



EVALUATION OF NESIDS - OTRI SCHEME: ASSESSING PROGRESS AND IMPACT







MINISTRY OF DEVELOPMENT OF NORTH EASTERN REGION



Government of India







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List of Abbreviations

MDoNER	Ministry of Development of Northeastern Region
NEC	North Eastern Council
NER	North Eastern Region
NESIDS	Northeast Special Infrastructure Development Scheme
NESIDS-OTRI	Other Than Roads Infrastructure
NLCPR	Non-Lapsable Central Pool of Resources
HADP	Hill Area Development Programme
SDGs	Sustainable Development Goals

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We are confident that the findings and recommendations in this report will contribute meaningfully to the ongoing efforts toward the holistic development of the North Eastern Region.

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Executive Summary

The evaluation of completed and ongoing projects across various states highlights significant progress in infrastructure development, social welfare, and economic transformation. These initiatives have successfully addressed key developmental needs, improving public services, regional connectivity, and quality of life. While the achievements are commendable, a closer analysis reveals areas that require sustained efforts to ensure long-term impact, sustainability, and efficiency.

Completed projects have delivered substantial benefits across multiple sectors. In Arunachal Pradesh, the augmentation of water supply in Bhalukpong has improved accessibility; however, long-term sustainability measures, including community engagement and regular maintenance, need to be reinforced. Similarly, the enhancement of educational infrastructure in Changlang has created a conducive learning environment, yet future efforts should focus on optimizing resource utilization and ensuring digital integration for broader outreach. Assam's new medical college in Nalbari strengthens healthcare capacity, but additional investments in digital health technologies and specialist training programs will further enhance its effectiveness. Meanwhile, power infrastructure improvements in Manipur have increased electricity reliability, though incorporating renewable energy solutions would ensure greater sustainability.

In agriculture and sports, projects such as the Sustainable Agro-Livestock Technology (SALT) 4-Model Village in Manipur and the Mini Sports Complex in Mizoram have contributed to rural livelihoods and youth development. However, further strengthening of market linkages and expanding training facilities will be crucial for long-term viability. Similarly, road and bridge upgrades in Nagaland, Tripura, and Sikkim have improved mobility and trade efficiency, yet the integration of smart traffic management systems and strategic planning for trade corridors remains an area for improvement. The modernization of marketplaces and administrative facilities, such as those in Sikkim and Mizoram, has boosted commerce and governance, though periodic assessments will be necessary to measure sustained economic benefits.

Ongoing projects exhibit promising potential, but their success hinges on strategic execution and continuous evaluation. The Chilly/Spices Processing Centre in Manipur offers economic opportunities for farmers, but ensuring proper market integration, capacity building, and sustainable sourcing practices will determine its long-term success. Educational projects across multiple states are poised to transform learning environments, yet emphasis on digital literacy, equitable access, and industry-academic collaboration is necessary for maximum impact. Health initiatives, including the Infectious Disease Centre in Manipur, require sustained financial planning and technological integration to ensure accessibility and operational efficiency. Urban infrastructure projects, such as the Solid Waste Treatment initiative in Sikkim, contribute to environmental sustainability, yet broader implementation strategies will be essential for scalability and long-term impact. Investments in power, sports, and water supply have already shown positive results, but

enhanced resilience strategies, grassroots talent development, and climate-adaptive water management approaches will be critical for sustained benefits.

To optimize the effectiveness of these projects, a multi-faceted strategy is required. Strengthening longterm sustainability through community ownership and structured maintenance plans will ensure continued impact. The integration of digital innovations, renewable energy solutions, and smart infrastructure management will enhance operational efficiency. Capacity-building programs must be expanded to equip stakeholders with the necessary skills for self-sufficiency and economic participation. Strengthening market integration, value chain development, and policy support will maximize project success, while establishing robust monitoring and evaluation frameworks will enable continuous improvement, resolve implementation bottlenecks, and ensure adaptive policymaking.

