing the income of small and marginal farmers besides providing nutritional security. With a total population of 307.59 lakh livestock and 1281.08 lakh poultry birds, animal husbandry sector plays a vital role in the rural economy. With the sustained efforts of the Government in implementing various programmes with judicious utilization of animal and natural resources in an eco-balanced way, the estimated milk production which was 35.24 lakh metric tonnes (LMT) during 1993-94, has increased to 69.98 LMT during 2011-12. During the same period, the estimated egg production has increased from 2919 million numbers to 11852 million numbers, and the estimated meat production has increased from 41.82 million kgs. to 460 million kgs. Such an increase has led to the increase in per capita availability of milk (262 grams) per day and egg (163 numbers) per annum.
Distribution of Milch cows at no cost scheme: To usher in Second White Revolution, the government implements distribution of milch cows scheme at no cost to 60,000 beneficiaries over a period of 5 years at a cost of Rs.232 crore. Under this scheme, 12000 milch cows would be distributed each year to the poor families in rural areas. The programme will be continued during 2013-14.

Free distribution of Goat /Sheep scheme: Under this scheme, each beneficiary will be provided with 3 female and 1 male (goat/sheep). This scheme is planned to be implemented in 5 years covering 7 lakh beneficiaries at a total cost of Rs.925 crore. From the inception of the scheme 1.25 lakh lambs were born. The programme will be continued during 2013-14.

Fodder development scheme is being implemented to bridge the gap in green fodder availability. Under this scheme, 24000 acres of land are to be brought under fodder cultivation and chaff cutters and grass cutter are to be distributed to the beneficiaries at 75 percent and 50 percent subsidy respectively.

Kalnadai Padukappu Thittam is being implemented from the year 2000, to cover both preventive and curative health aspects for animals. 5500 camps are proposed to be conducted per year. During 2013-14, another 100 veterinary sub centres will be upgraded into veterinary dispensaries. The Institute of poultry production and management is being established at Hosur at a cost of Rs.45.96 crore. Popularization of poultry in nontraditional areas has started yielding positive results. During 2013-14, an amount of Rs.25 crore is proposed to promote poultry in nontraditional areas.

Plan Outlay for 2013-14

For the year 2013-14, a sum of Rs.344.13 crore is proposed for Animal Husbandry sector.

Dairy Development

Tamil Nadu is one of the frontline State in milk production. Dairying provides regular income and employment to millions of rural families through the year. In Tamil Nadu, there are 9231 Milk Producers' Cooperative Societies with 22.26 lakh members.
About 24 to 29 Lakh Litre Per Day (LLPD) of milk is procured by cooperative societies. 62 Milk Consumers Cooperative Societies are functioning in the State for the benefit of the milk consumers. There are 17 District Cooperative Milk Producers’ Union functioning in the State with an installed capacity of 20.72 LLPD. In order to usher in Second White Revolution in the State, the following strategies are envisioned in the dairy sector: provision of doorstep veterinary and emergency health care service and subsidized artificial insemination services. Recently Aavin has introduced value added dairy products such as Chocolates.

Plan outlay for 2013-14

For the year 2013-14, a sum of Rs.65.10 crore is proposed for Dairy sector.

Fisheries

The fisheries sector in Tamil Nadu plays a crucial role in the overall economic development of the State. The rich fish bio-diversity of the State offers good scope for fisheries development. The present fish production is 5.97 lakh tonnes of which nearly 4.25 lakh tonnes is from the marine and 1.72 lakh tonnes is from inland fisheries. The major policies under this sector are: improving the standard of living of the fisherfolk by implementing various welfare schemes, protecting the fishing rights of the fishermen, developing and strengthening the infrastructure facilities for hygienic handling and processing of fishes.

It has been planned to enhance the fish production in the inland sector and strategies for full exploitation of inland resources are proposed. With this in view, it is proposed to strengthen the inland fisheries by augmenting the existing facilities in 2013-14.

