

# NATIONAL INSTITUTE FOR EMPOWERMENT OF PERSONS WITH MULTIPLE DISABILITIES (Divyangjan)

(Department of Empowerment of Persons with Disability, Ministry of Social Justice& Empowerment, Govt. of India)

East coast Road, Muttukadu, Kovalam (post) Chennai-603 112

Website: <a href="www.niepmd.tn.nic.in">www.niepmd.tn.nic.in</a> E-mail: <a href="meiepmd@gmail.com">neiepmd@gmail.com</a> Phone: 044-27472113, 27472046.

#### **EXPRESSION OF INTEREST (EOI)**

#### FILE NO. NIEPMD/ESTATE/06(Corrs.)/2022-23

NIEPMD invites EOI through NIC e-procurement portal URL http://eprocure.gov.in/eprocure/app" for Selection of Architects/Architectural Firms for Providing Comprehensive Architectural Services for the finalization of Proposed Plan for Development of NIEPMD Campus, at Muttukadu, Kovalam, Chennai -603 112 (Tamilnadu) which includes DPR, Detailed architectural working drawings for execution, Detailed structural design and drawing for actual execution, Finalization of layouts, Exterior & Interior Designing including Electrification, HVAC, Acoustic Control, Sanitary & Plumbing and other related Works).

The applying Firm/Agency/HUF/Individual etc. should must have 03 Years' experience in related field. The Experience claimed must be supported by proper testimonials certificates. The applying agency should have completed 05 such project during last 03 years. The applying Firm/Agency/HUF/Individual must have an annual average turnover of last 03 financial years **not less than 10.00 Lakhs** ((i.e. FYs 2019-20, 2020-21, 2021-22). The tender document can also be downloaded from our websitewww.niepmd.tn.nic.in.

Last date for E-bidding - 03.00 PM. On 27th Mar 2023

Tender fee - NIL

EMD Amount - Rs. 25,000.00

Date & Time of Opening of

Documents - 04.00 P.M. on 28th Mar 2023

Sd/Deputy Registrar (Admin) Offg.

Sd/-

**DIRECTOR** 

National Institute for Empowerment of Persons with Multiple Disabilities hear after called NIEPMD is a Central Autonomous Body under the Ministry of Social Justice & Empowerment, Government of India invites Expression of Interest (EOI) to finalise holistic development plan of NIEPMD Campus. Interested bidders can apply on line through NIC e-procurement portal URL <a href="http://eprocure.gov.in/eprocure/app":-">http://eprocure.gov.in/eprocure/app":-</a>

#### **EXPRESSION OF INTEREST (EO ) EVENTS: IMPORTANT DATES**

S. No	Particulars	Date
1	Release of Advertisement	10.03.2023
2	Available of document in E- procurement Website	10.03.2023
3	Mandatory Pre Bid- Meeting & Site Inspection	21.03.2023
4	Last date for submission of EOI	27.03.2023
05	Opening of Technical Proposals	28.03.2023

#### 1. Introduction:

National Institute for Empowerment of Persons with Multiple Disabilities (Divyangjan) established in the year 2005, on East Coast Road, Muttukadu, Chennai, Tamil Nadu, (about 30 km from Chennai Central railway station, Mofussil bus terminus and airport) Under Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment, Govt. of India, to serve as a national resource center for empowerment of persons with Multiple Disabilities.

The area of the campus of this premises is 15.22 Acres, having well-maintained roads, extensive greenery and buildings which are an architectural delight

#### 2. Scope of Work:

The proposed EOI is initiated with intention that engaged agency / firm /Individual should carry out a detailed review of the campus and recognize the places can be undertaken for further development keeping in view all Government rules and regulation in force including local authorities order in place. Proposed Plan for Development of NIEPMD Campus will includes DPR, Detailed architectural working drawings for execution, detailed structural design and drawing for actual execution, Finalization of layouts, Interior Designing including Electrification, HVAC, Acoustic Control, Sanitary & Plumbing and other related Works) for as follows: (Refer Annexure 11)

