#### Tamil Nadu Innovation Initiative (TANII)

# Minutes of the State Planning Commission on the appraisal of the Innovative proposals 2017-18 (Second Round)

Tamil Nadu Innovation Initiatives (TANII) in the State Planning Commission is to promote innovation in Government and Government Agencies. The State Innovation Fund was established in the State Planning Commission would finance new schemes if they are truly innovative in nature. Accordingly, every year there will be two rounds of sanction of financing from the State Innovation Fund. For the year 2017-18, in the first round appraisal, 27 proposals worth of Rs.68.83 crore were recommended for funding under TANII. The second round of proposals received from the Government Departments for the year 2017-18 have been appraised by the State Planning Commission in the meeting held on 5.10.2017 and 6.10.2017. During the appraisal meeting 59 proposals were appraised and a shelf of (39) recommended proposals prepared.

ii) The details of decision/ recommendation of the State Planning Commission are as follows:

#### AGRICULTURE DEPARTMENT

6 proposals of the Tamil Nadu Agricultural University have been forwarded by the Agriculture Department at a cost of Rs.2206.64 lakh for assistance under TANII.

Status of the recommendation of the State Planning Commission on each project is furnished below:

## 1) Ensuring Supply of Uniform and Quality Planting Material in Coconut through Micro Propagation

The main aim of the project is – to establish a state-of-the-art infrastructure for invitro multiplication and mass production of quality coconut seedlings and to develop a reliable, reproducible and cost effective protocol for rapid multiplication of true to type coconut seedlings through tissue culture /micro propagation.

Further, this proposal aims for establishment of a dedicated tissue culture facility at Tamil Nadu Agricultural University, Coimbatore for mass multiplication of elite coconut genotypes and thereby to reduce the gap between demand for coconut seedling and its supply.

The innovative technology envisages a quantum jump in the multiplication rate (1:1 in the case seed nut propagation) to 1:20 by using rapid multiplication protocols *viz.*, somatic embryogenesis as a viable approach - *in-vitro* plant regeneration. The above innovative technology will help to meet the demand for ten million quality planting materials per year of which only 3-3.5 million seedlings could be met by the existing conventional techniques. The total proposed outlay is Rs. 1105.00 lakhs

After having discussion on this project, the State Planning Commission has recommended this proposal for funding at the ratio of 60:40 between TANII and the

Coconut Board. Therefore, the commitment under TANII is Rs. 663.00 lakhs only for a period of three years.

#### 2) Sustainable Crop Pollination Initiative (SUSPOLLIN)

Sustainable Crop Pollination Initiative (SUSPOLLIN) is proposed to implement in 4 districts (Coimbatore, Erode, Then & Dindigul) through TANU colleges/ Research stations at a cost of Rs.162.60 lakh for two years.

The main aim of the project is to ensure high level of crop productivity and enhance farmer income by keeping honey bees in cross pollinated crops and by following Integrated Pollinator Management (IPoM).

After having discussion on this proposal the State Planning Commission is observed that the project is lacking innovativeness and as similar projects are being implemented by KVIB, NHB and suggested to study the project to find out how the proposed project is innovative than the existing similar programmes. Accordingly, the proposals are not recommended as of now.

# 3) Enhancing Pulses Productivity Through Modified Cultural Practices in Cauvery Delta Region of Tamil Nadu.

The project aims to modify the existing rice based cropping system into pulses based cropping system and enhancing the pulses productivity through the intervention like empowering the farmers in the recent advances in pulses production, adoption of pulse based farming system, value addition and group marketing.

The project intends for aggregating the farmers as a Farmers Producing Organization. Moreover, in order to enhance the income, the project envisages for implementation of resource based integrated faming system for various ecosystem in Orathanadu block, Thanjavur district.

After having discussion on this proposal the State Planning Commission has observed that since the proposed scheme involves change of cropping pattern in the delta area and hence suggested to resubmit with the remarks of Cauvery Technical Cell.

# 4) Promoting Holistic Crop Health Management Technologies for Horticultural Crops in Krishnagiri and Dharmapuri Districts.

Promoting Holistic Crop Health Management Technologies for Horticultural Crops in Krishnagiri and Dharmapuri Districts at a cost of Rs.174.92 lakh for 2 years.

The main aim of the project is awareness building and motivation for local production of important bio-inputs among the multitude of horticultural farmers at grass root level to ensure wider technology adoption.

After having discussion on this proposal, the State Planning Commission has decided to return this proposal for rework with details on the innovation.

### 5) Skill Development and Employment Generation in Palmyrah Based Ventures for Rural Youth.

Skill Development and Employment Generation in Palmyrah Based Ventures for Rural Youth at a cost of Rs.162.04 lakh for 2 years.

The project includes the establishment of the pilot plant for production and processing the palmyrah which impart training to the rural youth for production of edible palmyrah products in Thoothukudi, Tirunelveli, Virudunagar, Ramanathapuram, Sivaganga and Pudukottai Districts. The Project also includes establishment of shade net house for production of quality *palmyrah* seedlings. The above said establishments are to be established in AC&RI, Killikulam and DC&RI Chettinad of TNAU.

After having discussion, it is decided to fund the equipment cost and training cost may be met from the Skill Development Mission which has systematic procedure in identification of youth for imparting training on skill development for various sectors and to avail the services. Accordingly, the commitment under TANII is only Rs.136.50 for equipment cost.

#### Optimizing Farm Mechanization Practices for Different Soil Types and Crops of Madurai District.

Optimizing Farm Mechanization Practices for Different Soil Types and Crops of Madurai District at a cost of Rs.166.00 lakh for 2 years.

The project proposes for the development of feasible soil based farm mechanization strategies for small and medium farmers for timely field operation and reducing the labour dependency in Madurai district.

Considering the efficiency, usage, fitness and capability of the farm mechanisms and identification of suitable implements based on soil type, it is decided to fund this project under TANII.

Accordingly, the State Planning Commission has recommended this project as proposed subject to impact evaluation study by the independent agency.

#### ANIMAL HUSBANDRY, DAIRYING AND FISHERIES DEPARTMENT

Two proposals of Tamil Nadu Fisheries University at a cost of Rs.1627.25 lakh have been forwarded by the Animal Husbandry, Dairying and Fisheries Department for assistance under TANII.

