



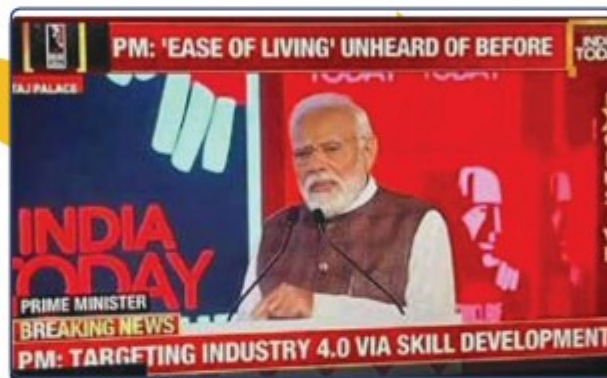
MINISTRY OF DEVELOPMENT OF
NORTH EASTERN REGION



India Prime Minister in
Hmarchhak state a a
hmalakna
(PM-DevINE)

Electronic Manufacturing Cluster (EMC)-a Digital ruangam siam
leh 3D Printing Centre of Excellence te chu Sawrkar Agency
dangte nen tangkawpin Tech City, Guwahati-a h a awm tur a ni.

Kan Prime Minister zahawm tak hmahlir hnungzuiin India hmasawna rahbi tur te zinga mi Industry 4.0 innovation hmangin, the Ministry of Development of North Eastern Region, Government of India (MDoNER) , North Eastern Council (NEC) leh AMTRON te chuan Digital Public Infrastructure for 3D Printing Ecosystem hmalakna an bawhzui. Hmar chhak state ho a huam ang a, 100% Centrally Funded Project ani baw k ang PM-DevINE Budget hnuaiha.



Hmarchhak state ten 3D chhutna hmu tura tian ni 3 August, 2022 live a buatsaih North Eastern Council Secretariat, Shillong a huaihawt a, Chumi hnuah 3D Printed Sockets / prosthetic leg pek an ni a, waviin hian a halwkputute hian chak tak leh nun awlsam an nei a, rualbanlote tan apt Model To Promote "Nun awlsamna" a ni.

He project sawi tak hian NER thalai te chu Industry atanga hlawkna tha ber an neih theih nan skillset dik tak an neih theih nan a pui dawn a ni, 4.0 hun remchang a awm. Hei hian Healthcare, Disability Treatment, Oil leh Gas Industry, MSME Ecosystem / start-ups / tribal enterprise te tihmasawn, Border Area Development atang 3D siamchhuah thawnchhuah leh hnathawh thenawmte ramah a nei etc..NER chuan India ram chu Global Economic Superpower-a siam turin Vision Viksit Bharat @ 2047-a a chanvo a thawh theih phah dawn a ni.



Industry 4.0 hian company hrang hrangte thil siam chhuah, tihchangtlun leh sem chhuah dan a tidanglam mek a ni. Thil siamtute chuan thiamna thar, Internet of Things (IoT), 3D chhut, cloud computing leh analytics, leh Artificial Intelligence (AI) leh Khawl hmanga zirna (ML) te chu an thil siamna hmunah leh an hnathawh chung zawngin an hmang khawm mek a ni. Indutry 4.0 hi latency hniam leh 5G hmantheih telecommunications thatna dangte hmanga thlawp a ni. 3D chhutchhuah leh Industry 4.0 te hi hmanraw hrang hrang hmanga “Make In India” tihlarna atana hmanraw tangkai tak (tech thar chhuak zingah) a ni. Kum zabi 21-na khawvel economy-ah hian kan inel thei dawn a, chu chuan tunlai thil siamna lama zirtirna nei hnathawk chak tak a mamawh a ni. 3D chhutchhuah hi manufacturing industry hmalam hun a ni a, conventional siamchhuah ah pawh a hma aia rang zawka thlak theihna a nei a, hmanna lian thenkhat nen:

1 Hmanruate hi 3D chhutna industry tan chuan bazar lian ber pakah

The focus areas would be MSME Tooling / Agri Tooling / Rural and Small Enterprises for industrial applications.