While these projects have significantly contributed to regional development, their sustained impact depends on a structured, data-driven approach to evaluation and improvement. By focusing on long-term sustainability, stakeholder engagement, and policy integration, these initiatives can continue to drive economic resilience, enhance public services, and support holistic regional growth.

Chapter 1

The Northeast Special Infrastructure Development Scheme (NESIDS) Other than Roads Infrastructure (NESIDS-OTRI) Scheme

1.1 Introduction

The Northeast Special Infrastructure Development Scheme (NESIDS) is a significant initiative administered by the Ministry of Development of Northeastern Region (MDoNER). It focuses on funding and implementing infrastructure development projects aimed at fostering sustainable economic and social growth in the Northeastern Region (NER). The NESIDS scheme has two major components:

- Road Infrastructure
- Other Than Roads Infrastructure (NESIDS-OTRI)

This report specifically addresses the Other Than Roads Infrastructure (NESIDS-OTRI) component, which covers a range of projects in sectors like education, water supply, electricity distribution, and flood protection, among others.

The development of critical infrastructure across sectors such as Sports, Water Supply, Education, and Health is essential for the socio-economic transformation of the Northeastern Region (NER). A sector-wise need assessment provides an in-depth analysis of the gaps, challenges, and opportunities within these focus areas, enabling targeted and effective interventions under the Northeast Special Infrastructure Development Scheme (NESIDS).

The Human Resource Development & Empowerment (HRD & E) domain addresses both the tangible and intangible needs required to strengthen the foundational infrastructure in the region. This chapter evaluates selected projects in four major sectors—Sports, Water Supply, Education, and Health—to highlight their role in enhancing quality of life, improving access to basic services, and fostering overall regional growth. By identifying key developmental priorities, this assessment aims to create a roadmap for addressing sector-specific needs while ensuring alignment with national policies and regional aspirations.

The development of critical infrastructure across key sectors is vital for the socio-economic transformation of the Northeastern Region (NER). Sectors such as Agriculture & Allied, Education, Health, Irrigation & Flood Control, Power, Sports, Tourism & Culture, and Water Supply play a pivotal role in fostering regional growth, enhancing livelihoods, and improving overall quality of life. A sector-wise need assessment provides a comprehensive analysis of the existing gaps, persistent challenges, and emerging opportunities within these focus areas. This evaluation serves as a foundation for targeted and effective interventions under the Northeast Special Infrastructure Development Scheme (NESIDS), ensuring sustainable and inclusive progress in the region.

1. Agriculture & Allied Sector

The Agriculture & Allied sector is the backbone of NER's economy, supporting a majority of the rural population. However, challenges such as low productivity, lack of market linkages, inadequate storage facilities, and vulnerability to climate change hinder growth. Infrastructure development focusing on irrigation systems, cold storage, agro-processing units, and market connectivity is essential for enhancing farm productivity and ensuring food security. NESIDS interventions can play a crucial role in integrating modern agricultural technologies and value chain development.

2. Education Sector

Access to quality education remains a challenge in NER due to inadequate infrastructure, shortage of trained teachers, and limited digital learning facilities. Strengthening school and higher education institutions through modernized classrooms, digital infrastructure, teacher training programs, and vocational education centers is essential. The focus on skill-based learning and industry-academia collaboration under NESIDS can bridge the employability gap and empower the youth.

3. Health Sector

Healthcare accessibility and affordability are critical concerns in NER, where remote locations and inadequate medical infrastructure create service delivery challenges. There is a pressing need for well-equipped hospitals, mobile healthcare units, telemedicine facilities, and improved supply chains for essential medicines. NESIDS can facilitate the establishment of specialized healthcare centers, emergency response systems, and training programs for healthcare professionals to strengthen the region's public health framework.