The status of recommendation of the State Planning Commission on each of the proposal is furnished below.

# 7) Artificial Coral Reef (ACR) and Fish Aggregating Artificial Reef (FAAR) to enhance biodiversity of Pulicat lake and to develop entrepreneurship through cage farming.

Artificial Coral Reef (ACR) and Fish Aggregating Artificial Reef (FAAR) to enhance biodiversity of Pulicat lake and to develop entrepreneurship through cage farming at a cost of Rs.830.25 lakh for three years.

The main aim of the project is to design and fabricate Artificial Coral Rocks(ACR), design & develop different types of FAAR for restoration of fish stocks in Pulicat lake, study the succession of biotic assemblage in and around FAAR & ACR, to enhance the livelihood of fishers through Mud Crab fattening and fish farming in FRP Cages and thereby restoration of ecosystem of the lake.

After having discussion on this proposal relating to clearance issue from the Forest Department, is decided to agree in principle and to get Detailed Project Report for this project. Accordingly, the State Planning Commission has agreed to in principle and hence resubmit with the Detailed Project Report proposals.

# 8) Tilapia Entrepreneurial Park Development for Industrialization of Tilapia Culture in Palar Porandarar Dam (Dindigul District)

Tilapia Entrepreneurial Park Development for Industrialization of Tilapia Culture in Palar Porandarar Dam (Dindigul District) at a cost of Rs.797.00 lakh.

The main aim of the project is industrialize the tilapia culture in advanced aquaculture system and increase the production system and to develop the supply chain and standard operating procedures.

After having discussion on this proposal is decided to get detailed estimation, fishing modalities, concurrence from Public Works Department etc., it is decided to agree in principle and this may be considered in 2018-19. Accordingly rework and revisit.

#### **ENVIRONMENT AND FOREST DEPARTMENT**

Five proposals of Forest Department worth of Rs.233.50 lakh have been forwarded by the Environment and Forest Department for assistance under TANII.

The status of the recommendation on each proposal are furnished below:

# 9) Providing 300 litre fermentor and mixing blender - 50 kg capacity in Modern Nursery Division, Dharmapuri

This proposal is for providing 300 litre fermentor and mixing in blender at a cost of Rs.12.00 lakh.

Fermentation is a key to generating bio fuels, and bio fuels refineries are becoming a part of agri business, linking agriculture to the energy sector. This project is likely to forge a link between agricultural related research and engineering.

After having discussion on this proposal, it is decided to fund this under TANII. Accordingly, the State Planning Commission has recommended this proposal for Rs.12.00 lakhs for a period of three years.

### 10) Creation of Bio-fence along Forest boundary to improve the habitat of Slender Loris

This proposal is for Creation of Bio-fence along Forest boundary to improve the habitat of Slender Loris at a cost of Rs.37.60 lakh.

Bio-fence materials such as Thirugu Kalli (*Euphorbia*) and Kiluvai will be collected from the Patta fields and will be planted along the boundary of Reserved Forests. It is proposed to erect bio-fence along the forest boundary in Dindigul division to an extent of 30 kms and in Karur Division to an extent of 10 kms and this bio-fence will be maintained for minimum of two years.

After having discussion on this proposal it is decided to fund under TANII for Dindigul district for a length of 30 kms. Accordingly, the State Planning Commission, has recommended the proposal with a restricted outlay of Rs. 27.60 lakhs for Dindigul district only.

#### 11) Restoration of Native Grass land in Kodaikanal Division.

This proposal is for restoration of native grass land in Kodaikanal Division at a cost of Rs.164.01 lakh.

Grasslands comprise a very important Eco system in the shoal grass lands of Kodaikanal hills. A large extent of these grasslands have been encroached by invasive species such Wattle and Pine. Restoration of Native Grassland is essential for conservation of Biodiversity and recharging of groundwater regime.

After having discussion on this proposal relating to the status of previous study on similar issue, planning the sequence of works, duration of the project etc. this proposal is considered for initial cleaning and removing of invasive species and raising of nursery planting for this year.

Accordingly, the State Planning Commission has recommended to agree in principle and funding for initial cost of removing the invasive species and raising of nursery planting for this year by excluding cost of computers and accessories. Therefore, the State Planning Commission recommended for 50 hectares at a reduced outlay of Rs. 84.70 lakhs.

# 12) Composting the bio waste generated in State Forest Research Institute through modern machinery and techniques.

This proposal is for composting the bio waste generated in State Forest Research Institute through modern machinery and techniques at a cost of Rs.10.00 lakh.

This is for Installation of machineries, its operation and production of compost from the bio waste at State Forest Research Institute, Kolapakkam, Chennai -600 127 at a cost of Rs.10.00 lakhs and the duration is 1 year.

After having discussion on this proposal, it is decided to fund this under TANII for 2017-18. Accordingly, the State Planning Commission has recommended this proposal as proposed.

# 13) Development of Novel expression markers to aid in the screening of tamarind genotypes for superior fruit characteristics.

Development of Novel expression markers to aid in the screening of tamarind genotypes for superior fruit characteristics at a cost of Rs.9.89 lakh.

This proposal is to study and elucidate the biosynthesis of the anthocyanin by doing transcriptomic gene mapping analyses and to develop an expression based marker system for screening elite genotypes of high anthocyanin content.

After having discussion on this proposal, it is considered to fund this under TANII. Accordingly, the State Planning Commission has recommended this proposal as proposed.

#### HANDLOOM, HANDICRAFTS, TEXTILES AND KHADI DEPARTMENT

# 14) Promoting heritage and handicrafts of Tamil Nadu through Virtual Reality Showrooms.

This proposal of Tamil Nadu Handicrafts Development Corporation Ltd has been forwarded by the Handloom, Handicrafts, Textiles and Khadi Department at a cost of Rs.216.67 lakh under TANII.

This will create a state-of-art Immensive Virtuality Reality (VR) Gallery and Showroom in key locations such as airports, mall, etc., located in Chennai, Mumbai or Delhi.