2 Healthcare / Medical Education

Medical segment-ah hian 3D chhut chhuah na a tan hmasawna hun remchang lian tak a awm a, chu chu Medical Education (Anatomy, Forensics), Pre-Surgery Planning(GI/Cardiac/Nephrology, Neurology, Orthopedics etc.), Brachytherapy based Oral Cancer Treatment, TMJ Disorder emaw pawh nise Enkawlna, Digital Dentistry (Aligners, Crowns, Implants Etc.), Trauma Surgery leh a kaihnawih enkawlna, Reconstructive Surgeries te chu a tlem berah tarlan tur a ni. Chutiang bawkin, siamchawp medical implant leh in enkawlna hmanrua te tan pawh hmalam hun duhawm tak a awm a ni.

3 Disability Treatment / Rehabilitative Services.

4 Fashion & Industrial Design Prototyping

Fashion thil leh kentel te, kekawr ruangam siam, tlereuh siam, thing siam mimal thilpek etc.

5 Technical Education

Industrial Training Institute / Polytechnics, Engineering College etc. kaltlangin Industry 4.0-a industrial ruangam siam lama thawk turin hmalam hun atana ready mihring thiamna hmangin

6 Reverse Engineering

Spare peng te man to tak tak Reverse Engineering khawl te, OEM siam chhuah tawh lohna hmuna spare thlak danglam etc..

AMTRON in a a thlawp Industry – Academia Partnerships kaltlangin Digital ruangam siamna leh 3D chhutchhuah hman dan chungchangah North Eastern Region thalai zingah Technical Education lama hmasawna, awareness, MOOC Course, Use Case lab hmanga quality tihchangtlun.

Thalai thiamna nei tura in pholanna tur a siam leh hnathawk tawh leh thiamna thar neih ngai te chu tunlai leh hmalam hun atana Industry 4.0 landscape mamawh puhruk turin an industry awmsa vertical rawngbawlina atana thiamna thar neih a ngai.

3 D products a bik takin Healthcare / Disability Treatment / Oil & Gas Industry te lakluh tihlem / thawn chhuah a market tihchak nan Make In India leh ngaihtuahna tihhmasawn.

NER hi Multi Trillion Dollar Indian-a Growth Engine Ni turin thawhhlawk rawh Economy India @ 2047 hnuaiah Viksit Bharat Sanakalp - Industry tihhmasawn 4.0 a ni. India Vision @ 2047-a thawhhlawk turin hmarchhak biala Ecosystem.

Hmarchhak tana SDG 2030 Parameter-a nghawng a neih beisei

1 SDG 3 - Hriselna tha leh damna tha

Dilna ruahmante hian nun awlsamna a tihpung ani.

- a. Healthcare - Tul lova sum hman tihblem, Enkawlna senso zawng zawng tihhniam, Continuous Medical Education Quality tihsan.
- b. Divyang - In dawrh awlsamna leh sum leh pai lama telna tha zawk neia nun pangngai an neih theih nan tanpui.

2 SDG 4 – Zirna tha tak

Hmarchhak atanga thalai / Professional / Entrepreneur te hnenah Zirna Quality sang tak pek a ni ang.

3 SDG 5 – Gender Equality

Hmeichhiaten entrepreneurship activities atan 3D Printing Tech lama training an pe / Industry 4.0-a skill gap awmte chinfel.

4 SDG 9 – Industry, Innovation & Infrastructure

NER-a traditional agro / mining based industry atanga thil thar leh service thar leh diversification atana R & D tihhmasawn. Tin, MSME, Private Enterprises te pawh a thlawp bawk a, hei hi India ram hmun dang nena khaihin chuan a hniam hle.

5 SDG 9 – Inthlahna tihblem

He project hian zirna tih hmasawna leh healthcare mipui te hnena pek a tum tlat bawk a ni

6 SDG 12 – Lakluh leh siamchhuaha mawhphurtu

Reduce waste generation in production process as compared to Substrative Manufacturing.

