

## **Tamil Nadu Innovation Initiative (TANII)**

### **Minutes of the State Planning Commission on the appraisal of the Innovative proposals 2017-18 (First 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 or more rounds of sanction of financing from the State Innovation Fund. For the year 2017-18, for the first round appraisal, 39 schemes from 15 departments were appraised for funding under TANII. The State Planning Commission appraised the proposals with the Administrative Departments of the Secretariat and with the individual Heads of Departments and after detailed appraisal, a shelf of 27 proposals has been recommended for funding under TANII as detailed below:

#### **AGRICULTURE DEPARTMENT**

##### **1) Establishment of infrastructure to develop nutritionally enhanced premium quality and stress resilient rice varieties for Tamil Nadu.**

New rice varieties with good physical and nutritional qualities, high yield potential and resistance to biotic and / or abiotic stresses are paramount to meet the demands to ensure nutritional security of the state. Therefore, this project is being proposed with the objective to develop superior rice varieties with high micronutrient and protein, and Low Glycemic Index as well as to develop rice varieties with superior milling properties along with resistance to major pest and diseases prevalent in Tamil Nadu. The total project cost is Rs.264.00 lakhs for a period of two years.

The State Planning Commission appraised the proposal. Development of superfine rice varieties with good grain cooking and nutritional qualities is the prime objective of this programme. The nutritional security of the infants, pregnant women and also the dietary requirements of the diabetic patients will be addressed with nutrient enriched varieties developed through this project. The State Planning Commission has

recommended the proposal by excluding the staff cost. The outlay recommended is Rs.256.00 lakhs for a period of two years.

## **2) Production and supply of quality grafted vegetable seedlings of Major Vegetable Crops.**

The project is being proposed under TANII by Tamil Nadu Agricultural University at an outlay of Rs.339.31 lakhs. The project is for the establishment of the nursery unit and will be a model nursery unit for the State to produce and supply the seedlings of high yielding varieties and hybrids viz., grafted brinjal, grafted watermelon, grafted musk melon, grafted cucumber, grafted bitter gourd, grafted tomato besides chilli, cabbage and cauliflower. The project aims to produce and supply quality planting materials in vegetable crops to vegetable growing farmers of Tamil Nadu for more than 1,000 ha per year. 18 districts are proposed to be covered under this project.

The State Planning Commission appraised the proposal. Traditionally, vegetable seedlings are produced in the raised beds under open field condition. The possibility of pest and disease attack will be more and mortality due to soil and environmental factors when the seedlings are produced in open field. This phenomenon of high level of seedling mortality could be eliminated through modern and mechanized production of vegetable seedling by adopting innovative technologies viz., Grafting technologies and mechanized portray seedling production for supply of quality seedlings. Accordingly, the project is being recommended by excluding the staff cost and subject to developing an appropriate business model. The recommended outlay is Rs.277.75 lakhs for a period of one year. The outlay for the subsequent years should be by the University's own resources, through the income generated from this project by applying the business model.

## **3) Organic Inputs and Bio-Inputs Charaterisation for Sustainable Organic Agriculture.**

Tamil Nadu is a treasure house of indigenous practices in agriculture. In organic farming, many traditional practices are followed. Various traditional organic formulations adopted in different parts of Tamil Nadu have already been surveyed and documented and these formulations need to be analysed and standardized for large

scale dissemination through training to the farmers. Therefore, the Tamil Nadu Agricultural University with the objective of evaluating, characterizing and validating the quality of organic inputs, bio inoculants and bio pesticides and test verification through laboratory and On Farm Trials has proposed this project under TANII at an outlay of Rs.170.88 lakhs.

Modern technologies has proved its sustainability deteriorating the resource base and signs of reversing trend in productivity even with increased inputs compel to adopt organic farming. The exact composition of the Indigenous Technology Knowledge based formulations will be analysed and the standardized methods if needed will be added with innovations to be disseminated to farmers. The State Planning Commission after detailed deliberation has recommended the proposal, excluding the staff cost. The recommended outlay is Rs.132.00 lakhs for a period of three years.

#### **ANIMAL HUSBANDRY, DAIRYING AND FISHERIES DEPARTMENT**

#### **4) Development and standardization of a Novel DIVA (Marker) Vaccine against Newcastle disease to augment production from poultry.**

There is no effective method to differentiate infected and vaccinated birds against Newcastle disease in poultry and because of this, in the phase of outbreaks culling becomes difficult as all birds both vaccinated and infected show antibodies against Newcastle disease. Therefore, to have a differentiation technology, the project is being proposed under TANII at an outlay of Rs.178.08 lakhs for a period of three years.