Deep sea fishing will be encouraged, the existing 25% subsidy will be enhanced 50% to fishermen for procuring new tuna long liners and a sum of Rs.30 crore is proposed to conserve the fisheries wealth of the State and manage the resources for sustainable fish production. Towards this, mid sea fish processing unit and setting of artificial reef will be implemented.
For the welfare of fisher folk, financial assistance of Rs.4000 to marine fishermen families during lean seasons and Rs.2000 during fishing ban period, National saving-cum-relief scheme for marine fishermen/fisherwomen, Group Accident Insurance Scheme, Reimbursement of Central Excise Duty on High Speed Diesel, Sales tax exemption on sale of high speed diesel to fishermen etc., are being implemented. With a aim to provide possible help to marine fishermen during distress time, one touch SOS button in Very High Frequency (VHF) handheld sets and to establish an effective communication network in between fishing crafts in the sea and crafts with shore stations, a pilot project Seamless Communication Network Facilities to Marine Fishermen is being implemented at Ramanathapuram district. Under this scheme, it is proposed to distribute Short Wave (SW) capacity of handheld VHF sets to traditional fishermen free of cost and 25 W capacity with GPS fixed mount marine radios for the benefit of mechanized fishing boats on subsidized rates along with towers, VHF repeaters with tracking software to assess the movement of the boats from shore and base stations. The scheme is implemented through M/S ELCOT Ltd. Chennai.

Under infrastructure development, establishment of fishing harbourers, fish landing centres, fish processing parks, seamless communication networks and cold storage etc will be taken up during 2013-14.

**Plan outlay for 2013-14**

For the year 2013-14, a sum of Rs.356.17 crore is proposed for Fisheries sector.

**Irrigation and Flood Control**

Tamil Nadu is a water starved State. The annual per capita water availability in India is about 2200 m³ whereas it is about 750 m³ only in Tamil Nadu. There are about 78 major reservoirs, 41 thousand tanks and 18.36 lakh wells in the State. More than 95% of the surface water potential and 80% of groundwater potential have been put into use. There are 34 river basins in the State, which have been grouped into 17 major river basins and 127 sub basins. The total water potential of the State including ground water is 47,230 MCM (1668 TMC ft.) with 24,160 MCM (853 TMC ft.) of surface water potential including the contribution (7391 MCM or 261 TMC ft.) from the neighbouring
states, viz., Kerala, Karnataka and Andhra Pradesh. The Annual Ground Water Replenishable Resources of the State has been estimated as 811 TMCft., out of which, the Net Annual Ground Water availability has been assessed as 729.65 TMC ft. The Annual Ground Water requirement for all uses has been estimated as 585.30 T.M.C ft and the present ground water requirement for irrigation has been assessed as 519.83 T.M.C ft. Out of the 386 blocks in the State, 139 blocks have been categorized as over exploited, 33 blocks as critical, 67 blocks as semi-critical, 11 blocks as poor quality and the balance 136 blocks as safe. The Government has taken initiatives to recharge the ground water potential through rain water harvesting and recharge structures. Measures to curb the ingress of saline water into the inland have also been initiated. In addition, the Government is taking continuous efforts to improve the water use efficiency and service delivery mechanism of the irrigation sector, through capacity building at various levels.

**Minor Irrigation**

Tanks, wells and tube well are the important sources of minor irrigation and they contribute significantly to irrigated agriculture in Tamil Nadu. Nearly 21 L.ha. are irrigated by these sources. The Government of Tamil Nadu has been taking concerted efforts to augment and manage these resources and to make them sustainable in the long run through several schemes viz., Hydrology Project II, modernisation of tanks with the loan assistance from NABARD. IAMWARM project is another important component in this sector.