Workshop - Educational Institutions In NER

1

ASSAM



17. Digboi Collage, Tinsukia

Tinsukia



18. NIT Silchar, Assam
19. Assam University, Silchar
20. Department of ETC Engg. Silchar Polytechnic, Assam

Cachar

1. Sarthebari Jatiya Bidyalaya, Barpeta
2. Sarukhetri High School, Sarthebari, Barpeta
3. Sarthebari Girl's High School, Sarthebari, Barpeta
4. Smart Computer Education, Sathebari, Barpeta
5. Banchit Choudhury Sankardev Shishu Niketan Sarthebari, Barpeta
6. Sarukhetry Jatiya Vidyalaya, Barkapala, Barpeta
7. Babujee College, Sarukhetri, Barpeta
8. Sarthebari H.S. School, Sarthebari, Barpeta
9. Jnyandeep Anchalik Senior Secondary School, Barghopa, Barpeta
10. B.R. Milan High School, Rauli, Vill. Bhakuatepa, Barpeta

Nalbari

Barpeta

সৰ্থেবানী
ছোৱালী হাইস্কুল
শ্ৰী ডি প্ৰিটিঙৰ
কৰ্মশালা

প্ৰতিদিন সোৱ. সৰ্থেবাৰী, ১৭ মাৰ্চ
১ এম.টী.ম.ৰ উদ্যোগত আন
সৰ্থেবানী ছোৱালী হাইস্কুলৰ
সহযোগত ১৬ মাৰ্চত সৰ্থেবানী
ছোৱালী হাইস্কুলত শ্ৰী ডি প্ৰিটিঙৰ
একটা কৰ্মশালা অনুষ্ঠিত হ'ল।
কৰ্মশালাত সৰ্থেবানী ছোৱালী
হাইস্কুলকে ধৰি অঞ্চলটোৰ ১০ খন
স্কুলৰ ২৪০ খনৰীয়া ছাত্ৰ-ছাত্ৰীয়ে
ভাগগ্ৰহণ কৰে। অনুষ্ঠিতকালত
পুৰণিখন বিজ্ঞান আলাপিত্তে ছাত্ৰ-
ছাত্ৰীসকলক ইয়াৰ এক সফল
পেৰাৰ সপক্ষে অনুষ্ঠিতকালত প্ৰতি
ছাত্ৰ-ছাত্ৰীক আকৰ্ষিত কৰা
কৰ্মশালাখনৰ মূল উদ্দেশ্য।
কৰ্মশালাৰ ছাত্ৰ-ছাত্ৰীক শ্ৰী ডি
প্ৰিটিঙৰ প্ৰশিক্ষণ নিজে এম.টী.ম.
সফল হ'লোৱে।

Kamrup Metro

11. Balabhavan Vidyapith High School, Sariahtali, Nalbari
12. Swami Paramanda Girl's High School, Sariahtali, Nalbari
13. ITI, Nalbari
14. Prabhati Bishnujyoti Self Help Group, Milanpur, Nalbari