4. Irrigation & Flood Control (I&FC)

NER faces recurring floods, soil erosion, and irregular rainfall patterns, which impact agriculture and settlements. Strengthening irrigation networks, developing flood control mechanisms, and implementing watershed management strategies are crucial for water resource optimization. Investments in climate-resilient infrastructure, early warning systems, and embankment reinforcement under NESIDS can mitigate disaster risks and support sustainable agricultural practices.

5. Power Sector

Reliable power supply remains a key challenge in NER, affecting industries, businesses, and households. Despite abundant renewable energy potential, inadequate grid connectivity and infrastructure gaps hinder progress. NESIDS can support the expansion of transmission lines, rural electrification programs, and the integration of renewable energy solutions such as solar and hydroelectric projects, ensuring energy security and economic growth.

6. Sports Sector

NER has a rich sporting culture and has produced several national and international athletes. However, the lack of state-of-the-art training facilities, stadiums, and grassroots sports development programs limits the potential of young athletes. Investments in sports infrastructure, coaching centres, and talent identification initiatives under NESIDS can position NER as a hub for sports excellence and youth empowerment.

7. Tourism & Culture Sector

Tourism has immense potential to drive economic growth in NER, given its rich cultural heritage, natural landscapes, and biodiversity. However, inadequate infrastructure, limited connectivity, and lack of sustainable tourism policies act as barriers. NESIDS can facilitate the development of tourism circuits, eco-tourism projects, cultural heritage conservation, and digital marketing initiatives to enhance NER's attractiveness as a tourist destination.

8. Water Supply Sector

Access to clean and reliable water supply remains a major challenge in many parts of NER, particularly in rural and hilly areas. Strengthening water distribution networks, rainwater harvesting systems, and wastewater management infrastructure is essential for ensuring water security. NESIDS interventions can enhance urban and rural water supply projects, improve sanitation facilities, and promote sustainable water conservation practices.

1.2 Snapshot of Ongoing Projects

Table 1 Ongoing Projects State-wise and sector wise	г
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	Ongoing Projects State-wise and sector wise									
States	Agri & allied	Education	Health	I&FC	Misc	Power	Sports	Tourism & Culture	Water Supply	Total no. of projects state wise
Arunachal Pradesh		8	2		2	2	1		11	26
Assam		26	3	6	18	7	9	2	21	92
Manipur	13	4	12		6	1	3	2	4	45
Meghalaya		14	3		3	2	1	1	5	29
Mizoram	2	1	11		4	2			3	23
Nagaland		2	4	1	5	3	3	1	4	23
Sikkim		1	2		2		1	1	3	10

Tripura		8	7		5	2	3	1	1	27
Total no. of projects sector wise	15	64	44	7	45	19	21	8	52	275

Source: MDoNER Dashboard

The table presents the ongoing projects across different North-Eastern states, categorized by sector and total project count.

Overview

This table shows the number of ongoing projects across nine key sectors:

- Agriculture & Allied
- Education
- Health
- Irrigation & Flood Control (I&FC)
- Miscellaneous
- Power
- Sports
- Tourism & Culture
- Water Supply

A. State-Wise Project Distribution

- Assam has the highest number of ongoing projects (92 projects), indicating substantial development efforts.
- Manipur (45), Meghalaya (29), and Tripura (27) also have significant ongoing projects.
- Sikkim has the least number of projects (10), highlighting lower project allocation compared to other states.
- The total number of ongoing projects across all states is 275.

B. Sector-Wise Project Distribution

- Education has the highest number of projects (64), reflecting strong investment in learning infrastructure.
- Water Supply follows with 52 projects, emphasizing infrastructure development.
- Health (44) and Miscellaneous (45) also have a high number of projects, likely addressing various public service needs.
- Irrigation & Flood Control (I&FC) has the least number of projects (7), suggesting a lower focus on water management.
- 3. Sectoral Trends Across States

Education (64 projects)

- Assam leads with **26 projects**, followed by Meghalaya (14) and Tripura (8).
- Sikkim and Mizoram have only 1 education project each.