The State Planning Commission appraised the proposal. Generating a DIVA (marker vaccine) – recombinant D58 strain of NDV and to generate a genetically altered virus with a foreign epitope besides transfer of technology and patenting are the main objectives of this project. The new virus will be used to produce a live vaccine for commercial poultry and an oral pellet vaccine for backyard poultry. Such vaccines are not available in the country and this innovation will be useful to poultry farmers all over India. Therefore, State Planning Commission recommended this project, excluding the

staff cost, subject to the condition that the vaccines developed should be commercialized and revenue should also be shared to TANII. The recommended outlay is Rs.166.50 lakhs for a period of three years.

**5) Bio electricity and Bio-hydrogen production using slaughter house waste rumen fluid.**

This project “Bio electricity and Bio-hydrogen production using slaughter house waste rumen fluid” is being proposed which will focus on production of Bioelectricity and Bio-hydrogen by using slaughter house, waste rumen fluid. In a slaughter house from each cattle, 85 Kg. of rumen waste is produced. Therefore, a prototype model of this project can produce 0.9 Watts of power from 200 ml of rumen waste and from one animal 382 watts can be generated. The total project cost is Rs.19.80 lakhs for a period of three years.

The State Planning Commission appraised the proposal. The evolution of electricity production from slaughter house waste rumen fluid is important and in this aspect, microbial fuel cell (MFC) is going to be a promising technology for simultaneous electricity production, bio-hydrogen production and waste treatment project. Renewable biohydrogen and bioelectricity production by slaughter house waste may acquire a renewed importance as a producer of energy source. Treatment of waste with simultaneous production of Bio-hydrogen and Bioelectricity without green house gas emission reduces the pollution problems. This project not only treats the waste from agriculture and allied sector but also converts the waste into energy. The State Planning Commission recommended the proposal at an outlay of Rs.19.80 lakhs for a period of three years.

**6) One Health Approach for Animal and Public Health to Augment Food Safety and Productivity.**

Infectious diseases warrant the use of antimicrobial agents and the major medical challenge faced is resistance to such agents thrown up by organisms causing infectious disease. Therefore, to foster one’s health, the project is being proposed

under TANII at an outlay of Rs.545.50 lakhs and the innovative approach is to develop a rapid diagnostic kits.

The SPC appraised the proposal elaborately. TANUVAS is working on Leptospirosis, Brucellosis, Anthrax, Japanese encephalitis & Fasciola infestation. The University is to support the line departments in outbreak investigation of Zoonotic diseases. Already the Government has sanctioned the establishment of the Bio-Safety Lab Level-III under TANII funding and this Lab will be utilized for diagnostic work on Anthrax which is a pre-requisite for handling such organisms. The non-availability of diagnostic kits which can be used in the field level is the major reason for the lack of detection of zoonoses. Therefore, the State Planning Commission recommended this project at an outlay of Rs.545.50 lakhs for a period of three years.

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

### **7) Modernisation of the sales counters of the Chennai Khadi Kraft (Main) and Madurai Khadi Kraft.**

The Tamil Nadu Khadi and Village Industries Board is selling its products through the existing 92 Khadi Krafts showrooms / outlets. In order to boost the sale the project “Modernisation of the sales counters of he Chennai Khadi Kraft (Main) and Madurai Khadi Kraft” is proposed for modern khadi sales outlets in the form and style of modern marts and “Khadi Mart” which will attract not only the affluent class of customers but also would attract young boys and girls adding new entrants into the existing customer list. The modernization is being proposed at Madurai and Chennai at an total outlay of Rs.194.00 lakhs. The State Planning Commission appraised the proposal in detail. Improving marketability and sales of Khadi and Village Industries products and its production can be increased and the benefits of which can be passed on the producers such as rural labourers and village artisans. Therefore, the State Planning Commission recommended the modernization at Madurai Centre only. Accordingly, the project is being recommended with a reduced outlay of Rs.80.00 lakhs.

## **HEALTH AND FAMILY WELFARE DEPARTMENT**

### **8) Establishment of Cardiac Care Network in Tamil Nadu.**

Coronary Artery disease affects people in the younger age group resulting in an extremely high loss of potentially protective years. Patients with Coronary Artery disease in India are at a greater risk of complications and have a poorer outcome following ST segment- Elevation Myocardial infarction. This Mission Director, National Health Mission, Tamil Nadu has therefore proposed the project "Establishment of Cardiac Care Network in Tamil Nadu" under TANII with an outlay of Rs.1125.20 lakhs.

The State Planning Commission has already appraised this proposal under TANII 2016-17 (Round-II) and after elaborate discussion has decided to agree the proposal in principle. However, it was observed that the operational aspects of the project has a Care component which consists of a) Thrombolysis only hospitals and b) Referral hospitals. The requirement under Thrombolysis only hospitals are, it should have an ICU and in-house physicians round the clock and these hospitals should be trained to have round the clock analysis facility. Similarly the referral hospitals should have Medical Officers round the clock with facility to provide emergency care and to take ECG. Hence, State Planning Commission has requested the specific commitment from the Director of Medical Education for the Care component (Operational aspects) of the project and decided to consider the project under TANII 2017-18 accordingly. Now, it is stated that the identified Hub Hospitals (Cardiology Department) will provide 24x7 Critical Cardiac Care through the proposed Cardiac care network. Accordingly, the State Planning Commission recommended the project with a reduced outlay of Rs.925.20 lakhs for a period of three years by excluding the drugs cost.