15. ITI Women College,
Kamrup Metro, Guwahati
16. Girijanand Chowdhury University,
Kamrup Metro, Guwahati





MIZORAM



Serchhip District

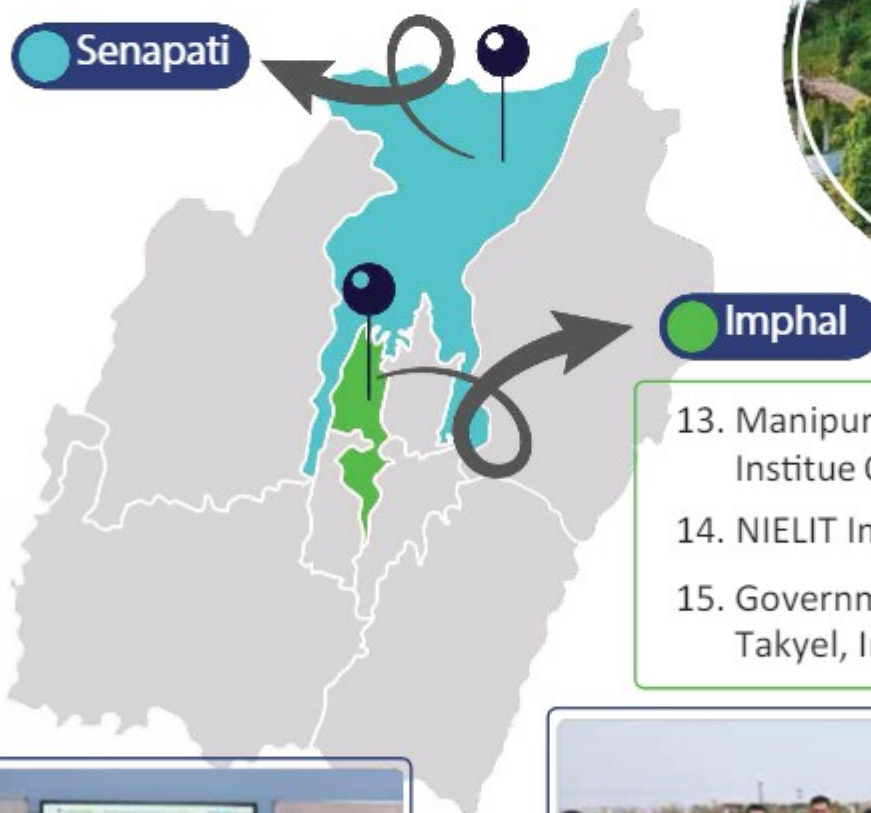
1. District Institute Of Education & Training, Serchhip
2. Government Serchhip College, Serchhip
3. Government Serchhip Higher Secondary School, Serchhip
4. Eklavya Model Residential School, Serchhip



3

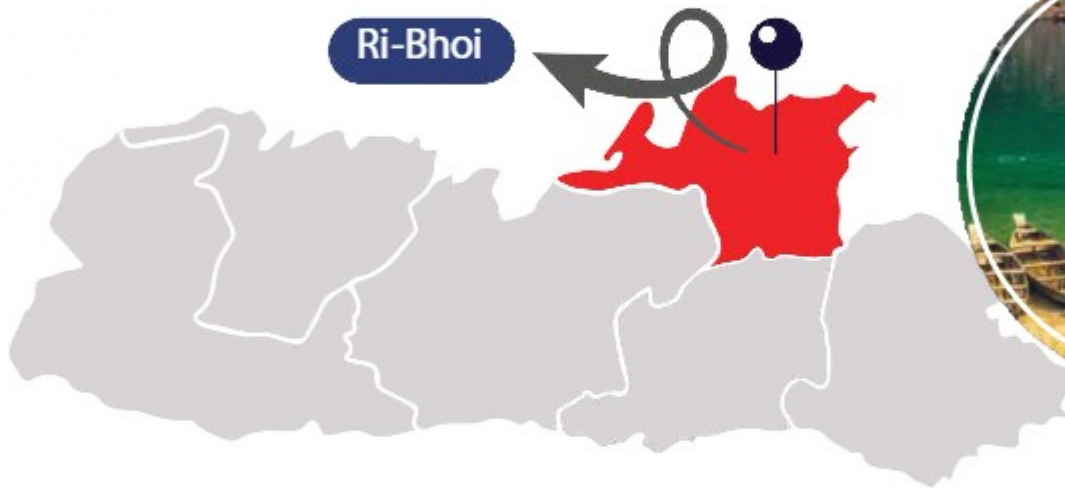
MANIPUR

1. ISÜPHI Education Center, Chisari, Chowainamei, Senapati
2. Sardar Patel High School, Senapati
3. St. Xavier's School, Makhan, Senapati
4. ST Joseph's H.R School, Tadubi, Senapati
5. Mount Gibeon Higher Secondary School, Tadubi, Senapati
6. Nazareth Residential School, Mao Gate, Senapati
7. Okai Academy, Mao Gate, Senapati
8. St Joseph High School, Lower Shajouba, Tadubi, Senapati
9. Asufii Christian School, Punanamei, Mao Gate, Senapati
10. Don Bosco Hr. Sec. School, Mao Gate, Senapati
11. Sophia English School, Punanamei, Mao, Senapati
12. Asufii Christian Institute, Punanamei, Mao, Senapati



13. Manipur University and Manipur Institute Of Technology, Takyelpat
14. NIELIT Imphal, Akampat
15. Government Polytechnic, Takyel, Imphal