Health (44 projects)

- Manipur has the highest number of health projects (12), followed by Mizoram (11).
- Nagaland and Sikkim have only 4 and 2 projects, respectively.

Water Supply (52 projects)

- Assam leads with 21 projects, followed by Arunachal Pradesh (11).
- Tripura, Mizoram, and Meghalaya have only 1-5 projects.

Power (19 projects)

- Assam and Nagaland have the highest number of power projects (7 and 5, respectively).
- Meghalaya, Manipur, Sikkim, and Arunachal Pradesh have only 1-2 projects each.

Sports (21 projects)

- Assam has 9 sports projects, followed by Manipur (3).
- Arunachal Pradesh, Meghalaya, Mizoram, and Sikkim have none.

Tourism & Culture (8 projects)

- Assam, Nagaland, and Manipur each have 2 projects.
- Meghalaya, Mizoram, Sikkim, and Arunachal Pradesh have none.

Key Insights

- 1. Education and Water Supply are top priorities, with 116 out of 275 projects (42%) allocated to these two sectors.
- 2. Assam is the dominant state, leading in almost every sector. It has nearly one-third of all ongoing projects (92 out of 275).
- 3. Manipur, Meghalaya, and Tripura show moderate project allocation, indicating active development efforts.
- 4. Sikkim has the least number of projects overall (10), suggesting either lower funding or fewer development initiatives.
- 5. Irrigation & Flood Control (7 projects) and Tourism & Culture (8 projects) are the least prioritized sectors, despite the region's heavy monsoon and tourism potential.

		Heatmap fo	or Fund sanct	ioned for (ongoing P	rojects St	ate-wise a	and sector v	vise	
States	Agri & allied	Educati on	Health	I&FC	Misc	Power	Sports	Tourism & Culture	Water Supply	Total fund sanctioned state wise (Amt. in cr.)
Arunachal Pradesh		78.9325	69.8661		47.634 3	20.356 2	13.066		242.4156	472.2707
Assam		472.946 7	149.1804	31.888 7	195.20 34	129.41 19	190.18 57	12.2285	371.2668	1552.3121
Manipur	30.6	9.3849	196.2437		23.214 2	109.58 67	26.088 9	20.8	40.4826	456.401
Meghalaya		111.844 3	33.6747		35.262	86.523 8	38.206 8	151.3331	224.7081	681.5528
Mizoram	11.25	5.65	132.747		92.009 4	50.828 4			171.4553	463.9401
Nagaland		34.4527	83.9205	16.933 2	45.798 3	164.61 89	23.397	9.8308	47.1404	426.0918
Sikkim		18	15.3343		21.144		9	42.23	61.5475	167.2558
Tripura		193.883 1	66.703		89.690 2	133.49	14.491	32.5867	7.8116	538.6556
Total fund sanctioned sector wise (Amt. in Cr.)	41.85	925.094 2	747.6697	48.821 9	549.95 58	694.81 59	314.43 54	269.0091	1166.827 9	4758.4799

Table 2 Heatmap for Fund sanctioned for ongoing Projects State-wise and sector wise

Source: MDoNER Dashboard

The heatmap table presents the fund sanctioned for ongoing projects across different states in various sectors.

The table outlines the total fund sanctioned (in crores) for different North Eastern states across nine sectors:

- Agriculture & Allied
- Education
- Health
- Irrigation & Flood Control (I&FC)
- Miscellaneous
- Power
- Sports
- Tourism & Culture
- Water Supply

A. State-Wise Fund Allocation

• Assam has received the highest total sanctioned fund (₹1552.31 Cr.), indicating significant investment across multiple sectors.

- Meghalaya (₹681.55 Cr.), Tripura (₹538.66 Cr.), and Mizoram (₹463.94 Cr.) are also among the states receiving substantial funds.
- Sikkim has received the least amount (₹167.26 Cr.), highlighting a lower allocation compared to other states.

