



TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY
Melakottaiyur, Chennai-127

TNPESU Strategic/Perspective Plan Successfully Implemented

TNPESU's strategic plan is to establish **TNPESU Sports Science Support Centre** for installing **world class amenities** to teach, train, coach and research in the promotion of Coaching, physical education, technology and sports. The steps to attain this strategy was initiated by establishing three components in the TNPESUSSC was attained through establishment of

- 1. Centre of Excellence in Sports Biomechanics**
- 2. E Library for sports science research**
- 3. Pedagogy lab**

CENTRE OF EXCELLENCE IN SPORTS BIOMECHANICS

Centre of Excellence in Sports Biomechanics established at the cost of **13.122 crores** under Tamil Nadu Innovation Initiatives (TANII) of State Planning Commission through Youth Welfare and Sports Development Department, Government of Tamil Nadu vide G.O.No.: 35 Youth Welfare and Sports Development Department 31.07.2017 (First Installment) for 10.00 crores and G.O No: 13 Youth Welfare and Sports Development Department 24.06.2019 (Second Installment) for Rs.3.09 crores.

Vision and Mission:

It is the **biggest lab in India** with state of the art facility and sports biomechanics equipment with cutting edge technology. The **mission** of the lab is to conduct biomechanical assessment of novice to elite sportsmen, **creation of baseline data of elite sportsmen**, reducing the risk of injuries which reinforce the mission of this university. The **vision** of this lab is achieving **India's Olympic gold quest in 2024** and will be a model lab which will be the eyes of the whole world.

Lab Infrastructure Facilities:

The lab has length of 45m and a width of 36meters with international standard synthetic track for all the jumps and throws. Further, this lab has the facility to assess the skills in weight lifting, archery, golf swing, squash, tennis, cricket, hockey, football, volleyball, basketball, rifle shooting, and table tennis. The lab facilitates the **quantitative assessment** of sports skills and movement skills with regard to **3D motion analysis, inverse dynamics, electromyography, posture analysis, eye gazing, isokinetic**

testing and training, gait analysis, somato-typing, sports performance analysis etc.