Further, it is proposed to setup an Integrated Turnkey bundle for Hardware and Software for setting up the immensive VR showroom with a 4 user simultaneous usage setup will be ideal shopping experience in groups with computer and other accessories for a sum of Rs. 216.67 lakh.

Discussion had on the issues such as content operation, agency identification through tender process, covering of Departments like, Tourism, Hindu Religious and Charitable Endowments, Co-optex, Forest etc.

Considering the Revenue generation issue, this proposal has been recommended by the State Planning Commission as proposed.

#### 15) Introduction of Organic Sericulture to Sericulture farmers.

This proposal of Sericulture Department has been forwarded by the Handloom, Handicrafts, Textiles and Khadi department at a cost of Rs.116 lakhs under TANII.

Organic Sericulture is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way to keep the soil alive and in good health by use of organic wastes and other biological materials along with beneficial microbes (bio-fertilizers) to release nutrients to crops with small and marginal 200 farmers at a cost of Rs.58000/- per farmer as 100% subsidy.

After having discussion, this proposal has been reverted back to come with revised proposal with farmers' contribution.

#### 16) Installation of LED lighting for 6 functional Co-operative Spinning Mills.

This proposal of Handlooms and Textiles has been forwarded by the Handloom, Handicrafts, Textiles and Khadi Department at a cost of Rs.50 lakhs under TANII.

This is for replacement by LED light in 6 co-operative Spinning Mills.

As this is to meet energy demand and it will save energy cost, this may be done as Energy Services Company (ESCO) model and the resultant saving cost may be adjusted against the initial cost i.e 50% being funded by the TANII. Agreed in principle to fund 50% of initial cost. Accordingly, this proposal has been reverted back to come with revised proposal.

#### 17) Purchase of Handloom Mobile Express

This proposal of Handlooms and Textiles has been forwarded by the Handloom, Handicrafts, Textiles and Khadi Department at a cost of Rs.66 lakhs under TANII.

This proposal aims to reach the Handloom products to the public at their convenient places such as road, street, shandai etc. for effective sales.

However, it is decided to fund the cost of one vehicle only under TANII. Accordingly, the State Planning Commission has recommended the cost of one vehicle only at a restricted outlay of Rs. 30.00 lakhs under TANII.

# 18) Installation of Design and Development of Industrial Combined Washing and Hydroextractor for Silk materials.

This proposal of Handlooms and Textiles has been forwarded by the Handloom, Handicrafts, Textiles and Khadi department at a cost of Rs.15 lakhs under TANII.

This proposal aims to increase the production and quality of silk by reduced labour and time through the combined washing and hydroextractor machine of 2 kg. capacity.

After having discussion, the State Planning Commission has recommended this proposal with the sharing pattern of 60:40 between the TANII and Society. Accordingly, the recommended outlay is Rs.3.00 lakhs for one society only.

#### HEALTH AND FAMILY WELFARE DEPARTMENT

Fourteen proposals of Tamil Nadu State Health Society, Department of Medical Education and Department of Public Health and Preventive Medicine have been forwarded by the Health and Family Welfare Department at a cost of Rs.11580.23 lakhs for assistance under TANII.

# 19) Strengthening the Neuro departments in Medical College Hospitals to handle head injury cases.

Strengthening the Neuro departments in Medical College Hospitals to handle head injury cases at a cost of Rs.450.00 lakh.

This proposal enables the surgeons in these hospitals to perform the surgeries on brain and spine immediately and the patient need not be shifted to higher center. This reduces the time of surgery and hence this will lead to improvement in the treatment outcome leading to reduction in mortality and morbidity.

After having discussion on this proposal the State Planning Commission has not recommended this proposal for assistance under TANII.

#### 20) Establishment of Clinial Simulation Skill Labs in 7 Medical college hospitals

Establishment of Clinical Simulation Skill Labs in 7 Medical college hospitals at a cost of Rs.3255.00 for 3 years.

This project is integrating simulation into traditional teaching models- classroom lectures, tests on paper, reliance on books and printed material- improves learner proficiency and offers them a more progressive and comprehensive skill set. Any scenario can be demonstrated and practiced in Simulation labs, which will be practiced with the guidance of Manikins (Airway, Full body, BLS and ALS Manikins) which can be arranged according to scenarios.

After having discussion on this proposal, it is decided to fund this project in a restrictive manner as furnished below:

- (i) equipment cost full
- (ii) staff cost for first year
- (iii) training cost from NHM
- (iv) no funding for civil work

Accordingly, the State Planning Commission has recommended to fund this project as mentioned above. The commitment of TANII is Rs. 1085.00 lakhs only.

# 21) Establishment of Emergency Care Centers (ECC) in 5 high accident prone areas (PHC and Sub-district hospitals)

Establishment of Emergency Care Centers (ECC) in 5 high accident prone areas (PHC and Sub-district hospitals) at a cost of Rs.521.10 lakh for 3 years.

The project aims to establish ECCs which stabilizes critical trauma and medical emergencies within the golden hour, thereby providing a longer window period for survival and reduces complication. The ECC will be co-located in a Government hospital/ PHC.

After having discussion on this proposal the State Planning Commission has recommended this project for two centres only i.e. Soolagiri and Sriperumbudur which needs revision of cost accordingly. Hence, the arrived commitment under TANII is Rs. 208.44 lakhs.

### 22) Establishment of Block Early Intervention Centre

Establishment of Block early intervention centre at a cost of Rs.735.12 lakh for 3 years.

The District Early Intervention Centers under Rashtriya Bal Swasthya Karyakram (RBSK – an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability under NHM) have started functioning in all the 31 districts of Tamil Nadu, lot of children are being diagnosed with conditions requiring daily intervention. Due to distance in travel to the DEIC many children are lost to follow up.

It is proposed to establish Early intervention centre at Block level with one Physiotherapist, Special educator, caregiver and sanitary worker. To avoid tedious travel of the parent and child to the DEIC at Medical College or District Head Quarters Hospital and to ensure continuum of care and increase accessibility. The Specialists from DEIC will be visiting the BEICs as per their Advance Tour Programme (ATP). The target population is children of age 0-18 years. A Pilot project was undertaken by NHM through NGO in 2 Districts- Cuddalore and Thoothukudi. The centers in the above 2 districts would serve partially for training and mentoring purposes.