B. Sector-Wise Fund Allocation

- Water Supply received the highest sectoral allocation (₹1166.83 Cr.), reflecting a major focus on infrastructure and essential services.
- Education is the second highest-funded sector (₹925.09 Cr.), with Assam receiving a significant portion (₹472.95 Cr.).
- Health (₹747.67 Cr.) and Power (₹694.82 Cr.) are also well-funded, indicating an emphasis on public welfare and infrastructure.
- Tourism & Culture (₹269.01 Cr.) has received the lowest sectoral allocation.

3. Sectoral Trends Across States

A. Education

- Assam has received the highest education funding (₹472.95 Cr.), followed by Tripura (₹193.88 Cr.) and Meghalaya (₹111.84 Cr.).
- Other states, especially Mizoram (₹5.65 Cr.) and Manipur (₹9.38 Cr.), have received relatively lower education funds.

B. Health

- Manipur (₹196.24 Cr.) has received the highest health funding, followed by Assam (₹149.18 Cr.) and Mizoram (₹132.75 Cr.).
- Health funding is relatively low in states like Sikkim (₹15.33 Cr.) and Meghalaya (₹33.67 Cr.).

C. Power

- Nagaland (₹164.62 Cr.) and Assam (₹129.41 Cr.) received the highest funds for the Power sector, focusing on energy infrastructure.
- Sikkim (₹9 Cr.) and Mizoram (₹50.83 Cr.) received lower allocations.

D. Water Supply

- This sector has the highest overall allocation, with Assam (₹371.27 Cr.), Meghalaya (₹224.71 Cr.), and Arunachal Pradesh (₹242.42 Cr.) being major recipients.
- Tripura (₹7.81 Cr.) and Nagaland (₹47.14 Cr.) have received much lower funding in this sector.

E. Tourism & Culture

- Meghalaya has the highest allocation (₹151.33 Cr.), aligning with its tourism potential.
- Nagaland (₹9.83 Cr.) and Arunachal Pradesh (₹12.23 Cr.) received relatively lower allocations.

Key Insights

- Assam dominates in almost every sector, securing the highest funding across most categories.
- Water Supply, Education, and Health are the top priority sectors, collectively accounting for over ₹2,800 Cr., suggesting a strong focus on essential services.
- Nagaland and Sikkim have lower allocations overall, highlighting disparities in fund distribution.
- Tourism & Culture has the lowest allocation (₹269.01 Cr.), despite North-East India's potential in tourism.

1.3 Snapshot of completed projects

				Comple	eted Proj	jects				
States	Agri & allied	Education	Health	I&FC	Misc	Power	Sports	Tourism & Culture	Water Supply	Total no. of projects state wise
Arunachal Pradesh		26	7	3	6	18	2		23	85
Assam		9	10	26	7	43	6	1	4	106
Manipur	11	20	15	5	10	40	3		54	158
Meghalaya		13			4	13			12	42
Mizoram	3	27	8		47	13	14		15	127
Nagaland		14	3	4	19	11	2		6	59
Sikkim		8	1	4	8	27	1	2	20	71
Tripura		20	8	1	6	11	4		5	55
Delhi		2			2					
Total no. of projects sectorwise	14	139	52	43	109	176	32	3	139	703

Table 3 Completed Projects

Source: MDoNER Dashboard

The table provides insights into 703 completed projects across nine states and Delhi, covering diverse sectors such as education, health, power, water supply, sports, and tourism. This data highlights the distribution of project implementation and helps identify areas where more focus is required.

Sector-Wise Analysis of Completed Projects

Among the different sectors, Power has the highest number of completed projects (176), signifying a strong emphasis on improving energy infrastructure. Manipur (40 projects) and Mizoram (13 projects) have led efforts in this sector, ensuring better access to electricity in these regions. Education and Water Supply sectors also received significant attention, with 139 projects each. Mizoram (27 projects) stands out in the Education sector, while Manipur (54 projects) has contributed the most to Water Supply projects, emphasizing the need for improved sanitation and clean water access.