- a. Wheel chair training area
- b. Sensory park
- c. Traffic training unit
- d. Hobby development unit (Gardening, pets, birds watching, star gazing, swimming, fishing and Photography)
- e. Parking stand for pick up and drop of PwD candidates
- f. Seating and resting area
- g. Open gym
- h. Automobile park
- i. Indoor stadium
- j. Accessible flag post
- k. Solar tree and Wi-Fi point
- 1. Synthetic athletic track
- m. Water sports facilities for PwDs
- n. Orientation and mobility training arena
- o. Adapted Basket Ball/Skating/Boccia Court
- p. Layout Drawing
- q. Key plan
- r. Site plan
- s. Tentative layout plan
- t. Contour plan
- u. Topographic Plan
- v. Any other suggested by Director NIEPMD or agency concern finalised for this purpose.

#### 2. Minimum Eligibility criteria:

Work experience Applicants/ bidders who fulfil the following requirements shall be eligible to apply.

- 1) The individual applicant/ bidder should be an Architect/ Architectural Consultant and should have been registered with Council of Architecture (COA) of India.
- 2) The applicant/ bidder should have at least Fifteen (10) years' experience in the field of architectural planning & detailed design and providing Consultancy Services.
- 3) Joint Ventures/ Consortium are not eligible to apply.
- 4) Experience of having successfully completed Similar Work/ Project individually during the last 07 years ending last day of the month previous to the month in which the bid is invited.

	Criteria	<b>Supporting Documents</b>
1.	The Architectural Consultant must be registered	Certificate of
	withthe Council of Architecture	Registration with the
	(Firm/agency/Individual)	Council of Architecture
2.	The Architectural / Design consultant / firms shall be	Certificate of
	of single entity and should have been in the field of	Incorporation
	Architectural consultancy for a minimum period of 10	
	years (Firm/agency/Individual)	

3.	The Architectural / Design consultant / firms	Audited Balance Sheet &
	average annual financial turn over (Gross), by way of	CA Certified Turnover
	professional receipts during the last three years	Certificate
	ending 31st March' 2022 should not be less than Rs.	
	10 Lakhs	
4.	The Architectural / Design consultant / Firm should	Work order/Completion
	have successfully completed at least 3 projects (with a	Certificate
	minimum of two Residential Educational Institutes)	
	involving prepare detail development plan	
	,Architecture & Structural design services in a single	
	Work order as a prime consultant of a Multistoried	
	building of Central / State Govt. / Govt. undertaking	
	/ Institutional building having built up area of not	
	less than 1,00,000 square feet./ development Plan for	
	the Extent Not less than 13 Acres.	

The participating firm needs to also submit Firm's Profile, key personnel, summary of past works furnished in the proposal along with architectural expressions in the form of plan design, photographs, 3D drawings etc.

#### 3. Definition of Similar Works/ Project:

"Campus layout, sensory gardens, Educational Building(s), having academic spaces such as Research Laboratories, Faculty rooms/ Offices, Seminar/ Committee halls; including (but not limited to) all the services (internal/ external), utilities and other development works; all composite executed under one agreement for the Institutions of National Importance (India) or State/ Central Universities or other Govt. Institutions."

#### 4. Presentation:

The shortlisted applicants will be required to give presentation on proposed proposal. Shortlisted bidders participating at this Stage shall submit their Final Design Proposal (land use zoning, urban form, ecological plan, etc.) for the Campus Master Plan and proposed framework for its implementation, monitoring and evaluation before the designated Committee. The proposal shall be detailed at this stage, including the scaled drawings, three dimensional visualizations, technological proposals, costs involved, timelines and deliverables etc., duly supported by data.

**5. Earnest Money Deposit(EMD):** Bidder should pay specified amount towards EarnestMoney deposit as follows:

i) The Bidder/Firm shall deposit EMD Amount Rs. 25,000/- (Twenty-Five Thousand only) through NEFT/RTGS to NIEPMD Account and payment receipt to be uploaded with the technical bid. EMD exemptions can be availed as per existing Government norms.