After having discussion, the State Planning Commission has agreed to in principle and it is suggested to have discussion with the Commissioner of Differently Abled Persons for staff component except equipment which could be met from TANII fund. Hence, the arrived commitment under TANII is Rs. 115.20 lakhs.

# 23) Establishment of Reverse transcription polymerase chain reaction – RTPCR (Real Time PCR) testing centres in 5 Medical College Hospitals (Salem, Dharmapuri, Vellore, Villupuram, Thanjavur)

At present, the Real Time PCR equipment which is used for the diagnosis of Swine flu - AH1N1, Hepatitis-C, HSV, Enterovirus, Scrub typhus, etc is available in the following Medical Colleges / Hospitals only (RGGH, Madurai, Coimbatore, Tirunelveli, Trichy, Theni). The Suspected Cases from other districts have to travel to these 6 centers for testing. This is a tedious process especially during epidemics. Hence availability of testing facility in 5 more Medical College hospitals helps in quick confirmation of suspect cases and ruling out the diagnosis. The project is proposed for 3 years. The total project cost is Rs.566.25 lakhs.

After having discussion on this proposal, the State Planning Commission has recommended to fund for machinery and equipment cost only, Hence, the arrived commitment under TANII is Rs.218.25 lakhs only.

# 24) Establishment of 5 De-addiction Centers in Dharmapuri, Trichy, Tiruvannamalai, Salem, Tirunelveli

Establishment of 5 De-addiction Centres in Dharmapuri, Trichy, Tiruvannamalai, Salem, Tirunelveli at a cost of Rs.1024.06 lakh for 3 years.

There is a need to strengthen and implement mental health policies and programmes for improvement of mental health service. We require focused programmes in the areas which are often missed such as child mental health, adolescent mental health, geriatric mental health, de-addiction services, and suicide and violence prevention. 3 De-addiction centers are under process of establishment at Kancheepuram, Tiruppur and Cuddalore. The activities under de-addiction center involve a major component from Ayurveda, Homeopathy, Siddha and Unani (AYUSH) related health care services. Since the number of TASMAC shops have been reduced, the people may develop withdrawal symptoms which have to be taken care of. The project aims to establish 5 De-addiction Centres in Dharmapuri, Trichy, Tiruvannamalai, Salem and Tirunelveli. The project is proposed for 3 years at a total project cost of Rs.1024.06 lakhs.

After having discussion on this proposal, the State Planning Commission has agreed to in principle and instructed the Mission Director to have a discussion with the Prohibition and Excise Department for the staff component.

# 25) Establishment of Centre of Excellence for poison management at Government General Hospital (GGH), Chennai.

Establishment of Centre of Excellence for poison management at Government General Hospital (RGGH), Chennai is proposed at a cost of Rs. 207.22 lakhs. This will also serve as a training centre for the staff from peripheral institutions and thereby helps to manage cases in their hospitals. The project is proposed for 3 years.

After having discussion on this proposal, the State Planning Commission has not recommended this project under TANII taking into consideration of existing setup available in Tamil Nadu Health System Project.

# 26) Establishment of Cochlear Implantation centre in 5 Medical colleges – (GIFT a EAR) Salem, Tirunelveli, Dharmapuri, Thanjavur & Chengalpet

Establishment of Cochlear Implantation centre in 5 Medical colleges – (**GIFT A EAR**) Salem, Tirunelveli, Dharmapuri, Thanjavur and Chengalpet at a cost of Rs.451.50 lakh for 3 years.

This center will provide facility for advanced surgery and facilitate to perform Cochlear Implantation. This will also act as training centre for the ENT surgeons. This ensures that no deserving child remains deaf due to financial constraints or inaccessibility to the equipped health institutions. The target population is, all children less than 6 years with hearing impairment at birth.

After having discussion on this proposal the State Planning Commission has recommended to fund this project only for equipment cost and recurring cost may be met from the insurance funding. Hence, the arrived commitment under TANII is Rs.375.00 lakhs only.

### 27) Strengthening the Hemodialysis units in primary Care Institutions

This proposal is for strengthening the Hemodialysis units in Primary Care Institutions at a cost of Rs.900.00 lakhs.

In the Tamil Nadu Government sponsored Chief Minister's comprehensive Health Insurance Scheme (CMCHIS), Maintenance Hemodialysis is the most utilized package and the financial pay out for Maintenance Hemodialysis is Rs.198.8 crore in five years (2012-16) and is second only to Percutaneous transluminal coronary angioplasty (PTCA) which cost Rs.201.4 Crore in five years. The scheme provides about 2,60,000 sittings of hemodialysis annually to more than 25,000 individuals suffering from Chronic renal failure. Out of this, 93.9% of the services are provided by the Private hospitals and the remaining 6.1% was by the Government hospitals. In addition to this, Government hospitals provide Hemodialysis free of cost to those who are not covered by insurance and those who are covered by insurance but exhausted the sum insured. Currently 23 Government Medical College hospitals, 31 District Head Quarters hospitals and 6 Sub

District hospitals provide on an average 14239 cycles of Hemodialysis to 2192 patients per month (Juy-2017) and their capacity is already over stretched.

As this is proposed to strengthen the dialysis facilities with hemodialysis machines along with the Reverse Osmosis facility and on deliberation made in this year, the State Planning Commission has recommended this project under TANII as proposed.

# 28) Establishment of TAEI Centre at IIT Madras – Development of Comprehensive registry for trauma care in Tamil Nadu

This project is for establishment of TAEI Centre at IIT Madras – Development of Comprehensive registry for trauma care in Tamil Nadu at a cost of Rs.1511.00 lakhs for 3 years.

This centre will attempt to disrupt the traditional boundaries of the ecosystem by bringing in innovative technologies, processes and registry of trauma care. This centre will be working on many key aspects such as, assisting in developing comprehensive registry for trauma care in Tamil Nadu, developing technology-based system to assist TAEI program in Tamil Nadu ec. In addition to that, this centre will be helpful in assisting and auditing in implementing lean principles for TAEI service delivery leading to continuous Improvement by horizontal deployment of best practices.