1. Alpha English Higher Secondary School, Pahamsyiem, Nongpoh, Ri-Bhoi
2. Savio Secondary School, Nongpoh, Ri-Bhoi
3. Nomiwell Memorial Secondary School, Nongpoh, Ri-Bhoi
4. Saiden RMSA Secondary School, Saiden, Ri-Bhoi
5. Ri-Bhoi Presbyterian Synod English Secondary School, Pahamlapong, Nongpo, Ri-Bhoi
6. Umsning Presbyterian Higher Secondary School, Umsning, Ri-Bhoi
7. Nongthymmai Presbyterian Sec. School, Umsning, Ri-Bhoi
8. Gorkha Pathsala Secondary School, Umsning, Ri-Bhoi
9. Balawan College, Umsning, Ri-Bhoi
10. Sati Raja Memorial Sec. School, Umsning, Ri-Bhoi
11. Eden Academy Sec. School, Umsning, Ri-Bhoi
12. St. Michael Higher Sec. School, Umsning, Ri-Bhoi
13. Umsning Town Durvar Sec. School, Umsning, Ri-Bhoi

5

ARUNACHAL PRADESH

1. College Of Agriculture, Pasighat, East Siang
2. Arunachal Pradesh University, Pasighat, East Siang
3. Govt. HR. Sec. School, Borguli, East Siang
4. IGJ Govt. HR. Sec. School, East Siang
5. Pasighat Sigma Institute Pvt. Ltd., East Siang
6. Govt. HR. Sec. School MEBO, East Siang
7. D.E.M Govt. HR. Sec. School, Pasighat, East Siang
8. Government Polytechnic Pasighat, East Siang
9. Govt. HR. Sec. School, Ruksin, East Siang
10. College Of Horticulture / College Of Forestry, Pasighat, East Siang



11. Govt. HR. Sec. School Marvang, Upper Siang
12. Govt. H.S. School, Yingkiong, Upper Siang



13. Govt. HR. Sec. School, BolengSiang

Upper Siang

14. Govt. HR. Sec. School, Sille

Siang

West Siang

Papum Pare

East Siang

15. North Eastern Regional Institute Of Science And Technology (NERIST), Arunachal Pradesh



6

NAGALAND



Dimapur



1. Pranabananda Women's College, Dimapur
2. Nagaland Tool Room & Trg. Center, Dimapur
3. Holy Cross HR. Sec. School, Dimapur
4. Government High School Lengrijan, Dimapur
5. Immanuel Collage, Lengrijan, Dimapur
6. Christian Higher Sec. School



7

SIKKIM

1. Govt. Sec. School Melli Aching , Gyalshing, West Sikkim
2. Government Yuksam SR. Sec. School, Gyalshing, West Sikkim
3. Dentam SE. Sec. School
4. Khechupari Govt. SR. Sec. School
5. Vocational College Dentam
6. Govt. Junior High School Chingthang
7. P.R. Lama Govt. SR. Sec. Sec. School Yangsum, West Sikkim
8. Govt. SR. Sec. School Darap, Gyalshing
9. Govt. Sec. School Central Martam, Gyalshing
10. Govt. Junior High School, Onchung, Gyalshing
11. Govt. Sec. School Rinbik Gyakshing
12. Govt. SR. Sec. School Pelling, Gyalshing
13. District Institute Of Education And Training (DIET)
14. Govt. Sec. School Middel-Gyalshing
15. Govt. Girl's SR. Sec. School, Kyongsha, Gyalshing
16. Govt. SR. Sec. School Legship, Gyalshing
17. Industrial Training Institute, Gyalshing

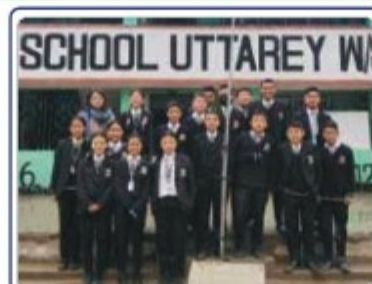


West Sikkim



Pakyong

18. Sikkim Manipal Institute Of Technology, Sikkim Manipal University
19. Government SR. Sec. School, Uttarey, West Sikkim
20. Govt. Senior Secondary School Sakyong, Gyalshing