## **HIGHWAYS AND MINOR PORTS DEPARTMENT**

### **9) Bridge Instrumentation for Structural Health Monitoring system in Highways Department.**

The deterioration and damages in Highway Bridges are identified only by visual observation. The effectiveness of visual inspection is limited in reaching all the critical locations and in detecting all the defects is not possible. Instrumentation based Bridge

Health monitoring systems can revolutionize the traditional way of Bridge inspection in an objective based and in time effective manner. Accordingly, the project is being proposed under TANII at an outlay of Rs.65.00 lakhs for a period of 3 years.

The State Planning Commission appraised the proposal in detail. Structural Health Monitoring is a non-destructive in-situ structural sensing and evaluation method that uses a variety of sensors attached to or embedded in a structure to monitor the structural response to analyze the structural characteristics for the purpose of estimating the severity of damage / deterioration and evaluating the consequences thereof on the structure in terms of response, capacity and service-life. The State Planning Commission recommended the proposal at an outlay of Rs.65.00 lakhs for a period of three years.

**10) Study on improving the CBR value of Sub grade soil by adding quarry Dust.**

CBR values of the sub grade mainly govern the design of the pavement. The CBR value of sub grade decides the thickness of other pavement layers. Lower the CBR value of the sub grade soil leads to higher thickness of above overlaying pavement layers to accommodate the heavy traffic plying on the road. Ultimately it leads to higher construction cost. One of the ways to minimize the construction cost is to improve the sub grade CBR value. Adding Quarry dust to sub grade is one methods to improve the sub grade CBR value. It is proposed to study the performance of sub grade soil by adding Quarry dust in varying proportion. The State Planning Commission after detailed appraisal has recommended the proposal at an outlay of Rs.5.00 lakhs.

**11) Study on the technology of long lasting pavement including construction of circular test track for model study.**

The project is being proposed under TANII to provide long lasting pavement which should be able to withstand almost infinite number of axle loads without any significant structural deterioration due to either fatigue cracking or rutting. The State Planning Commission appraised the proposal. Construction of Model test track and testing the various models of combination for sub grade, sub base, base, bituminous

pavement and study the effect of various loading on them. The State Planning Commission recommended the proposal at an outlay of Rs.200.00 lakhs for a period of three years.

## **HOME, PROHIBITION AND EXCISE DEPARTMENT**

### **12) Enhanced E-Challan devices with ATM card swiping facility.**

The Director General of Police has proposed the project “E-Challan devices with ATM Card swiping facility to be implemented in each Police stations in the cities of Madurai, Tiruppur, Coimbatore, Trichy, Salem and Tirunelveli under TANII at a total outlay of Rs.227.24 lakhs. This project, is to provide an E-Challan device with built-in ATM card swiping facility and embedded software for E-Challan system, SAN storage, SAN Switch with accessories, 4G/3G Data Plan and consumables for printer to each station.

In the appraisal meeting it was informed that the expenditure proposed itself is an indicative amount only. The issue of Merchant Discount Rate (MDR) is also involved in this. In Kochi Metro Rail, a similar project has been entrusted with a bank wherein they agreed to set up facilities including maintenance. Thus the entire cost of computerization can be saved. So rather than investing money in machinery and its maintenance, which becomes the agency’s responsibility, the State Planning Commission suggested that the Police Department to identify the agency by following due process and revert back for funding if required under TANII.

### **13) Mobile Data Terminal for all highway Patrol Vehicles**

The patrol vehicles are dispatched to the incident location of a distress caller over VHF radio network and the control room has limited control over the patrol vehicle. Therefore, as an alternate solution to the Conventional GPS tracking device, it is proposed to provide Mobile Data Terminal for all Highway Patrol Vehicles in the cities (Madurai, Coimbatore, Trichy, Salem, Tirunelveli and Tiruppur) at a total outlay of Rs.267.80 lakhs for a period of three years under TANII. The proposal is for installing MDTs in 200 vehicles which includes 20 standby.



Mobile Data Terminal (MDT) is a computerized rugged device with GIS Solutions and various features for enhancing the productivity of Patrol Vehicles through Computer Aided Dispatch and GIS Solutions. The project's advantages are among others that the control room will be able to track the movements of all MDT fitted petrol vehicles and can be uploaded to the control room of the photos, videos and audios about the incidence for further review. The State Planning Commission after detailed discussion decided to fund 100 vehicles. Accordingly, the project is approved with a reduced outlay of Rs.133.90 lakhs for a period of three years.