After having discussion on this proposal, the State Planning Commission has agreed to in principle and instructs the Mission Director to have a discussion with the Tamil Nadu Road Sector Project.

# 29) Comprehensive Plan for Surveillance, Prevention and Control of Epidemic Prone Infectious diseases and Management in Tiruppur district.

Comprehensive Plan for Surveillance, Prevention and Control of Epidemic Prone Infectious diseases and Management in Tiruppur district at a cost of Rs.500 lakhs for one year.

The project aims to:

- (i) Create 24 hours fever management centres in all Govt. health facilities of Tiruppur Health Unit District.
- (ii) Establish Fever Surveillance of both OP and IP care in these centres, adopted from the Surveillance model of Tiruvallur project.
- (iii) Improve Laboratories with equipment and other facilities for diagnosing the fever cases and improving the lab based surveillance.
- (iv) Capacity building and better management of all OP/ IP fever cases. An infectious diseases ward will be established in the available building space of all the 13 UG PHCs, 9 Taluk level hospitals and one DHQ hospital.
- (v) Improve Public Health response in the identified hotspots by forming a special fever Rapid Response Team (consisting of a II level officer from DDHS office, Entomologist, Block health supervisor, fogging team and Domestic Breeding Checkers) at the District and Block level as appropriately.

After having discussion on this proposal, the State Planning Commission has recommended to fund this project to improve and strengthen the Lab for Rs.435.00 lakhs only by excluding cost for pick-up-truck i.e Rs.65.00 lakhs.

#### 30) Creation of cGMP facility for Stem Cell Research and Treatment

This project is for creation of cGMP (Current Good Manufacturing Practices) facility for Stem Cell Research and Treatment at a cost of Rs.636.52 lakh for one year.

This aims at establishing a cGMP facility for culturing clinical grade stem cells (which have the potential to alleviate certain diseases) for use in clinical therapy / Clinical trials. cGMP facility is a certified facility for expanding stem cell that are safe for therapeutic use. Such Stem cells will be used in clinical research as a trial for preventing / reducing GVHD occurrence and improving the success rate of Organ transplant as well as disorders of the eye, Liver diseases, osteoarthritis, critical limb ischemia etc. These clinical grade stem cells are highly preferred for treatment as they are simple and convenient to isolate, easily available from various sources, has potency to differentiate towards the mature cell types, has lower risk of genetic/ epigenetic alterations and are immune privileged with low expression of MHC-I making them safer for clinical translation.

After having discussion on this proposal, the State Planning Commission has recommended to fund the project under TANII as proposed.

The following two proposals of Department of Medical Education namely Prevention of GvHD in Organ Transplant using Adult Stem Cells in Clinical Trials at a cost of Rs.404.84 lakh and the proposal on Clinical Trials – Use of Adult Stem Cells in patients with End-Stage Liver Disease at a cost of Rs.430.10 lakh which have been briefly furnished below. The State Planning Commission has recommended any one of these proposals for assistance under TANII which could be prioritized by the Department of Medical Education.

# 31) Proposal:1 Prevention of Graft Versus Host Disease (GvHD) in Organ Transplant using Adult Stem Cells in Clinical Trials at a cost of Rs.404.84 lakh.

The project aims to improve the clinical symptoms of GvHD in transplanted patients aiding in successful / immune tolerant transplant. This is also an alternative therapy using MSCs alone or in combination with steroidal therapy for treating GvHD which would help in increasing the survival rates after transplantation thereby ultimately improve the quality of life.

### 32) Proposal: 2 Clinical Trials – Use of Adult Stem Cells in Patients with End-Stage Liver Disease at a cost of Rs. 430.10 lakh for two years.

The objective of the project is to demonstrate the safety and efficacy of MSCs administered through I.V injection in patients with End stage liver diseases.

The Department of Medical Education has prioritised the proposal on Clinical Trials with use of Adult Stem Cells in patients with end stage liver disease at a cost of Rs.430.10 lakh for two years for assistance under TANII. Accordingly, it has been recommended by the State Planning Commission.

#### HOME, PROHIBITION AND EXCISE DEPARTMENT

Four proposals of Tamil Nadu Police Housing Corporation, O/o. Director General of Police and Prison Department for assistance under TANII at a cost f Rs.1028.78 lakh.

Status of recommendation of the State Planning Commission on each proposal is furnished below:

# 33) Establishment of paver block manufacturing unit using M/s. TANMAG, Salem waste material at Central Prison campus, Salem.

Establishment of paver block manufacturing unit using M/s. TANMAG, Salem waste material at Central Prison campus, Salem at a cost of Rs.28.56 lakh.

This proposal aims at establishment of paver block manufacturing unit at Central prison, Palayamkottai by using the waste material generated by the M/s. TANMAG which is free of cost and using manpower, water and electricity from the Central Prison, Palayamkottai.

After having discussion on this proposal it is decided to fund this project at 50:50 basis between TANII and TN Police Housing Corportaion. Accordingly, the State Planning Commission has recommended this proposal at Rs.14.28 lakhs under TANII.

# 34) Installation of Over Speed Detection, Red Light Violation, automatic Number Plate Recognition System.

This proposal enables to identify over speed driving, traffic under violation and also records the number plates of the traffic rule violating vehicles at junction between Thiruvanmiyur and Napier bridge. This needs to have a discussion with the Corporation whether the smart city proposal may have similar proposals for implementation. Accordingly, the State Planning Commission has not recommended this proposal.

#### 35) Installation of Facial Recognition system for Secretariat.

Installation of Facial Recognition system for Secretariat at a cost of Rs.85.25 lakhs.

The project aims to identify and capture the anti social elements and unauthorized entry inside Secretariat campus, Chennai by installing cameras at the entry levels which could be monitored at a control room. Further, at the control room with the help of the facial recognition software and employee database, it would be possible distinguish the visitors.

Considering technical aspect and storage period of 30 days which could be mapped with the existing criminals and suspects, it is decided to fund this project under TANII. Accordingly, the State Planning Commission has recommended this proposal under TANII at Rs.85.25 lakhs.