The Hydrology Project Phase II is implemented at a cost of Rs.25.47 crore for a period of 6 years from the year 2006 with World Bank assistance. In the month of April 2012, the project was extended upto 31.05.2014 and accordingly, the revised cost for Rs.36.30 crore has been prepared and got approved from World Bank. The project aims to make Tamil Nadu to practice improved water resources management in its river basins through the development of State-of-the-art tools like Decision Support Systems (DSS) and Hydrological Design Aids (HDA).
The 13th Finance Commission has recommended a Grant of Rs.200 crore for restoration of the 674 traditional water bodies over a period of 4 years from 2011-12 under State Specific Needs Grant. During 2012-13, efforts are being taken to execute 175 works at a cost of Rs.50 crore in the second phase.

Irrigated Agriculture Modernization and Water bodies Restoration and Management project (IAMWARM) at a cost of about Rs.2547 crore is a multidisciplinary perspective project. The objective of the project is to improve the sustainable productivity in irrigated agriculture, on an integrated approach and to build a frame work for effective water resources management in Tamil Nadu with World Bank assistance involving line departments. Rehabilitation works in 3277 tanks, 563 anicuts and 5900.20 km length of supply channel have been completed thereby an ayacut of 3.81 lakh ha have been benefitted at an expenditure of Rs.784.31 crore. By utilizing the savings, proposals for rehabilitation of left out infrastructure in 31 IAMWARM sub basins for an amount of Rs.242.07 crore are under preparation.

Plan Outlay for 2013-14

An amount of Rs.45.57 crore is proposed for Minor Irrigation sector for the year 2013-14.

Command Area Development Programme

Command Area Development and Water Management Programme (CADP) has been implemented in the State with an aim to improve water use efficiency in canal irrigated areas. The programme is implemented with the financial assistance from Central and State Governments on 50: 50 sharing basis. The On-Farm Development (OFD) works like construction of field drains are taken in the command areas. The programme is being implemented in Vaigai project, Kodaganar reservoir project, Varadhamanadhi reservoir project, Kalingarayan anicut project, Pelanduri anicut project, Cheyyar anicut system, Ellis anicut project and Manimuktha Nadhi system during 2012-13. It is proposed to continue the scheme in the above commands during 2013-14.
Plan Outlay for 2013-14

An amount of Rs.19.41 crore is proposed for the year 2013-14 for Command Area Development. In addition, an amount of Rs.19.41 crore is expected to flow through central assistance.

Major and Medium Irrigation and Flood Control

Strengthening the irrigation infrastructure is the most important prerequisites for sustainable growth of agriculture sector. Therefore, the State focuses on irrigation infrastructure development. Under the Major and Medium Irrigation, schemes like IAMWARM project and Restoration of Channels system canals are taken up. Desilting, widening and strengthening works under ETRP (Emergency Tsunami Reconstruction Project) with assistance from World Bank are also undertaken.

Under Intralinking of river project, following links are proposed 1) Cauvery-Agniarsouth Vellar-Manimuthar-Vaigai-Gundar, and 2) Tamiraparani-Karumeniar-Namibiar. With respect to Cauvery-Gundar inter linking project, construction of barrage across the Cauvery River below 250 m from the existing Kattalai bed regulator in Karur district at an estimate of Rs.234 crore is in progress and so far, 72% of works has been completed at a cost of Rs.140.71 crore as a first stage of this link. With respect to Tamiraparani-Namibiar link, formation of a flood carrier canal from Kannadian Channel to drought prone areas of Sathankulam and Thisaiyanvilai by interlinking Tamiraparani, Karumeniyar and Nambyar rivers in Tiruneveli and Thoothukudi districts at a cost of Rs.369 crore is in progress. In anticipation of approval under Accelerated Irrigation Benefits Programme (AIBP) an expenditure of Rs.173.93 crore has been incurred so far for this scheme and by implementing this scheme, an extent of 23040 ha. of lands will be benefitted.

The Dam Rehabilitation and Improvement Project (DRIP) with World Bank assistance aims to restore the capacity of the dams, achieve effective utilization of stored water and manage the long-term performance of the dams. It has been proposed to improve and rehabilitate 66 dams under the Water Resources Department (WRD) and 38 dams under the control of the Tamil Nadu Generation and Distribution Company.
at a cost of Rs.745.49 crore over a period of 6 years, in 4 phases, from 2012-2013. Agricultural Engineering Department is the other participating department in the project.