#### **NIEPMD BANK DETAILS:**

Acc. No. : 76276246

Type of Account : Savings bank

Name of the Bank: Indian bank, Kovalam branch

IFSC Code : IDIB000K122

Branch Code : 01176

- ii) EMD will not carry any interest.
- iii) EMD will be refunded to unsuccessful bidders after finalization of bid.
- iv) The Earnest Money Deposit submitted by the bidder may be forfeited if,
  - a) Successful bidder fails to execute the awarded work within specified time asper intimation/request of the NIEPMD,
  - b) Successful bidder withdraws his EOI or backs out after acceptance,
  - c) Bidder withdraws his EOI during the validity period stipulated in the bidding document,
  - d) Bidder violates any of the terms and conditions of the EOI,
  - e) Bidder revises any of the items quoted during the validity period,
  - f) Bidder is found to have indulged in fraudulent practices in the bid submission process.
- **6. Validity of EOI:** EOI submitted by Bidders shall remain valid for acceptance for a minimum period of 90 (ninety) days from the last date of submission of Bid.
- 7. Conditional EOI would be summarily rejected.
- **8. Payment Terms:** The payment will be made within thirty working days after successfully completion of work. No advance payment will be made under any circumstances.

#### 9. Contact Information:

Queries/clarifications may be e-mailed to <a href="maileo:niepmd@gmail.com">niepmd@gmail.com</a>. Clarifications will be posted from time to time on the Institute website (https://niepmd.tn.nic.in/). No individual replies/clarifications will be sent. No oral communication will be entertained.

10. Estimated Cost: The project approximate estimated cost is Rs. 3,00,000/-. However, vendors are permitted to quoted the actual project cost as per latest market trends and based on quantum of work analyzed by the professionals during site inspection. Attending per-bid meeting and site inspection is mandatory. Pre-bid meeting and site inspection certificate will be issued to bidders. Bids of bidders not attending the meeting and not performing site inspection, will not be accepted for evaluation. The Certificate issued in this regards must be uploaded with technical bid.

# **BIDDER INFORMATION**

Date:

S. No.	Particulars/Details	
1.	Name of the Firm	
2.	Communication Address	
3.	Telephone No. Office	
	Mobile	
	Fax	
	E-Mail	
	Website	
4.	Authorised Person - Name	
	Designation	
	Mobile	
	E-Mail ID	
5.	Alternate Authorised Person - Name	
	Designation	
	Mobile	
	E-Mail ID	
6.	PAN No.	
7.	GST No.	
8.	Company/Firm/Proprietorship Registration No.	
9.	Beneficiary Bank Details	
	Account No	
	IFSC/NEFT Code	
	Name of Bank	

	Address of Branch	
10.	Particular of Earnest Money Deposit (EMD)	UTR No.
11.	Furnish the names with address & telephone nos. of three responsible persons who will be in a position to certify about the services/quality as well as the past performance of your organization.	
12.	Attached Detailed Company/Firm Profile	

Date:	Signature of authorized person
Place:	Full Name & Designation:
	Company's Seal

Annexure-2

**A.** Details of Similar Experience: Preparation of Master Plan for Architectural related work.

Sl.	Name &	Name &	Built	Value of	Contract	Completion	Any other
No.	Address of	Location	up	Work (In	Period	/	information
	the client,	of work	Area	lakh)	(from_To)	Performance	you would
	Concerned					Certificate	like to give
	Person and					enclosed	
	contact/					'Yes' or 'No'	
	Mobile						
	No						
1	2	3	4	5	6	7	8

Fill up the above table & Enclose legible copies of the supporting documents

Note : We hereby confirm that in the above said projects were executed by us.

# B. Details of Technical and skilled manpower

Sl. No	Name and Designation	Qualification	Experience	Any Other Information
1	2	3	4	5

# **C.** Financial Capability: Average Annual Turn Over of the bidder during the last 3 years

SL. No.	Financial Year	Turnover (Rs. in lakh)
1.		
2.		
3.		
	Average	

(Fill up the above table and Enclose copy of Turn over certificates, profit/loss statementcertified by any Chartered Accountant).