### 36) Introduction of Electronic Key Management system in Prisons

Introduction of Electronic Key Management system in Prisons at a cost of Rs.172.05 lakh.

The Prisons Department has proposed to introduce Electronic Key management system in Prisons on pilot basis in Puzhal Prison Complex and Central Prison, Coimbatore for replacing the existing conventional lock and key system with a modern key Management System. The proposed new system will have "mechatronic padlocks" with smart keys for efficient monitoring of not only handling of keys but also locks through a Key Management System".

Considering the risk issues in this project, it is decided to fund the project for Puzhal prison on pilot study. Accordingly, the State Planning Commission has recommended this proposal for Puzhal Prison only at a cost of Rs.86.03 lakhs only.

#### HOUSING AND URBAN DEVELOPMENT DEPARTMENT

# 37) Research study on the Economic effects of improving sleep among the urban poor in Tamil Nadu

This proposal has been forwarded by the Tamil Nadu Slum Clearance Board through Housing and Urban Development Department of the Secretariat for the assistance of Rs.258.08 lakhs under TANII and Rs.76.18 lakhs by J-PAL.

It emphasis the need for improvement of the Sleep among the urban poor through a specific study which is being entrust with the J-PAL.

In this connection it is informed that this study project has been approved in the Fourth Steering Committee meeting held 28.03.2017 and the identified saving of Rs.17.82 lakhs in the scheme namely Promoting Latrine use in Rural Tamil Nadu needs to be utilized for this project as per Government Letter No.6002/ST-2&E/2016, Planning, Development and Special Initiatives Department, dated:13.7.2017.

Further this is included in the Policy Note for 2017-18 under Demand No.36 and it is also floor announcement made by the Hon'ble M(F). Accordingly, this proposed project study has been recommended by the State Planning Commission as proposed.

#### INFORMATION TECHNOLOGY DEPARTMENT

#### Tamil Nadu Virtual Academy

#### 38) Sentence Patterns Structure and Rules in Tamil for Machine Translation.

This proposal of Tamil Nadu Virtual Academy has been forwarded by the Information Technology Department at a cost of Rs.72.72 lakhs under TANII.

This proposal aims to develop the Tamil sentence structures and patterns, rules, usages etc. as found in English to map in more ways to machine Translation and Tamil computing field as the existing Machine Translation does not give the desired result because of non availability of proper Tamil phrase / clause structure dictionaries.

Accordingly, this proposal has been recommended by the State Planning Commission as proposed with the staff cost for coordinator and the balance cost as project cost.

### Tamil Nadu e-Governance Agency

#### 39) e-Governance Standard Portal

This proposal has been forwarded by the Information Technology department at a cost of Rs.400.07 lakh under TANII.

This proposal aims as to facilitate inter-operability among various software systems in all the departments through a standard portal covering design, development, testing, implementation and maintenance.

After having detailed discussions, it is decided to get detailed study report with action plan and cost, identification of Agency through Tender Transparency etc. Accordingly, this is agreed in principle by the State Planning Commission.

### 40) Standard Digital Address System (SDAN)

This proposal has been forwarded by the Information Technology department at a cost of Rs.634.84 lakh under TANII.

This proposal is to establish SDAN through NIC for identification of an address / property in an urbanised area and this uniform code will facilitate creation of land bank, curtailing illegal registration, integrating with TNEB, regularisation of ration cards etc.

After having a discussion with Secretary to Government, Information Technology Department and other concerned officials, the following issues are needs to be considered.

- 1) utility
- 2) mandate and implementation module
- 3) check the 7<sup>th</sup> schedule of the Constitution Act
- 4) opinion of legal team

Accordingly, this proposal has been approved in principle subject to the above mentioned issues.

### 41) Unified Content Management System and Portal Framework for Government of Tamil Nadu

This proposal has been forwarded by the Information Technology Department at a cost of Rs.296.80 lakh under TANII.

The proposal of the Information Technology Department, through National Information Centre, is to standardize the content framework and citizen interface as per prescribed Guidelines & Standards, and, to consolidate the information presently available at existing Websites / Portals of various Government Units i.e. Secretariat Departments, Head of Departments including Directorates & Commissionerate Boards, Undertaking, Statutory Bodies, District Administration and Local Bodies at Taluk / Block/ Village levels.

After having discussion, the State Planning Commission has recommended to fund for one year only in Rs.81.50 lakhs under non-recurring fund.

#### MICRO, SMALL AND MEDIUM ENTERPRISES DEPARTMENT

# 42) Sophisticated testing instrument for testing of Metal and Metallic Products for Chemical Testing and Analytical Laboratory, Chennai and Regional Testing Laboratory, Madurai

This proposal of Industries and Commerce Department has been forwarded by the Micro, Small and Medium Enterprises Department at a cost of Rs.90 lakhs under TANII for 2017-18.

This proposal is having the unique advantage of testing the sample in few minutes and supported with printout for the test results and is capable of finding out the chemical elements present in the metals and metallic products.

After having discussion and considering the revenue generation involved in this proposal which may possible within 3 to 4 year of implementation, the State Planning Commission has recommended this proposal for assistance under TANII for Rs.90.00 lakh.

#### PUBLIC DEPARTMENT

There are three proposals of Tamil Nadu House, New Delhi and one proposal of Ex-Servicemen's Welfare Department have been forwarded by the Public Department at a cost of Rs.87.80 lakh under TANII. Status of recommendation of the State Planning Commission on each proposal are furnished below:

# 43) Provision of Intelligent Door Lock System integrated with hospitality Management System

This proposal is for provision of Intelligent Door Lock System integrated with hospitality Management System at a cost of Rs.29.10 lakh.

This is the substitution of existing customary lock and system with electronic lock and key system which is electronic approach in making lock and key system.

After having discussion on this proposal the State Planning Commission has recommended this proposal for assistance under TANII as proposed.

#### 44) Provision of N-Computing Thin Client Desktops to all standard rooms

This proposal is for provision of N-Computing Thin Client Desktops to all standard rooms at a cost of Rs.16.75 lakh.

This aims at improving the infrastructure facilities of Tamil Nadu House at New Delhi.