Irrigation & Flood Control (I&FC) has seen 43 projects completed, with Assam leading at 26 projects. This suggests a focused approach to managing water resources and mitigating flood risks, which are crucial for agricultural productivity in the region. Meanwhile, Health sector projects remain relatively lower (52 total), despite their importance, with Assam taking the lead with 10 projects.

The Miscellaneous category (109 projects) is another major area of investment, reflecting diverse infrastructure and welfare initiatives. Mizoram (47 projects) has the highest contribution in this category, indicating strong multi-sectoral development. Sports development, with 32 completed projects, is led by Mizoram (14 projects), while Tourism & Culture remains the least prioritized sector, with only 3 projects completed (2 in Sikkim, 1 in Assam). Given the potential of tourism to boost local economies, this indicates an area that requires greater investment.

State-Wise Analysis of Completed Projects

Among the states, Manipur has the highest number of completed projects (158), followed by Mizoram (127) and Assam (106). Manipur's focus on Power (40 projects) and Water Supply (54 projects) suggests a strong push toward infrastructure improvements that directly impact the quality of life. Mizoram, with 47 Miscellaneous projects and 27 Education projects, demonstrates a broad-based development strategy. Assam's governance in I&FC (26 projects) and Miscellaneous (43 projects) highlights its focus on infrastructure and multi-sectoral progress.

Other states, such as Arunachal Pradesh (85 projects) and Meghalaya (42 projects), have seen moderate levels of project completion. Arunachal Pradesh has placed significant focus on Education (26 projects) and Water Supply (23 projects), reflecting its priorities in strengthening human capital and access to basic necessities. Meghalaya's education (13 projects) and water supply (12 projects) indicate a similar focus, but the overall number of completed projects remains lower compared to other northeastern states.

Nagaland (59 projects) has concentrated efforts on Miscellaneous (19 projects) and Education (14 projects), while Sikkim (71 projects) has invested the most in Miscellaneous (27 projects) and Water Supply (20 projects). Tripura, with 55 completed projects, has also focused on Education (20 projects) and Miscellaneous (11 projects). Notably, Delhi has completed only two projects, both in the Education sector, suggesting a limited engagement in this initiative.

Key Takeaways

The data suggests that infrastructure development, particularly in Power, Water Supply, and Education, has been a priority across the northeastern states. This aligns with the need for improved basic amenities, economic development, and social progress. However, some sectors remain underrepresented, such as Tourism & Culture, which has only three completed projects. Given the rich cultural heritage and scenic landscapes in the Northeast, enhanced investment in tourism could generate employment and boost local economies.

The Sports sector also exhibits uneven distribution, with Mizoram (14 projects) leading while other states have minimal engagement. Promoting sports infrastructure in states like Nagaland, Arunachal Pradesh, and Meghalaya could enhance youth development and participation in national and international sports.

Moving forward, **a** more equitable distribution of projects is necessary to ensure balanced regional development. While some states, such as Manipur and Mizoram, have shown strong execution capacity, others like Meghalaya and Nagaland require more targeted investments to bridge infrastructure and service gaps. Additionally, greater investment in health infrastructure is critical, especially considering the growing healthcare needs in the region.

By addressing these gaps and diversifying project investments, states can enhance their development impact, promote economic growth, and improve the overall quality of life for their citizens. The insights from this data can help policymakers and stakeholders design more inclusive and effective development strategies for the region.