In Tamil Nadu, the behavior of the sea field varies throughout the year. It is of utmost importance that the coastline of the State should be sufficiently protected from sea erosion. The 13th Finance Commission constituted by the Government of India has recommended a Grant of Rs.200 crore for coastal protection works over a period of 4 years from 2011-2012. On priority, vulnerable reaches have been identified and coastal protection works in 7 districts have been recommended. During 2012-13, 15 coastal protection works at a cost of Rs.85.10 crore are in progress in second phase.

Under Renovation of existing irrigation channels, tanks and strengthening of dams, Upgradation of Peikulam, Korapallamkullam and Korampallamkulam reserve tanks at Thoothukudi district, construction of check dams across Kosasthalaiyar near Thirukandalam village, Thiruvallur district, construction of bed dam across Vaigai river in Manamadurai taluk of Sivaganga district, linking PAP system to Upper canal in Thoothukudi district, rehabilitation and raising the existing RMS wall in Thiruvallur district and construction of Groynes from Ennore to E.Kuppam in Thiruvallur district with loan assistance from NABARD under RIDF-XVIII are proposed during the year 2013-14. Rehabilitation of Thovalai channel, Modernization of Melmangalam supply channel in Melmangalam village, modernization of Jeyamangalam anicut supply channel in Jeyamangalam village and modernization of right main canal of Manjalar dam in Devadanapatti village of Periyakulam taluk in Theni district are in the final stages of completion. Modernization of 10th B.C. and construction of bye-pass channel to feed Chunnambar distributors and modernization of connected 12 tanks in Madurai district, rehabilitation works in Kondamari Odai in Madurai district, modernization of Ramnad big tank in Ramanthapuram district are nearing completion.

Plan Outlay for 2013-14

A sum of Rs.1324.79 crore is proposed for 2013-14 for Major and Medium Irrigation and Flood Control.
Co-operation and Public Distribution System

Co-operatives

Co-operative societies play an important role in the economy especially in areas such as agricultural credit, distribution of fertilizers and other agricultural inputs, storage and marketing of agricultural produce, dairies, fisheries etc. In the State, to cater to the credit needs of agriculture and rural development, a State Apex Cooperative Bank (TNSACB), a State Cooperative Agriculture and Rural Development Bank (TNSCARDB), 23 District Central Cooperative Banks (DCCB), 4534 Primary Agricultural Cooperative Credit Societies (PACCS) and 180 Primary Cooperative Agricultural and Rural Development Banks (PCARDB) are effectively functioning. Besides, to meet the credit needs of urban people 120 Urban Cooperative Banks (UCB) and One Tamil Nadu Cooperative Urban Bank Federation (TNCUBF) are functioning in the State.

The State has fixed the crop loan target of the Co-operative sector at Rs.4,500 crore for the year 2013-2014. Interest subvention scheme is applicable to the prompt repayers.

On the analogy of the Self Help Groups, Joint Liability Groups will be formed for providing loans for cultivation operations. The National Co-operative Development Corporation (NCDC) provides assistance in the form of loan and subsidy to Cooperative Institutions and the State government sanctions a matching subsidy. The aim of the scheme is to achieve area based development rather than society based development. It also aims at improving the infrastructural facilities for the cooperatives in the entire area. The scheme was successfully implemented in Virudhunagar, Thiruvannamalai, Kancheepuram, Ramanathapuram, Villupuram, Cuddalore, Dharmapuri, Coimbatore, Thanjavur, Thiruvarur, Thiruchirapalli and Perambalur districts. The scheme is being implemented in Salem, Erode, Madurai, Tirunelveli, Sivagangai, Dindigul, Pudukottai, Karur, Nagapattinam and Vellore districts.