#### **14) Establishment of Computer Forensics Division**

The examination of Digital Evidences relating to electronic discovery of e-discovery, the process of gathering data, documents or email in preparation for legal action that may lead to trial are mostly received from the Central & Western Region of Tamil Nadu and every year the receipt of cases are on the rise. Therefore, on a trial basis for the examination of digital evidences related to crimes in Central & Western Region, with a aim of investigation within a reasonable time frame, it is proposed to establish a separate "Computer Forensic Division" in the Regional Forensic Laboratory at Coimbatore.

The project is being appraised by the State Planning Commission elaborately. The State Planning Commission was informed that the process of examination of digital evidences has both personnel as well as equipment problem. It was also informed that the department has limited experts but by giving training the manpower will be expertised. Staff already trained and working in the relevant field will be deployed to handle the case work at Regional Laboratory, Coimbatore. The State Planning Commission, considering the present scenario that the examinations of Digital Evidence relating to crime are gaining foremost importance, recommended this project under TANII at an outlay of Rs.54.00 lakhs for a period of three years.

## **INFORMATION TECHNOLOGY DEPARTMENT**

### **15) Business Intelligence in Data Analysis for Tamil Nadu Government Departments.**

The project “Business Intelligence in Data Analysis for Tamil Nadu Government Departments” is a technology-driven process for analyzing data and presenting actionable information to help corporate executives, business managers and others and users make more informed business decisions. The total project cost proposed is Rs.44.35 lakhs for a period of three years. While appraising this project the Principal Secretary to Government, Planning, Development and Special Initiatives Department is of the view that the purpose of the project viz. technology driven result oriented Data Analysis and Data warehousing of Tamil Nadu Government Departments, is part of the Data Analytics Unit. Under the Data Analytics Unit scheme there is enough funding available for this project. Therefore the State Planning Commission suggested to approach the Data Analytics Unit for funding for this project. The project is not recommended under TANII.

### **16) Digitisation and Cataloguing of Palm-Leaf manuscripts in Dr.U.V.Swaminatha Iyer Library, Directorate of Indian Medicine & Homeopathy and International Institute of Tamil Studies.**

The Tamil Virtual Academy with the objective to digitize the rare palm leaf manuscripts of U.V. Swaminatha Iyer Library, Directorate of Indian Medicine & Homoeopathy and International Institute of Tamil Studies has proposed this project with an outlay of Rs.105.00 lakhs. The project is also to prepare the Metadata for each palm-leaf manuscripts of U.V.Swaminatha Iyer Library, Directorate of Indian Medicine & Homeopathy and International Institute of Tamil Studies.

The State Planning Commission appraised the proposal in detail. The Tamil Virtual Academy is developing an Integrated Digital Archival Management System for the existing digitization project (create a Digital Library) with MySQL database & Interface and the same Digital Archival Management System will be used for this proposed project by extending and adding the module features essential for the palm-leaf manuscripts. In the appraisal meeting the Tamil Virtual University informed the

SPC that the digitized palm-leaf manuscripts will be uploaded at the existing Digital Archival Management System of TVA by developing new modules and extending the features of the system suitable for palm-leaf manuscripts. The State Planning Commission after detailed deliberation recommended the proposal with an outlay of Rs.105.00 lakhs subject to the condition that the Digitised Palm-leaf manuscript should be put in the public domain. Further, Information Technology Department in consultation with Tourism & Culture and Tamil Development & Information Departments should ascertain how many palm- leaf and other manuscripts remain to be digitized.

### **17) Tamil Text and Speech Computing Tools**

The project “Tamil Text and Speech Computing Tools” proposed by Tamil Virtual Academy at an outlay of Rs.70.04 lakhs is to develop a full-fledged Grammar Checker for Modern Tamil to use it in computers and mobile phones for the benefit of teachers, learners and general public.

The State Planning Commission appraised the proposal. Grammar Checker for Tamil will help the user to use Tamil language in the digital devices correctly. The text and speech system proposed to develop as to individual projects viz. i) Tamil Grammar Checker - 5 modules, ii) Assistive Aids for Visually-Challenged People – 4 modules. The project is to overcome the discrepancies found in classroom Tamil teaching and learning or through computer, powerful grammar checking algorithms that will be developed by linguist with linguistic technology. Therefore, the State Planning Commission recommended the proposal at an outlay of Rs.70.04 lakhs.

### **18) Tamil Nadu Arasu Free Public Wi-Fi Services Development**

Tamil Nadu Arasu Cable TV Corporation Ltd. proposed this project at an outlay of Rs.2009.00 lakhs in order to provide Broadband Internet connectivity to the public through the Local Cable Operators across the State. The State Planning Commission appraised the proposal in detail and after detailed discussion has agreed to provide Rs.850.00 lakhs as assistance from TANII to implement this scheme. Accordingly, the project is recommended with a reduced outlay of Rs.850.00 lakhs. The Government

may take a decision as to the form of assistance to Tamil Nadu Arasu Cable TV Corporation Ltd.( i.e.) Whether the assistance is to be in the form of share capital assistance or loan.