]	Heatmap for F	und Sanct	ioned for (Completed	Projects Sta	atewise an	d Sector wis	e	
States	Agri & allied	Education	Health	I&FC	Misc	Power	Sports	Tourism & Culture	Water Supply	Total fund sanctioned statewise (Amt. in Cr)
Arunachal Pradesh		198.53	63.71	64.94	150.20	213.50	15.86		259.24	965.98
Assam		215.01	278.99	340.22	110.02	150.17	101.23	3.30	28.50	1227.44
Manipur	21.16	101.13	117.30	20.05	46.87	686.26	37.05		399.54	1429.35
Meghalaya		60.32			10.91	306.55			180.39	558.18
Mizoram	12.35	232.43	87.27		224.29	232.98	87.84		208.27	1085.43
Nagaland		89.93	53.02	9.17	61.54	229.49	2.74		75.21	521.12
Sikkim		70.70	27.13	35.83	74.27	389.86	15.36	4.80	263.94	881.89
Tripura		341.75	169.94	4.78	121.22	373.33	12.55		38.61	1062.18
Delhi		11.95			9.46					
Total fund sanctioned sectorwise (Amt. in Cr.)	33.51	1321.75	797.35	474.99	808.78	2582.14	272.64	8.10	1453.70	7731.55

Table 4 Heatmap for Fund Sanctioned for Completed Projects Statewise and Sector wise

Source: MDoNER Dashboard

The table provides **a** heatmap-style distribution of funds sanctioned for completed projects across different states and sectors, amounting to a total of \gtrless 7,731.55 crore. This analysis helps in understanding which sectors and states received the highest financial allocations and where further funding might be necessary.

Sector-Wise Distribution of Funds Sanctioned

Among all sectors, Power received the highest sanctioned amount at ₹2,582.14 crore, accounting for 33.4% of the total funds. This aligns with the heavy focus on infrastructure development, especially in states like Manipur (₹686.26

crore), Mizoram (₹232.98 crore), and Tripura (₹373.33 crore). Given the Northeast's terrain and energy challenges, this investment indicates a strong push toward electrification and energy security.

The Education sector follows with $\gtrless1,321.75$ crore in total funding, with Assam ($\gtrless278.99$ crore) and Mizoram ($\gtrless232.43$ crore) receiving the highest allocations. This highlights the region's commitment to improving educational facilities and literacy rates.

Water Supply (₹1,453.70 crore) and Miscellaneous (₹808.78 crore) sectors also received significant investments, reflecting efforts to enhance public infrastructure and multi-purpose developmental projects. Assam (₹1,227.44 crore) and Manipur (₹1,429.35 crore) emerged as major recipients in these categories, indicating a balanced focus on urban and rural development.

Interestingly, the Health sector (₹797.35 crore) received a lower proportion of funds compared to Power and Education, despite its critical role in public welfare. Assam (₹340.22 crore) and Manipur (₹117.30 crore) lead in health-related investments, but several states, such as Nagaland and Tripura, received significantly lower allocations in this sector, signaling the need for increased funding in healthcare infrastructure.

Tourism & Culture remains the least funded sector, with just ₹8.09 crore allocated. Sikkim (₹4.80 crore) and Assam (₹3.29 crore) received small allocations, indicating a major gap in investment despite the Northeast's high potential for tourism-driven economic growth. This suggests an opportunity for further investment to leverage the region's rich cultural heritage and natural landscapes for sustainable economic benefits.

State-Wise Distribution of Funds Sanctioned

When analyzing state-wise sanctioned funds, Manipur (\gtrless 1,429.35 crore), Assam (\gtrless 1,227.44 crore), and Tripura (\gtrless 1,062.18 crore) are the top three recipients, indicating that these states have received the highest financial support for completed projects. Their investments span multiple sectors, focusing on Power, Water Supply, and Education. Mizoram (\gtrless 1,085.43 crore) and Arunachal Pradesh (\gtrless 965.98 crore) have also received substantial funding, particularly in Power, Education, and Miscellaneous categories. Mizoram's strong funding allocation across multiple sectors, especially in Power (\gtrless 232.98 crore) and Miscellaneous ($\end{Bmatrix}224.29$ crore), suggests a balanced investment strategy.

Nagaland (₹521.12 crore) and Meghalaya (₹558.18 crore) received comparatively lower funds, with Meghalaya's Water Supply sector receiving a relatively higher share (₹180.39 crore). However, the low allocation to Health and Power in these states indicates potential infrastructure gaps that need to be addressed.