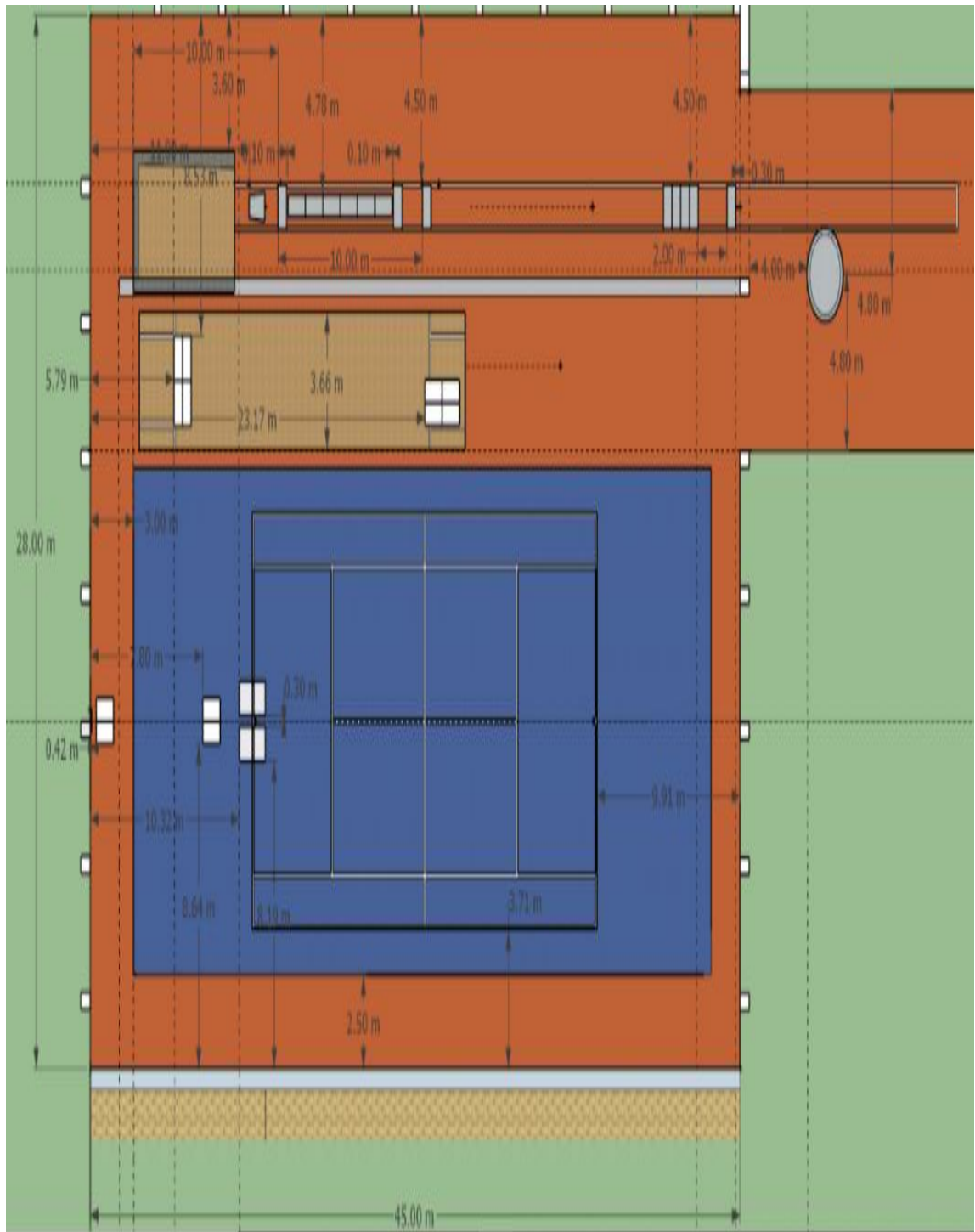
Further, this lab has **cutting edge technology** to integrate the results of 3D motion, force plate data, EMG data and eye tracking data for the better interpretation of outcome from the biomechanical assessment. The **MATLAB and Python software** of this lab would help to work on the domain of simulation and modelling. The performance analysis system would help the coaches to devise an **ideal strategy** to promote our players with holistic development at the international arena. Further, the lab has the facility and experts to analyze the sports skills of track and field events and versatile sports skills. This lab serves the domains of **academics, research and consultancy services.**

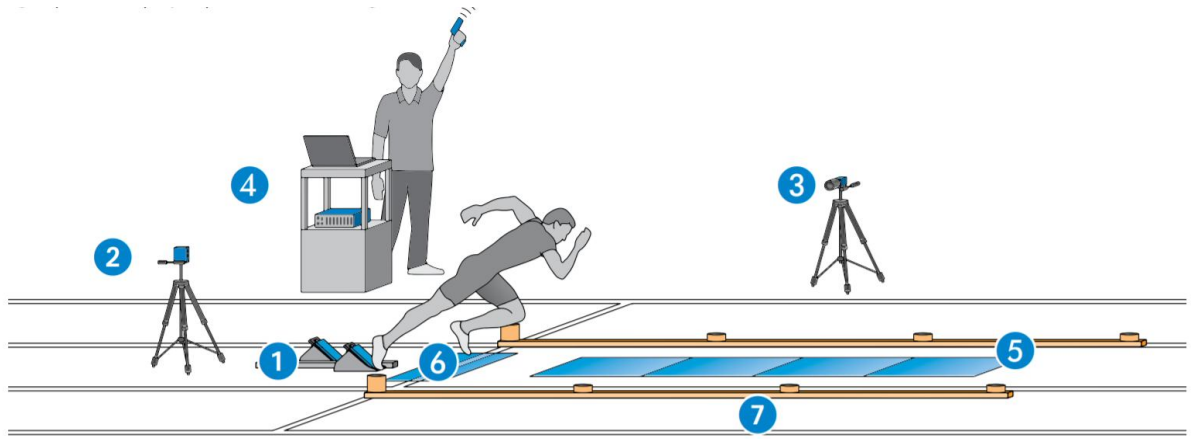
Beneficiaries:

The beneficiaries of the lab is **the students and research scholars of this University, sports hostel students and centre of excellence students of SDAT, Potential athletes from the govt. schools and colleges, clubs and association, Players from Sports Authority of India and players from private clubs.** Further, this lab will upgrade the skills of coaches and PE teachers across the state and country through conducting refresher course and workshop.