1. Bir Bikram Memorial College, Agartala
2. Maharaja Bir Bikram College, Agartala
3. Women's Collage, Agartala
4. Bhavan's Tripura College Of Science & Technology, Anandnagar
5. Tripura University, Suryamaninagar
6. Techno College Of Engineering, Agartala
7. Bharat Pharmaceutical Technology, Amtali, Agartala
8. National Institue Of Electronics & Information Technology (NIELIT), Agartala
9. Ramthakur College, Agartala
10. TTAADC Poytechnic Institue, Khumulwng



Agartala



Workshop - Healthcare Institutions In NER

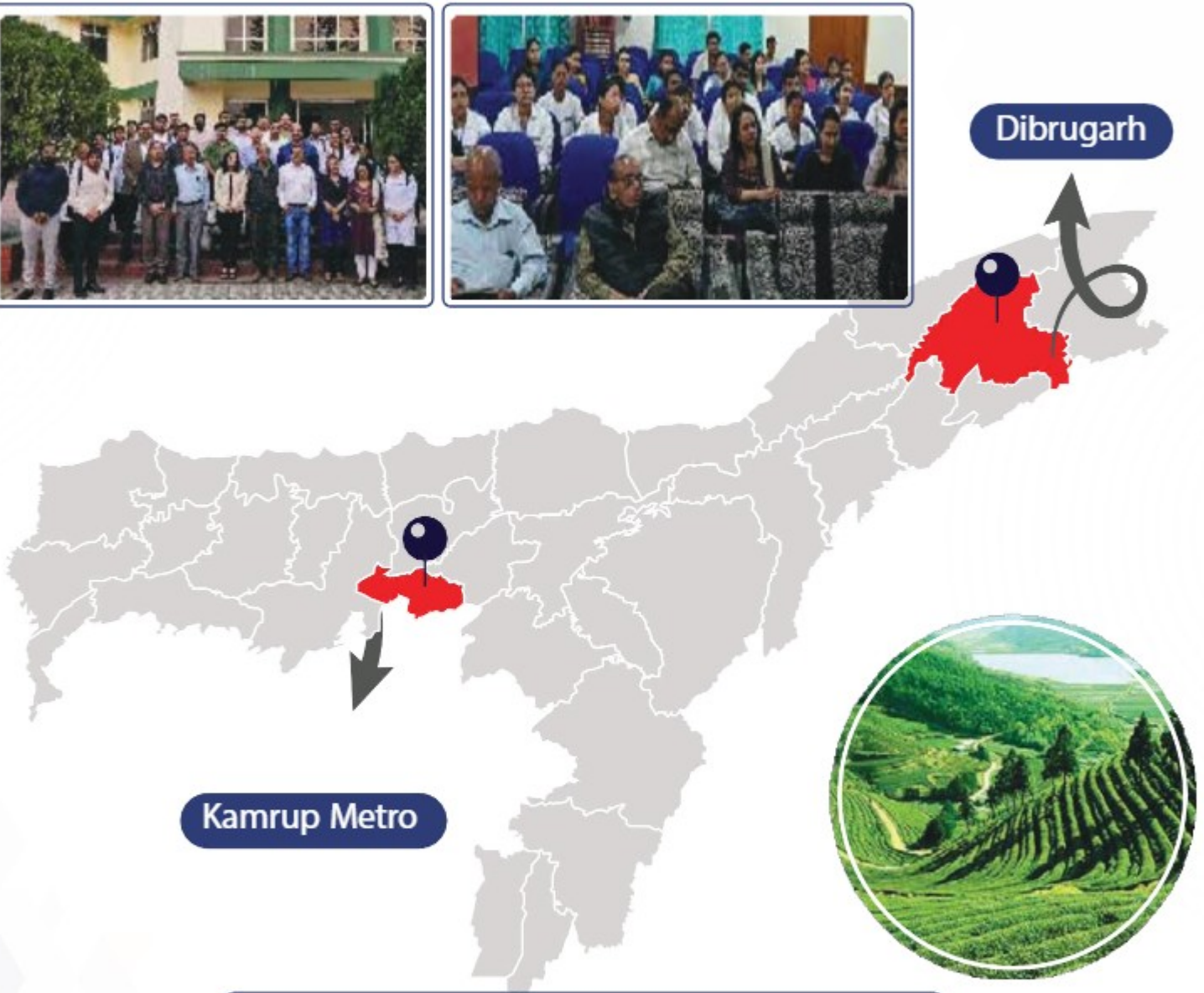


ASSAM

Assam Medical College, Dibrugarh along with Institute of Paramedical Sciences under AMC, Dibrugarh and BSC Nursing College, Dibrugarh



Dibrugarh



Kamrup Metro

Regional College of Nursing, Indrapur, Guwahati



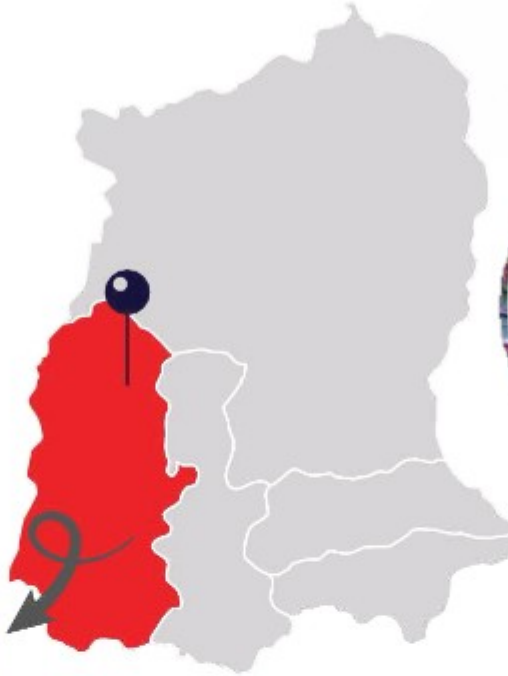
MIZORAM



Serchhip District

District Hospital, Serchhip





West Sikkim District

District Hospital, Gyalshing





NAGALAND



Naga Hospital Authority, Kohima



5

ARUNACHAL PRADESH



Papumpare District

Abotani Dental Clinic with members of Arunachal Pradesh State Dental Council, Itanagar



TRIPURA

Agartala



Tripura State Red Cross Society, Agartala



MANIPUR

Workshop on use of digital designing tools held

RIMS observes Oral Health Day, holds health camp

The Department of Physical Medicine and Rehabilitation (PMR), Regional Institute of Medical Sciences (RIMS) organised a workshop on 'Use of Digital Designing Tools and 3D Printing to provide custom designed prosthetics and orthotics devices to patients in need' at RIMS Seminar Hall today.