Date:	Signature of authorized person
Place:	Full Name & Designation:
	Company's Seal

Annexure - 3

#### **DECLARATION**

(TO BE TYPED ON A LETTER HEAD OF THE COMPANY/ FIRM)

Dated	l:	,	2023

The Director National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) ECR, Muttukadu, Kovalam (post), Chennai – 603 112

**Sub:** Proposed Plan for Development of NIEPMD Campus which includes DPR, Detailed architectural working drawings for execution, detailed structural design and drawing for actual execution, Finalization of layouts, Interior Designing including Electrification, HVAC, Acoustic Control, Sanitary & Plumbing and other related Works)

Sir,

This is with reference to your EOI No. \_\_\_\_\_\_ .... dated ...... on theabove subject that: -

- 1. We have carefully read and understood all the terms and conditions of the EOIand hereby convey our acceptance to the same.
- 2. The information / documents furnished along with the above offer are true and authentic to the best of my knowledge and belief. We are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of our EOI at any stage besides liabilities towards prosecution under appropriate law.
- 3. We have apprised our self fully about the job to be
- **4.** done during the currency of the period of agreement and also acknowledge to bear consequences to of nonperformance or deficiencies in the services on our part.
- **5.** We have no objection, if enquiries are made about the work listed by us.
- **6.** We have not been blacklisted by NIEPMD or any other organization where we haveworked. Further, if any of the partners/directors of the organization /firm is blacklisted or having any criminal case against them, our bid shall not be considered. At any later point of time, if this information is found to be false, **NIEPMD** may terminate the assigned contract immediately.
- 7. We have not been found guilty by a court of law in India for fraud, dishonestyor moral turpitude.
- **8.** We agree that the decision of NIEPMD in selection of Bidders will be final and binding to us.

Date:	Signature of authorized person
Place:	Full Name & Designation:
	Company's Seal:

Annexure - 4

#### **EOI FORM**

Dated: \_\_\_,2023

The Director National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) ECR, Muttukadu, Kovalam (post), Chennai – 603 112

**Sub:** Proposed Plan for Development of NIEPMD Campus which includes DPR, Detailed architectural working drawings for execution, detailed structural design and drawing for actual execution, Finalization of layouts, Interior Designing including Electrification, HVAC, Acoustic Control, Sanitary & Plumbing and other related Works)

Dear Sir,

This is with reference to your EOI No. \_\_\_\_\_\_ dated......on
the above subject. After reading above documents, Amendments/ Clarifications/
Corrigenda/Errata/etc. issued in respect of EOI document by NIEPMD, your requirement, scope of
work, site inspection and after discussions, we have understood them fully and we accept all the terms
and conditions mentioned therein.

We are also enclosing duly stamped and signed copy of the above form along with annexures as token of acceptance of the terms indicated therein.

:

Name & Address of the Bidders

Contact phone Nos. of the key person

Official E-mail ID :

Signature of Authorized Signatory with date and seal :

# Annexure - 5

# **Details of Proprietor/Partners/Directors**

Sl. No	Name	Designation	Qualification	Any other information
1	2	3	4	5

(Name, Signature, Seal of the agency/firm with date)

# Annexure - 6

# List of Key personnel permanently employed in your firm

Sl.	Name and	Qualification	Experience	Particulars	Employed in	Any Other
No	D : (:			of Work	Your Firm	Information
	Designation			Done	Since	
1	2	3	4	5	6	7

(Name, Signature, Seal of the agency/firm with date)

# Annexure - 7

#### **List of Associates**

Sl.	Name and	Specify the field	Experience	Associated in	Any other
No	address of	(area of		the project	information
	the	operation)		(givename of	
	Associate			work)	
1	2	3	4	5	6

(Name, Signature, Seal of the agency/firm with date)

## Annexure - 8

# Details of Empanelment, if any (with Govt. Organization/PSUs/Banks etc.) with proof

S1.	Name and address of	Nature of	Value of	Date of	Any other
No	the Organizationand	Works	Works	Registration	information
	Contact No. of				
	concerned official				
1	2	3	4	5	6

(Name, Signature, Seal of the agency/firm with date)

# Annexure - 9

# **Details of Major Clients**

S1.	Name and	Name of the	Contact	Give nature	Any other
No	address of the	concerned	no.	of work	information
	Organization	official		carried out	
1	2	3	4	5	7

(Name, Signature, Seal of the agency/firm with date)

#### FINANCIAL BID

The Director National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) ECR, Muttukadu, Kovalam (Post), Chennai – 603 112