This lab planned and established with **utmost care and commitment** to produce high performance athletes with sports biomechanics support system. The lab has versatile applications and it will serve the **sports fraternity right from grass root level to elite level.**

Finally, the centre of excellence in sports biomechanics lab will be an **iconic facility** of our Tamil Nadu state and India as well.





E LIBRARY

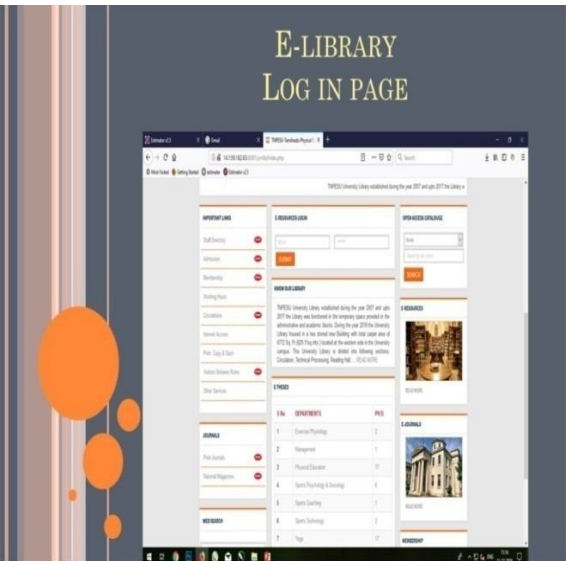
TNPESU's effort to promote research in sports sciences and academic lead with the proposal of establishment of E Library to stay in tune with the **advancements of Academic environments** and to install an **international bond in advanced researches**. Finally, the University's Proposal was accepted by SPC and sanctioned fund under TANII for the Establishment of E-Library at a Budget Estimate of **Rs.2.51 Crore** for a period of 3 years vide G.O.(Ms).No.35 dated 22-09-2016 Youth Welfare and Sports Development (YW2) Department issued for Rs.96.5 Lakhs and G.O.(Ms).No.37 dated 14-09-2018 Youth Welfare and Sports Development (YW2) Department for Rs.71.25 Lakhs.



மாண்புமிகு தமிழ்நாடு முதலமைச்சர் திரு.எடப்பாடி கே. பழனிசாமி அவர்கள் 12.12.2018 அன்று தலைமைச் செயலகத்தில், இளைஞர் நலன் மற்றும் விளையாட்டு மேம்பாட்டுத் துறை சார்பில், பெரம்பலூர் மாவட்ட புரட்சித் தலைவர் டாக்டர் எம்.ஜி.ஆர். விளையாட்டு அரங்க வளாகம் மற்றும் விருதுநகர் மாவட்ட விளையாட்டரங்கத்தில் கட்டப்பட்டுள்ள பல்நோக்கு உள்விளையாட்டு அரங்கங்கள், மேலக்கோட்டையில் உள்ள தமிழ்நாடு உடற்கல்வியியல் மற்றும் விளையாட்டுப் பல்கலைக்கழகத்தில் அமைக்கப்பட்டுள்ள மின்னணு நூலகம் ஆகியவற்றை திறந்து வைத்தார்கள்.