The constraints for promotion of mechanization include non standardized agricultural practice, small and marginal land holdings, low investment capacity of farmers, lack of know-how and non availability of service and maintenance facilities.
Policy and structural mechanisms will be developed to address these issues and support increased mechanization in all the phases of agriculture. Subsidy will be given to Primary Agricultural Cooperative Credit Societies (Rs.20 lakh/PACCS) for procurement of farm machinery and to let them for custom hiring to the farmers. 20 solar drying units for copra in cooperatives has been set up during 2012-13 with NADP funding.

The borrowing power of a member is linked to share capital subscriptions. The members belonging to weaker sections and other farmers have to contribute 5 percent and 10 percentages respectively of their borrowings as share capital. But the women, SC/ST/ belonging to weaker sections are finding it difficult even to contribute the share capital for availing the loan facility extended by the Primary Agricultural cooperative Credit societies and other banks. The sanction of share capital at Rs.5000/- per women member will enable them to raise loans for agricultural and other need purpose, which will generate employment opportunities for women/weaker sections.

**Plan Outlay for 2013-14**

A sum of Rs.481.61 crore is proposed for Co-operation sector.

**Civil Supplies**

Universal food security is the core objective of food policy of the State. The policy of the State Government is to ensure adequate supply of essential commodities of acceptable quality at an affordable price to the general public, particularly the poor. The State is keen to ensure that the benefits of the Public Distribution System (PDS) reach the poorest of the poor.

Public Distribution of essential commodities in the State of Tamil Nadu continues to follow the Universal Public Distribution System but not the Government of India’s later Targeted Public Distribution System (TPDS). The Public Distribution System in Tamil Nadu is specially focused on assuring food security for the deprived poor as it covers all families and is based on the choice of the people. All cardholders who opt to buy rice from the Public Distribution System shops are given rice upto 20 kg/month free of cost.
with effect from 1.6.2011. To control the prices of essential commodities like pulses, oil, as a temporary measure, a special scheme to supply Tur dhall, Urad dhall, fortified Atta and palmolein oil is being implemented.

**Consumer Awareness Activities**

Government has set up Tamil Nadu State Society for Consumer Protection and Empowerment (TANSSCOPE). The society is undertaking consumer protection and awareness creation activities by raising the funds from various agencies including international agencies. The society is engaged in running the State Consumer Help Line (SCHL) (044-28592828 and consumer @tn.gov.in), publishing monthly journal *Nugarvor Kavasam* conducting training programs, consumer festivals, outreach camps and workshops. Formation of Citizen Consumer Clubs (CCC) is actively encouraged in all schools, colleges and polytechnics to enable the students to develop into pressure groups in consumer movement. CCC have been established in 1000 schools and in 500 colleges.

**State Consumer Welfare Fund**

The Government has constituted Tamil Nadu State Consumer Welfare Fund with contribution from State and Centre as seed money @ Rs.0.50 crore each. The fund is being utilized to promote consumer education and research. To strengthen this fund Government of India has proposed to set up a corpus of Rs.10 crore with a Central and State contribution in the ratio of 75:25.

The Government of Tamil Nadu procure and distribute **Electric Fans, Mixies and Grinders** from 2011 and 25 lakh families is being covered during 2011-12 and that women beneficiaries belonging to families holding family cards which are eligible for drawing rice will get this benefit and all of them will be covered in a phased manner. Since the electric fans may not be of much utility in hill areas like The Nilgiris district and Kodaikanal area of Dindugul district, it is decided to provide Induction Stove in those areas. The PDS of the State will be improved by introducing technological innovations in family card management, tracking movement of stocks, monitoring allotment and distribution of essential commodities to control diversions.
The Government has already constituted a Price Stabilisation Fund of Rs.50 crore for procuring and distributing essential commodities at cost price in emergent situations. During 2013-14 the scheme will be implemented with an outlay of Rs.100 crore. All the existing welfare schemes will be integrated with biometry based unique identification system to improve the delivery of Government services.

Plan Outlay for 2013-14

A sum of Rs.1500.00 crore is proposed for 2013-14.