**Sub:** Proposed Plan for Development of NIEPMD Campus which includes DPR, Detailed architectural working drawings for execution, Detailed structural design and drawing for actual execution, Finalization of layouts, Interior Designing including Electrification, HVAC, Acoustic Control, Sanitary & Plumbing and other related Works)

Dear Sir,

This is with reference to your EOI No.\_\_\_\_\_\_/... dated ...........
on the above subject. After reading above documents, Amendments/
Clarifications/Corrigenda/ Errata/etc issued in respect of EOI document by
NIEPMD, your requirement, scope of work, site inspection and after discussions, we
have understood them fully and we accept all the terms and conditions mentioned
therein. We quote our consultancy charges/ professional fee as under:

- (a) For preparation of Master Plan/. Development Plans
- (b) For preparation of Sub Plans as per scope of work like worth 3.0 Lakhs.

The fees quoted by us are inclusive of all other charges and incidental expenses for the sites visit, etc. **but exclusive of taxes.** 

We are also enclosing duly stamped and signed copy of the above letter along with annexures as token of acceptance of the terms indicated therein.

Name & Address of the Bidders

Contact phone Nos. of the key person :

Official E-mail ID :

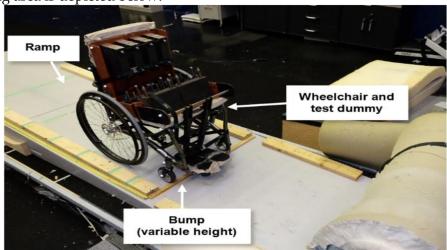
Signature of Authorized Signatory with date and seal :

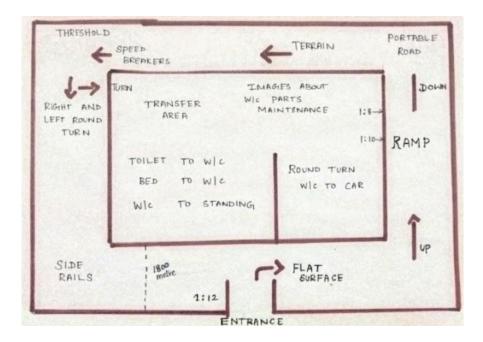
#### Proposed Plan for Development of NIEPMD Campus

As per the directions of the EC the holistic development of the NIEPMD campus has been taken up. There are seventeen facilities which are being proposed to be implemented.

#### 1. Wheel Chair Training Area:

**Aim**: To enable wheel chairs users learn different skills so as to use the wheelchair optimally and achieve independence in activity of daily living skills. The broad layout of the wheel chair training area is depicted below:



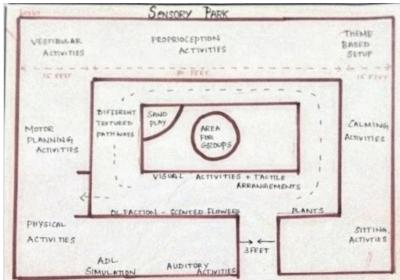


#### 2. Sensory Park

**Aim**: To facilitate stimulation and integration of different senses for children and adults with and without disabilities.

This sensory park shall be utilised to provide group therapy for children and adults with disabilities. Different plants & flowers to provide different smells, sound making instruments & materials shall be included. Various motor planning activities, physical activities shall be provided for individuals with disabilities to facilitate their participatory level in the rehabilitation and enhance their activities of daily living through play and group therapy activities.





# 3. Hobby development unit & leisure: Gardening, Pets, Bird watching, Star gazing, Swimming, fishing & Photography

**Aim**: To provide scope for developing a hobby including learning skills to handle leisure.

- 1. Accessiable Garden with Gardening Facilities
- 2. Pet cage having rabbits, birds, poultry, fishes (Available)
- 3. Provision for an outdoor telescope to watch stars.
- 4. Hydrotherapy pool: Available
- 5. Fishing: Back waters









#### 4. Traffic training unit

**Aim**: simulation of road transport system, to facilitate learning different traffic rules and to provide a space for PwDs to learn & to create Model Road & accessible parking system.

- 1. Roads to be laid for the internal campus, markings, zebra crossing, blinkers and traffic lights should be included.
- 2. Tricycle training area
- 3. Adequate road lights.
- 4. Traffic Lights
- 5. Signage.
- 6. Accessible layout map for the whole campus at the entrance and at the parking sites.
- 7. Model accessible Bus Stand with accessible drinking water facilities.