As this is for creating infrastructure facility, the State Planning Commission has not recommended this proposal for assistance under TANII.

### 45) Provision of Airplus Coating Solution for Air Pollution Control

This proposal is for provision of Airplus Coating Solution for Air Pollution Control at a cost of Rs.26.00 lakh.

This aims at improving Air quality in the suite / room of Additional Guest House of Tamil Nadu House, New Delhi and this coating bring down pollutant level from 44 to 17 in a trial coating made in Room No.101 of Additional Guest House.

Accordingly, the State Planning Commission has recommended this proposal for assistance under TANII as proposed.

# 46) Installation of 4kWp Grid Tied PV Solar Power Plant and Networking of Desktop Computers (LAN)

This proposal is for Installation of 4kWp Grid Tied PV Solar Power Plant and Networking of Desktop Computers (LAN) at a cost of Rs.15.95 lakh for one year.

This is for purchase of computers and accessories and installation of solar power grid. After having discussion, it is decided to fund the LAN cost only under TANII.

Accordingly, the State Planning Commission has recommended the LAN cost only under TANII at Rs.4.00 lakhs only.

#### PUBLIC WORKS DEPARTMENT

# 47) Estimate for the Work of Scientific Studies of Coastal Erosion Control in Kancheepuram District.

This proposal has been forwarded by the Public Works Department at a cost of Rs.75.00 lakhs under TANII for the Scientific Studies of Coastal Erosion control in Kancheepuram District at 8 sites to a length of 13.70 km.

This is mainly deals with the Study and involves more cost, it is decided to entrust this work with the National Institute of Ocean Technology (NIOT) and to have discussion with Tamil Nadu Infrastructure Development Board for funing assistance. Accordingly, this is agreed to in principal by the State Planning Commission.

#### SCHOOL EDUCATION DEPARTMENT

Five proposals have been forwarded by the School Education Department at a cost of Rs.1464.35 lakh for three years under TANII fund.

Status of recommendations of the State Planning Commission for each proposal is furnished below:

# 48) Production of accessible reading content for persons with print disabilities in Anna Centenary Library at a cost of Rs.61.70 lakhs.

The aim of this project is to increase the availability of accessible reading resources in the formats of DAISY Pub Text, audio, text & audio for the people with print disabilities viz., visual impairment, severe locomotor impairment and learning disability.

After having discussion on this proposal relating to selection of nature of book i.e. text book on competitive, OCR to digital, outsource the whole operation, selection of process etc. it is decided to fund Rs.60 lakhs against the proposed amount of Rs.61.70 lakhs.

Accordingly, the State Planning Commission has recommended the proposal for Rs.60.00 lakhs only.

# 49) Union Catalogue for Public Libraries in Tamil Nadu at a cost of Rs.59.00 lakhs for one year.

The main aim of this Project is to create the unified catalogue for 32 District Central Libraries, Anna Centenary Library and other government aided libraries in Tamil Nadu.

This Project involved two phases.

**Phase-I:** - (i) Correcting and standardizing existing catalogue entries and combining them into a unified online catalogue system.

Phase-II: - (ii) Creating catalogues for newly purchased books by DPL

After having discussion on this proposal relating to Universal standards, open source, recording the error in book validation etc., it is decided to fund this proposal as proposed. Accordingly, the State Planning Commission has recommended this proposal for Rs.59.00 lakhs as proposed.

#### 50) Mobile Computer Van at a cost of Rs.100.00 lakh for one year.

The aim of the project is to make opportunities to farmers and Agriculturists in rural/urban sector to get and access the up to date relevant information and knowledge based content related to agriculture and allied sectors, contributed by Government/Agriculture Universities in these sectors for their constant regular cultivation and generate income all over the year. After having discussion on this proposal, it is decided to hold this proposal. Accordingly, the State Planning Commission has not recommended the proposal.

#### 51) Formation of Smart Classroom in selected schools in two Districts-Cuddalore and Thoothukudi.

The proposal for formation of Smart Classrooms with the equipment's like LCD projector, Tablets for teachers and Students, Workbooks, Practice books and Assessment sheets in selected Government schools of Cuddalore and Thoothukudi Districts.

After having discussion on this proposal, it is decided to fund under TANII. Accordingly, the State Planning Commission has recommended this proposal for Rs.1213.90 lakhs as proposed.

# 52) Teacher training programme for identification and Remedial Education for Specific Learning Disability in Tamil Nadu Government School Children at a cost of Rs.29.75 lakhs for one year.

Teacher Training programme has been designed to identify children with Specific Learning Disability (SLD) and to train them on Remedial Education for such children by preparing Individualized Education Programme according to the student's Learning Disability.

After having discussion on this proposal, further consultation on available man power, resource etc. under Sarva Shiksha Abhiyan (SSA) and Rastriya Madhyamic Shiksha Abhiyan (RMSA) needs to be ensured.

Accordingly, the proposal has been approved in principle by the State Planning Commission.

#### SOCIAL WELFARE AND NUTRITIOUS MEAL PROGRAMME DEPARTMENT

Four proposals of Directorate of Social Welfare have been forwarded by the Social Welfare and Nutritious Meal Programme Department of the Secretariat for assistance of Rs.1192.06 lakh under TANII. The status of the recommendation on each of the proposal is furnished below:

53) Administration of Pneumonia Vaccine to elderly persons in Senior Citizens Homes and Integrated Complexes run by NGOs with State and Central Grants at a cost of Rs.165.32 lakh for one year.

This proposal aims to administer Pneumonia Vaccine to elderly persons in Senior Citizens Homes and Integrated Complexes run by NGOs with State and Central Grants.

This covers 4133 elders living in 547 Homes with cost of Rs.165.32 lakhs and the coverage of risk due to vaccination will be 10 years after which re-vaccination needs.

Considering the vaccination aims to elderly persons in Senior Citizen Home and Integrated complexes run by the NGOs with State and Central Grants, this is recommended by the State Planning Commission subject to the concurrence of the Director of Public Health. Hence the commitment under TANII is Rs.165.32 lakhs.