## **PERSONNEL AND ADMINISTRATIVE REFORMS DEPARTMENT**

### **19) Formation of e-Library, e-Records and Electronic file management system version 2.0**

The project "Formation of e-Library, e-Records and Electronic file management system version 2.0" proposed under TANII at an outlay of Rs.37.24 lakhs is a web based application wherein all the Service Rules and Government Orders are converted in to digital format by PDF conversion of Text file or by Scanning of documents and uploaded in the server of the department for public interest. The State Planning Commission examined the proposal and found that the entire project component is towards purchase of computer and accessories only. The Information Technology Department is doing the file management system and therefore the State Planning Commission suggested having a discussion with Information Technology Department and then revisit if necessary. The proposal is not recommended.

### **20) Promotion of Good Governance through Right to Information**

The Personnel and Administrative Reforms Department desires to have a study on RTI petitions and appeals to identify issues having bearing good governance which also focus on suo-motto disclosure as required by the act and examine the level and efficacy of complaints. The total project cost proposed is Rs.23.20 lakhs which includes engaging a consultancy and appointment of staff on contract basis. The State Planning Commission appraised the proposal in detail and is of the view that basically the proposal is for an evaluation for good governance. The Government is having a separate Department for Evaluation and Applied Research and P&AR Department has also agreed to entrust the study to the Evaluation and Applied Research Department. Therefore, the State Planning Commission suggested P&AR Department to send necessary proposals to E &AR Department for the study so that the same may be placed in the State Evaluation and Advisory Board for its approval.

## **PERSONNEL AND ADMINISTRATIVE REFORMS (TRAINING) DEPARTMENT**

### **21) Provision of LAN Networking, EPABX and CCTV with accessories.**

The proposal at an outlay of Rs.177.10 lakhs is for LAN Networking, EPABX and CCTV with Multimedia Projector for the office of the Director of Vigilance and Anti-Corruption. The project is mere purchase of equipments for the routine office function and no innovation involved in this and therefore not recommended this proposal.

## **REVENUE DEPARTMENT**

### **22) Unmanned Aerial Vehicle Photogrammetric Mapping**

The watercourse data is currently dependent on field sketches which are prepared several decades ago. An accurate picture of the water courses can be obtained through aerial imageries which will provide valuable inputs for identifying locations for dams, missing links of canals and possible opportunities for interlinking of water courses. UAV imagery, maps from photogrammetric software and flood simulation models present themselves as very valuable tools to survey and identify disaster-prone areas for a better understanding of flood risk. Therefore the Revenue Administration Department proposed the project “Unmanned Aerial Vehicle Photogrammetric Mapping” at a total outlay of Rs.701.60 lakhs for a period of three years under funding from TANIL.

The State Planning Commission appraised the proposal in detail. The images captured Using UAV will be pre-processed, stitched and converted into useful maps for further understanding of the situations of river basins and water courses to initiate flood mitigation measures. The project will capture images of water courses covering 10,000 sq.km in the State and will be implemented over a period of 3 years. The project is to be implemented by Revenue Department’s State Disaster and Responsive Force in collaboration with Anna University’s Centre for Aerospace Research, MIT Campus. The use of Unmanned Aircraft Systems and its imagery in disaster response has become increasingly popular in recent years. However, very few organisations are currently using them to understand and reduce disaster risk in their community. UAV imagery, maps from photogrammetric software and flood simulation models present themselves

as very valuable tools to survey and identify disaster-prone areas for a better understanding of flood risk. The State Planning Commission taking into account the benefits viz. less cost compared to satellite or other aerial survey methods and more accurate images with less than 6 cm spatial resolution as well as on demand Aerial data collection has decided to recommend the proposal.

However, in as much as Government have already sanctioned Rs.20.00 crores to Anna University under TANII for the year 2015-16 for a similar project's initial takeoff under which Anna University can commercially develop UAS related products and Services and market to suitable agencies including Government of India. As this project is a collaborative project with Anna University it has been decided that the equipments that are already sanctioned to Anna University need not be sanctioned to this project. This issue has been further consulted with Anna University's Aerospace Centre. It is ascertained that the existing TANII project sanctioned to Anna University titled "Design and development of Unmanned Aerial Vehicles" has been sanctioned for the purpose of development and designing the various types of UAVs. Under this project funding, equipment /components have been purchased for the fabrication of UAVs. This project is only meant for manufacturing UAVs. The cost of the proposed project includes the expenditures towards the operational cost, outsources services, accessories for aerial mapping, consumables and maintenance of UAVs. This project is only meant for using UAVs for Aerial mapping related to disaster management applications. There is no overlap of funding between both of these projects. However, it is agreed that the equipment, components & instruments, fabrication cost for Unmanned Aircraft System including mission payloads required for the present projects shall be utilised with the Anna University's earlier project under TANII. The funds available with Anna University for the year 2015-16 proportionately. The State Planning Commission recommended the project with an outlay of Rs.701.60 lakhs for a period of three years subject to the condition that the staff cost of Rs.222.84 lakhs shall only be allowed as operational expenses on outsourcing basis.