5. Parking Area outside the Campus/adjacent to front boundary: (Permission is being obtained from Highway Development Authority)

**Aim**: to create parking facilities of two wheelers along with facility for scooter & bike wash along with car wash.

- 1. One strip of strong ground along the boundary, taking advantage of the tree shade to enable two wheeler parking.
- 2. Water pipe facility in five locations in the campus.
- 3. Facility to park three cars which can be washed.

#### 6.Skill training Units /Shops for Vocational Empowerment.

**Aim**: To have an outlet for sale where PwDs can be trained upon various skills.

- 1. Three shops with 10 ft x12 ft with the outlets facing the ECR these will be used for training PwDs on skills to achieve vocational empowerment.
- 2. Skill training for Vehicle wash facilities.



#### 7. Taxi Stand for Pick up and drop of PwD at the entrance

Aim: To develop a model accessible pick up and drop area for PwDs so as to enable them access facilities of NIEPMD with ease.

# 8. Parking for PwDs in front of main Entrance.

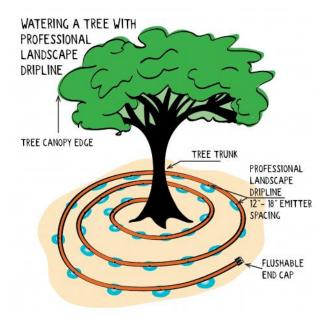
Facilities to park four two wheelers and two four wheelers for PwDs in front of the gate.

## 9. Seating & Resting Area

- 1. Accessible seating area for 50 students at the volley ball court
- 2. Seating areas and resting space for Pwds under the trees to relax and have food.



#### 10. Drip Irrigation facility to all the grow up trees & coconut trees in the campus.



Drip Irrigation is a technological innovation for stepping up production with limited water supply. It increases yield by 25-35% and saves water to the extent of 30-40%. It can be adopted for a wide range of crops particularly for horticultural crops, flowers, vegetables, trees etc.

# 11. Open Gym

**Aim:** to encourage fitness in all the stake holders of NIEPMD. The equipment's apart from regular ones will have modified equipment's for PwDs.

The space shall be used to have open gym facilities for PWDs and others for accessing equipment to have fitness.



#### 12. Automobile Park:

**Aim**: to orient PwDs about common Vehicles like Motor Bikes, Car & Bus using Dummy Models.

The park will be having three dummy models of a Mini-Bus (Available), Car and a Bike which can be used to orient PwDs about boarding, de-boarding the vehicles and positioning themselves

in the vehicle. This would be especially useful for the persons with visual impairment and the persons with autism spectrum disorders.

#### 13. Indoor stadium

**Aim**: to enable training and conduct of various indoor games which are played by the persons with multiple disabilities leading to participation in Para Olympics

- 1. Have facilities for games like bocchia, archery, shooting, badminton, chess, Table tennis, carom, gymnasium etc which can be played by children with multiple disabilities
- 2. The facility to have an auditorium with 500 seating capacity.
- 3. A specialized accessible gymnasium.



#### 14. Accessible Flag Post:

**Aim:** To design a model accessible flag post which can empower a wheel chair user a Pw\_Visual impairment as well hoist a Flag.

- **1.** ......Ht flag post with accessible reach.
- 2. Three Tanjore pillar design with 3D logos on top of them showing evolution of NIEPMD and DEPWD. Logos of NIEPMD (2006), DEPWD (2012) and 15 years of NIEPMD (Crystal Jublee) opposite to the flag post.
- 3. Appropriate illumination.

#### 15. Solar Tree and Wi Fi Point:

**Aim**: To Put to use and show case the method to implement natural energy sources along with a landmark and seating area.

A solar tree is a structure incorporating solar energy technology on a single pillar, like a tree trunk. It may be a solar artwork or a functional power generator. Benefits of solar tree Solar trees may build awareness and interest in solar technology and also provide shade and meeting places.