### 54) Introduction of Fortified Rice in PTMGRNMP and ICDS in 10 districts on pilot basis.

This proposal of ICDS has been forwarded by the Social Welfare and Nutritious Meal Programme for Rs.606.99 lakh for assistance under TANII in selected 10 endemic districts such as Villupuram, Tiruchirapalli, Thirunelveli, Perambalur, Thiruvannamalai, Dharmapuri, Thoothukudi, The Nilgiris, Thanjavur and Madurai districts on pilot basis.

The objective of the project is to enhance the enrolment of students and retain the attendance in schools and simultaneously improve the nutritional levels among children. In order to bring down Anaemia and increase micronutrient intake among children on a daily basis, it has been proposed to introduce fortified Rice for the children under ICDS and P.T.M.G.R Nutritious Meal Programme in 10 endemic districts of the State (Villupuram, Tiruchirapalli, Thirunelveli, Perambalur, Thiruvannamalai, Dharmapuri, Thoothukudi, The Nilgiris, Thanjavur and Madurai) with the know-how provided by World Food Programme. The fortified rice produced, would be packed in 50 Kg bags of appropriate packaging material with adequate labeling to comply with FSSAI Packaging & Labelling Regulations.

Fortified Rice Kernels (FRK) resembling rice grains will be produced through extrusion technology wherein Rice flour along with micro nutrient premix would be extruded to kernels similar to shape, colour and texture of milled rice. The Fortified Rice

Kernels will then be blended with milled rice in the proportion of 1:100 i.e., 1kg of extruded fortified rice kernels for 100 kg of milled rice.

Tamil Nadu Civil Supplies Corporation will be the nodal agency for the procurement of fortified rice kernel (FRK). The staff at the TNCSC godowns would be trained in in-process quality parameters for blended fortified rice.

Further it is to ensure the results of existing pilot study shall be shared with the Department for better implementation.

Accordingly, this proposal has been recommended by the State Planning Commission subject to clearance by the Tamil Nadu Civil Supplies Corporation. Hence the commitment under TANII is Rs. 606.99 lakhs.

#### 55) Interventional Programme to combat declining Child Sex Ratio in 5 districts.

This proposal of Social Welfare and Nutritious Meal Programme aims to combat declining Child Sex Ratio in Ariyalur, Perambalur, Dharmapuri, Namakkal and Salem Districts at cost of Rs.325.05 lakhs under TANII funds through Interventional Programme such as consultation, District Technical Force, Block Technical Force, Media campaigns, encouraging meritorious girls, training and capacity building monitoring and evaluation documentation etc.

Further, in this case issues of registration of pregnancy have been discussed and schedule a meeting with Heath & FW, TNeGA and SW & NMP Departments. Accordingly, this is agreed to in principal by the State Planning Commission.

### 56) Creation of community help desk and development of multi dimensional communication tools.

This proposal of Social Welfare and Nutritious Meal Programme is for creation of community help desk and development of multi dimensional communication tools at a cost of Rs.94.75 lakhs under TANII.

As this continuation of proposal recommended for Rs.1.00 crore under TANII in first round of this year 2017-18, this needs to be considered in the second round of this year under TANII for the balance amount of Rs.94.75 lakhs. Accordingly, this has been recommended by the State Planning Commission as proposed.

#### TOURISM, CULTURE & RELIGIOUS ENDOWMENTS DEPARTMENT

The three proposals of Archaeology as furnished below have been forwarded by the Tourism, Culture and Religious Endowments Department for assistance under TANII.

# 57) Publication of Epigraphy book titled Tamil Nadu inscriptions Vol-XIII and ten student's monographs.

The printing of the Inscriptions in book form will definitely serve as a primary documentary evidence to establish legal, political, socio-cultural, literary and archaeological antiquity based on engravings.

After having discussion on this proposal as it is continuation of the existing sanctioned project in 2015-16, this has been recommended by the State Planning Commission at an outlay of Rs.12.00 lakhs.

58) Making a VR 3D Virtual Museum with selected 100 antiquities which were collected from explorations and excavations carried out the Department of Archaeology on the two-year basis (Pilot Project)

Making a VR 3D Virtual Museum with selected 100 antiquities which were collected from explorations and excavations carried out the Department of Archaeology on the two-year basis (Pilot Project) at a total cost of Rs. 20.00 lakhs for two years.

After having discussion on this proposal, the State Planning Commission recommended the project as proposed.

59) Installation of floor projection mapping as a first step in the Archaeological Site Museum – Rajarajan site Museum, Thanjavur District as an innovative initiative to increase the footfall and entertain and educate the children's and general public.

Installation of floor projection mapping as a first step in the Archaeological Site Museum – Rajarajan site Museum, Thanjavur District as an innovative initiative to increase the footfall and entertain and educate the children's and general public at a cost of Rs.15.00 lakh.

After having discussion, it is recommended to fund this proposal as proposed.

III) Government may sanction the innovative schemes as recommended by the State Planning Commission for 2017-18 (Round-II) duly including the proposed outlay for the first year in the Supplementary Estimates. The total outlay for the recommended schemes (Round-II) is Rs.8756.79 lakhs for a period of three years. The total outlay recommended under TANII for 2017-18 is Rs.15640.12 lakhs as detailed below:

SI.No.	Year of Implementation	Amount (Rs. lakhs)		
		Round-I	Round-II	Total
1	2017-18	5566.35	8063.74	13630.09
2	2018-19	808.87	584.47	1393.34
3	2019-20	508.11	108.58	616.69
	Total	6883.33	8756.79	15640.12

The details of schemes recommended and not recommended by the State Planning Commission have been given as Annexure-I & II to this minutes. The Government is requested to sanction the implementation of the schemes as recommended by the State Planning Commission as in Annexure-I duly following the procedure prescribed in G.O.Ms.No.124/PD & SI Department, dated: 24.10.2014.

Government after approval may consider to issue a detailed order for the schemes sanctioned, so that the order will indicate all the scheme details like period of funding, staff component, implementing agency mandatory / statutory approvals required to be obtained, the specific innovation of the project, the public issue to be addressed by the project etc.

S. KRISHNAN PRINCIPAL SECRETARY TO GOVERNMENT

// FORWARDED / BY ORDER //

HEAD OF DIVISION (Plan Co-ordination)