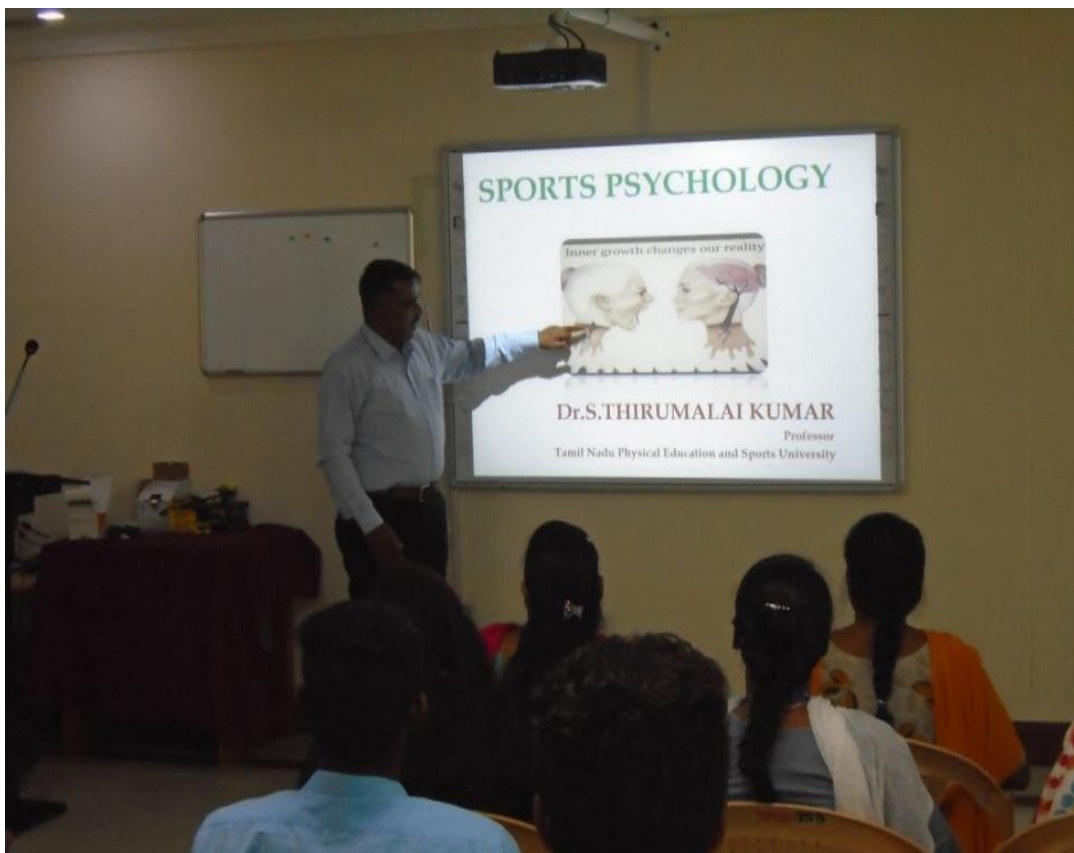
மின்னணு நூலகம்
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PEDAGOGY LAB

Pedagogy Lab for research, teaching, testing and training of physical education students was established under TANII scheme vide G.O.Ms. 20 YW & SD dated: 18.07.2018 at the cost of Rs.**22.05** Lakhs. The primary purpose of instituting this lab was supported by **Research** that has shown that students show more gains in **scientific reasoning** when they are taught using **inquiry-based labs, versus traditional cookbook labs**. Students also show improved **higher-order thinking skills, such as data analysis, and drawing sound conclusions from their findings**. Students need to use lab methods to find a solution to the problem, or to make recommendations based on lab findings.









Equipments available:

Sl No.	Equipment	Purpose
1	Smart Digital Podium	Teaching
2	Magnetic Board	Teaching
3	Professional Video Camera Handy cam	Teaching
4	Megaphone	Teaching
5	Digital Camera	Teaching
6	Smart Board	Teaching
7	Sliding Caliper & Spreading Caliper (2 Nos)	Testing
8	Stadiometer	Testing
9	Pulse Oximeter	Testing
10	Laser Digital Meter (100M)	Testing
11	Reaction Timer Apparatus (visual & Audio)	Testing
12	Sit & Reach Trunk Test	Testing
13	Digital Weighing Machine	Testing
14	Medicine Ball (10 Nos)	Training
15	Kettle Bell (5 Nos)	Training
16	Agility Training Ladder (10 Nos)	Training
17	Metronome	Training
18	Treadmill with Digital Display	Training
19	Weight Jacket	Training
20	Theraband (5 Nos)	Training
21	Mini Hurdles (30 Nos)	Training
22	Nivia Aerobic Steeper (30 Nos)	Training