#### 16. Model accessible toilets: Available

**Aim**: to develop and show case a model accessiable toilet for use by one and all.

#### 17. Secured Garbage Disposal Site:

**Aim**; to develop pit where garbage can be stored for 14 days till its taken away by the panchayat. It should have facilities to burn the biodegradable material like wood, grass, shrubs and herbs which come out of regular gardening and of the campus.

#### 18. Synthetic Athletic track: 200 meters

**Aim:** To train Para Athletes to compete for National and international Sporting events.

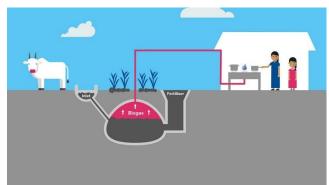
Porplastic synthetic athletic track surfaces are advanced track surfaces designed to provide athletes with the highest levels of surface performance for competition as well as for safe training.

The athletics events within the Para sport are mostly the same as those available to able-bodied people, with two major exceptions in wheelchair racing and the club throw



# 19. Cow Shed, Vermi compost & Biogas facilities: (<u>implementation</u>, maintenance and finding suitable manpower would be challenging)

**Aim**: To develop self-sustainable fuel to support the students mess along with skill training for Pw MD in the area of Animal husbandry, organic manurecreation, vermi compost.



Biogas is a mixture of gases, primarily consisting of methane, carbon dioxide and hydrogen sulphide, produced from raw materials such as agricultural waste, manure, municipal waste, plant material, sewage, green waste and food waste. It is a renewable energy source.

#### 20. Water Sports facilities for PwDs:

**Aim**: To enable PwDs take up water sports as a recreational means as well as a sport.

The shallow waters and the hydrotherapy pool of NIEPMD creates an ideal environment to go for a water sports both in controlled environment of the hydrotherapy pool and the natural environment of back waters.

Aquatic environments allow people with disabilities to **move easier**. As established by the Archimedes Principle, "a body submerged in liquid suffers an upward vertical thrust equal to the weight of the fluid it dislodges", which means that in water body weight can decrease by up to 90% which facilitates the performance of exercises.

Hydrotherapy, used at the physical and psychic level, consists of utilising water as a therapeutic agent in conjunction with other physical elements such as temperature, frictional force and hydrostatic pressure.

Generically, the **benefits of water sports for people with disabilities** are the same as for people without disabilities, the most important benefits are:

- All of the muscle groups are used.
- It increases cardiorespiratory capacity.
- The resistance provided by the water helps to burn calories.
- Different elements are required for the same exercise, such as resistance, strength and flexibility.
- They can help to reposition the spine and achieve a more upright position.
- The coolness of the water and the feeling of floating can reduce the sensation of effort.
- Joint pressure is lowered.





#### 21. Orientation and Mobility training arena:

**Aim:** to empower the persons with visual impairment move independently in the community along with the use of cane.

This is a training that enables blind and visually impaired individuals to learn to travel safely within their community. Specialized instruction will allow the student to learn safe techniques for crossing streets, using canes and accessing public transportation. The area around the campus would be specifically designed so as to enable the pwVI learn all the skills needed to navigate independently.



#### 22. Adapted Basket Ball / Skating / Boccia Court:

**Aim**: to train children and adults in Basket Ball / Skating/ Boccia so as to play for leasure and to select it as a profession if aimed for.



Wheelchair basketball is basketball played by people with varying physical disabilities that disqualify them from playing a non-disabled sport. [1] These include spina bifida, birth defects, cerebral palsy, paralysis due to accident, amputations (of the legs, or other parts), and many other disabilities.

Therapeutic skating may produce physical benefits for children with autism spectrum disorder and offer a viable, inexpensive community-based alternative to other forms of physical activity.

The name "boccia" is derived from the Latin word for "boss" – *bottia*.<sup>[1]</sup> The sport is contested at local, national and international levels, by athletes with severe physical disabilities. It was originally designed to be played by people with cerebral palsy but now includes athletes with other severe disabilities affecting motor skills. In 1984, it became a Paralympic sport and as of 2020, 75 boccia national organizations have joined one or more of the international organizations.<sup>[2]</sup> Boccia is governed by the Boccia International Sports Federation (BISFed) and is one of only two Paralympic sports (along with goalball) that have no counterpart in the Olympic program.

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# SITE