The workshop was conducted under the project awarded to AMTRON, a PSU of Assam Government, by the Ministry of DoNER, Government of India.

It was attended by a diverse mix of medical professionals such as junior residents, senior residents, assistant professors, and professors from both PMR and sports medicine specialties.

RIMS Director, Prof. G. Sunil Kumar Sharma and Dr. L. Nilachandra Singh, Head of

Workshop organised at RIMS
IMPHAL, Mar 28

Department of PMR also grand the workshop.

The workshop commenced with a detailed demonstration of below knee amputation scanning, followed by the conversion of raw images into precise 3D models using advanced software.

Participants actively engaged in post-processing design work, refining 3D models to determine optimal pressure distribution for prostheses, thereby enhancing comfort and functionality.

This modern approach represents a significant advancement over traditional techniques since the digital designing is much faster and the products are more comfortable for beneficiaries.

Additionally, all attendees were provided with hands-on experience, allowing them to directly manipulate and interact with the 3D models.



Imphal West District



Regional Institute Of Medical Sciences, Imphal



West Garo Hills District



District Hospital, Baghmara



3D Printing Centre of Excellence,
Tech City,
Assam Electronics Development Corporation Limited (AMTRON),
Bongora, Near Lokpriya Gopinath Bordoloi International (LGBI) Airport,
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Email: 3dpcoener@gmail.com