### **23) Computerization of Land Acquisition**

The processes of Land Acquisition is done manually in the present system and this make it difficult to track the progress of the Land Acquisition processes. There is no credible MIS system for analyzing the delays in Land Acquisition process for all infrastructure projects of Government or its agencies. Therefore, in order to overcome these challenges Land Administration Department has proposed this project “Computerisation of Land Acquisition” under TANII at the total outlay of Rs.113.00 lakhs.

The State Planning Commission appraised the proposal in detail. The project is to develop a software application with online facility to cater the components of land acquisition process. Accordingly the details of Lands to be acquired will be taken from Web Tamil Nilam application instead of using physical land records and output of the process. It will also have facility to track land acquisition cases under litigation during the acquisition as well as post acquisition including arbitration cases. This project will enable the state to create a database of lands acquired, its valuations, time taken to acquire etc. and this can be used to predict timelines for future acquisition possible elements of litigation etc. The State Planning Commission recommended the proposal at an outlay of Rs.113.00 lakhs. The possibility of expanding the software to monitor all land alienation, transfers and lease cases is also to be examined by Commissionerate of Land Administration.

## **RURAL DEVELOPMENT & PANCHAYAT RAJ DEPARTMENT**

### **24) Replication of marketing for products**

The proposal under TANII at an outlay of Rs.279.61 lakhs appears to be routine waste management project, no way innovative and therefore the State Planning Commission has not recommended the proposal.

## **25) Real time monitoring with Geo Tagging for road and housing works**

The service delivery by the Government Departments lies in the development of citizen centric and process centric mobile application. Accordingly, Rural Development Department has proposed this project under TANII at an outlay of Rs.990.00 lakhs.

The State Planning Commission is informed in the appraisal meeting that all the applications have been developed with the support of NIC and are designed to run on any Android based Smart Phones. The applications have been integrated with the online portal in the tnrd.gov.in website and the data is updated real time. It is also informed that Geo referencing is an integral part of these applications and hence data validation is done based on the lat-long reference. The updating of photographs gives the exact status of the works with time stamp. However, in the demonstration during the appraisal meeting, it is noticed that the geo-tagged lat-long reference is missing for cases where it was claimed that it had been completed. Therefore, the State Planning Commission has not considered this project and suggested to revert back.

## **26) Introducing multi-post single choice EVMs in the conduct of elections to local bodies.**

The Secretary, State Election Commission who proposed this project has not attended the appraisal meeting to pursue the proposal. Therefore, the State Planning Commission has not appraised the proposal since the lower level staff are not in a position to detail the project.

## **SCHOOL EDUCATION DEPARTMENT**

### **27) Development of CCE (Continuous & Comprehensive Education) Worksheets / Modules to improve reading, writing and comprehension skills in School Children.**

The traditional testing procedures do not expose children to questions demanding inferential skills or questions which are subjective in nature demanding application of common sense and conceptual understanding. Therefore it is necessary to train the teachers in developing such questions and developing children's ability to answer such questions with confidence. Accordingly, "Development of CCE



(Continuous & Comprehensive Education) Worksheets / Modules to improve reading, writing and comprehension skills in School Children is being proposed under TANII by School Education Department at an outlay of Rs.48.06 lakhs.

The State Planning Commission appraised the proposal in detail. In order to build the capacity of students to respond to the type of questions asked by NCERT, there is a need to expose students to such type of questions which require critical and analytical thinking. This could be achieved by improving the reading, comprehension, critical and analytical thinking skills of students of classes I to X. Hence, it is imperative to provide the best of the assessment materials to the students to give them the scope for reflecting on the questions and answering correctly choosing the best alternative. The State Planning Commission after detailed discussion recommended the proposal at an outlay of Rs.48.06 lakhs.

## **SOCIAL WELFARE AND NUTRITIOUS MEAL PROGRAMME DEPARTMENT**

### **28) Creation of Community Help Desk and Development of Multi Dimensional Communication Tools.**

The project aims to create a community help desk at district level (32 districts) and one in Head office to facilitate and monitor the activities at the district level and create awareness through a multi dimensional / multi faceted communication strategy in order to reach Children, Women and Senior citizens in the remotest areas in the districts using technological solutions. This acts as a platform to redress their grievances then and there. The total project cost proposed is Rs.100.00 lakhs.

The State Planning Commission appraised the proposal in detail and agreed with the concept. However, the proposal needs to be modified by including baseline and endline studies which establish the efficacy of the proposed strategy. The proposal is approved with this modification at an outlay of Rs.100.00 lakhs.

## **WELFARE OF DIFFERENTLY ABLED PERSONS DEPARTMENT**

### **29) Mobility Assistance Appliance for persons affected by Muscular Dystrophy.**

Muscular Dystrophy is a group of disease that cause a loss of muscle mass and also progressively weaken the muscles which control movement. There is no special mobility assistance appliance available for the persons affected by muscular dystrophy to provide any assistive device. The movement of persons affected by Muscular Dystrophy is very much restricted due to the severe impact of the Disease. There is a need to provide some mobility support appliance which could lessen the difficulties of the affected person's mobility and to enable them for independent mobility to a greater extent. Therefore, Welfare of Differently Abled Department has proposed to provide Battery Operated Wheel Chair to thousand persons with Muscular Dystrophy at an estimated cost of Rs.650.00 lakhs.

The State Planning Commission appraised the proposal in detail. The State Planning Commission taken in to account the long waiting list suggested to prescribe the criteria so that the scheme can be repeated year wise. The State Planning Commission also suggested that after covering all the persons with Muscular Dystrophy and then develop a guideline so that 50% can be on free of cost and another 50% on payment basis of 60:40 ratio or as may be decided by the department. The idea is to reach more people with Muscular Dystrophy and if any contribution comes from them more people may be benefitted. Accordingly, the project is being recommended at an outlay of Rs.650.00 lakhs.

### **30) Training Aids for Psychomotor Co-ordination to Homes for the Adult with Mental Retardation.**

Persons with mental retardation lack physical and sensory skills which is necessary for employment. Therefore the Differently Abled Department has proposed this project under TANII at an outlay of Rs.13.00 lakhs. The State Planning Commission appraised the proposal and is of the view that specially designed training aids is developed adaptive work related behavior in persons with Mental Retardation and sensitize to gain work experience in typical work environment. Therefore the State

Planning Commission has recommended the project under TANII at an outlay of Rs.13.00 lakhs.

**31) Process Innovation in terms of provision of access to information and communication to persons with visual impairment.**

The Welfare of Differently Abled Department proposed this project under TANII at an outlay of Rs.6.30 lakhs to make the physical environment accessible and undertake measures to provide access to information and communication. The State Planning Commission discussed and recommended the proposal at an outlay of Rs.6.30 lakhs.

**32) Early Intervention Services to children with disabilities (0-6 years) thro' Community Based Approach and Home Based Approach with use of TABLET.**

Early Intervention Services to children with disabilities are provided at present through "Centre Based Approach" i.e. Early Intervention Centers (EICs) are established at district level. In this model, parents have to bring their children to centres in the district head quarters. Still many children are deprived of early intervention services through this approach. Therefore, as an alternative it is proposed to cover more number of children through "Community Based Approach" and "Home Based Approach" by deploying a special software which helps better administration. Accordingly, this project is being proposed under TANII at an outlay of Rs.12.48 lakhs.

The State Planning Commission appraised the proposal elaborately. It is observed that the project is basically an evaluation of Intelligence Quotient (I.Q) of disabled children through three tests. The proposed project is to implement early intervention services with a custom made "TABLET" application called mVBRI. The mVBRI application works in both online as well as offline mode. It requires only 2G network to connect the Community Rehabilitation Workers (CRW) with cloud based system. The Geo network links the child-staff-office. Also the location based application ease the work of Commissioner and Officers in Commissionerate to monitor the CRW, specialists and the administrators from anywhere at any time. It is also helpful in monitoring individual and consolidated data of a particular EIC of different

EICs functioning in the districts at one point of time. The State Planning Commission recommended the project at an outlay of Rs.12.48 lakhs, for a period of 3 years.

**33) Evaluation and Intervention of Special Children coming under the purview of Welfare of Differently Abled Persons.**

Special education is being imparted to the special children which includes various kinds of facilities like food, accommodation, supply of education materials, assistive devices, cash incentives etc. to improve their Socio-economic conditions. It is now proposed to make an additional intervention namely Health Intervention through Health check up and Nutrition supplementation to children studying up to 8<sup>th</sup> standard level, and career counseling through Intelligence Quotient assessment and facilitate the students in class IX to XII of Government schools / Aided Schools so that they are in a position to select suitable courses for academic learning or vocational training or jobs which could best suit them in future on a scientific cost and evaluation with unique time tested techniques for the better life. Accordingly, the project is being proposed under TANII at an outlay of Rs.22.15 lakhs and the State Planning Commission recommended the proposal for Rs.11.00 lakhs by restricting the evaluation to class IX and Class XII levels alone.

**YOUTH WELFARE AND SPORTS DEVELOPMENT DEPARTMENT**

**34) Establishment of NCC Training Academy at Neerpeyer Village, Maduranthagam Taluk.**

The project "Establishment of NCC Training Academy of Neerpeyer Village, Maduranthagam Taluk" proposed by NCC Department at an outlay of Rs.20.00 crores under TANII is being appraised by the State Planning Commission. Similar projects has already been sanctioned at Idayapatti in Madurai District in the year 2016-17 under TANII. Therefore, State Planning Commission suggested that establishing similar training academy may be considered after the Academy at Madurai is established and its benefits known. The project is not recommended.

### **35) Rowing Simulators for Cadets Training**

The project “Rowing Simulators for Cadets Training” is being proposed under TANII at an outlay of Rs.30.00 lakhs under TANII to enhance the NCC Cadets quality of Training with much interest and the enthusiasm prior to their actual handling of boat. The Rowing Simulators are ideal for instruction, rehearsing hand movement essential for Rowing. The State Planning Commission after detailed deliberation recommended the proposal at an outlay of Rs.30.00 lakhs.

### **36) Centre for Excellence in Yoga**

The Tamil Nadu Physical Education & Sports University proposed this project “Centre for Excellence in Yoga” at an outlay of Rs.978.00 lakhs under TANII. The State Planning Commission appraised the proposal. The project cost includes Machinery and Equipment, Computer and accessories besides staff cost. The State Planning Commission is of the view that TANII fund is not meant for the Sports University’s infrastructure and its routine activities. The project is not recommended.

### **37) Centre of Excellence in Sports Biomechanics**

Tamil Nadu Physical Education and Sports University placed the proposal to set up state of the art Centre of Excellence in Sports Biomechanics in the University Campus to cater the needs of all sports fraternity of every nook and corner of Tamil Nadu and India as well. The total project cost is Rs.1312.20 lakhs for a period of two years which includes the construction cost of multipurpose building at Rs.600.00 lakhs.

The State Planning Commission appraised the proposal in detail. This proposal was earlier appraised by the State Planning Commission in the year 2016-17 in Round-I & II of the Appraisal meeting. Even though, the State Planning Commission is willing to fund the project, it is having reservations on the medical elements involved in the proposal and therefore suggested the department to consult with Dr.M.G.R. University so that the project can be implemented as a joint venture. Now, the Tamil Nadu Physical Education and Sports University has entered into MoU with Dr. M.G.R. Medical University and will proceed further. Therefore, as per the earlier commitment the State Planning Commission recommended the project at an outlay of

Rs.1312.20 lakhs subject to the remarks that the optimum utilization of the facilities are to be ensured. There should also be a monitoring mechanism that is to be integrated with SDAT, Schools etc.

**38) Composite Materials Manufacturing, Testing, Research Laboratory for Sports Application (CMMTRLSA)**

This project proposed by Tamil Nadu Physical and Sports University at an outlay of Rs.947.70 lakhs which relates to the infrastructure development of the University and therefore the State Planning Commission has not recommended this project as there is no innovation.

**39) Institutional Repository**

This project proposed by Tamil Nadu Physical and Sports University at an outlay of Rs.130.80 lakhs which relates to the infrastructure development of the University and therefore the State Planning Commission has not recommended this project as there is no innovation.

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.

The total outlay for the recommended schemes (Round-I) is Rs.6883.33 lakhs for a period of three years. The abstract of the fund position is as follows:

<b>Sl.No.</b>	<b>Details</b>	<b>(Rs. in lakhs)</b>
<b>1.</b>	<b>Closing Balance for 2016-17</b>	<b>3893.94</b>
2.	Total amount transferred to innovation fund for 2017-18	15000.00
<b>3.</b>	<b>Total for 2017-18 (Sl.No.1 + Sl.No.2)</b>	<b>18893.94</b>
4.	Committed expenditure for innovative schemes sanctioned for 2015-16 ( 3 <sup>rd</sup> year outlay for the projects sanctioned in 2015-16)	1513.65
5.	Committed expenditure for innovative schemes sanctioned for 2016-17 (2 <sup>nd</sup> year outlay for the projects sanctioned in 2016-17)	2419.85
6.	Total outlay for the committed expenditure for the schemes sanctioned during 2015-16 & 2016-17 (Sl.No.4 + Sl.No.5)	3933.50
<b>7.</b>	<b>Opening Balance available for 2017-18 (Sl.No.3 – Sl.No.6)</b>	<b>14960.44</b>
8.	Outlay recommended in the first round appraisal 2017 -18 (First year outlay)	5566.35
<b>9.</b>	<b>Balance available (to be utilized in the second round) (Sl.No. 7- Sl.No.8)</b>	<b>9394.09</b>

S. KRISHNAN  
PRINCIPAL SECRETARY TO GOVERNMENT

// FORWARDED / BY ORDER //

HEAD OF DIVISION  
(Plan Co-ordination)