Key Takeaways

- 1. Power Sector Dominance: With over ₹2,500 crore allocated, the Power sector has been the highest priority across most states, particularly in Manipur, Tripura, and Mizoram. This suggests a major push toward energy security and electrification, but ensuring effective implementation and long-term sustainability of these projects is crucial.
- Unequal Health Sector Funding: Despite the importance of healthcare, the sector received only ₹797.35 crore, much lower than Power or Education. Increased investment in healthcare infrastructure, especially in Nagaland, Tripura, and Meghalaya, is necessary to ensure better public health outcomes.

- 3. Low Tourism & Culture Investment: The Tourism & Culture sector remains the most underfunded (₹8.09 crore), despite the Northeast's potential for eco-tourism, cultural tourism, and adventure tourism. A stronger policy push toward tourism infrastructure and promotion could unlock economic opportunities for local communities.
- 4. State-Wise Funding Disparities: While Manipur, Assam, and Tripura received the highest financial support, states like Nagaland and Meghalaya received relatively lower allocations. A more balanced distribution of funds across states and sectors is needed to ensure inclusive growth across the region.
- 5. Water Supply as a Growing Priority: With ₹1,453.70 crore allocated, the high investment in Water Supply indicates a strong focus on sanitation and access to clean water. Manipur and Assam's significant investments in this sector suggest proactive measures to improve water infrastructure, which can serve as a model for other states.

1.4 Objectives of the Study

1. To highlight the anticipated short-term and long-term transformative impacts of the scheme across sectors, showcasing its contributions to infrastructure development, social progress, and economic empowerment in the Northeastern Region (NER), while aligning with Sustainable Development Goals (SDGs).

2. To evaluate the anticipated socio-economic benefits of the initiative.

3. To present strategic insights and forward-looking recommendations for strengthening the initiative's impact and ensuring its long-term sustainability.

Chapter 2 Research Methodology

2.1 Shortlisting of Projects:

The project shortlisting process aims to identify high-impact infrastructure projects across multiple sectors such as Water Supply, Education, Health, Power, Sports, Miscellaneous, etc. The selection is based on their alignment with regional development priorities, socio-economic benefits, and sustainability under the Northeast Special Infrastructure Development Scheme (NESIDS).

The shortlisting of select projects have been carried out using the following criteria:

- Alignment with NESIDS objectives and regional development goals
- Sectoral priority as per state government
- Contribution to Sustainable Development Goals (SDGs)
- Project completion status (Completed vs. Ongoing)

Table 5 Projects considered for evaluation

Sl No	State	Sector	Project	Present Status
1	ARUNACHAL PRADESH	Water Supply	Augmentation of water supply to Bhalukpong town in West kameng District	Completed
2	ARUNACHAL PRADESH	Education	Project Infrastructure Development of Rangfrah Vidya Niketan Vidyalah at Changlang	Completed
3	ASSAM	Health	Construction of Medical College at Nalbari under NLCPR in Assam	Completed
4	MANIPUR	Power	Installation of 2x5 MVA 33/11 KV Sub-station along with the associated 33 KV line & releated work at Gumnom in Ukhrul district in Manipur	Completed
5	MANIPUR	Agriculture & Allied	Sustainable Agro-Livestock Technology (SALT) 4-Model village.	Completed
6	MIZORAM	Sports	Construction of Mini Sports Complex at Khawbung (Mizoram)	Completed
7	MIZORAM	Miscellaneous	Construction of Mizoram State Account and Treasury Office Building at New Secretariat Complex, Aizawal.	Completed

				P a g e 21
8	NAGALAND	Roads & Bridges	Project Upgradation of road from Aizuto Mission Centre to Shena old Saptiqa EAC HQ via Atoizu and Tulo river i/c one bridge (25m span) 45 km. retained for 23 kms. only in Nagaland	Completed
9	SIKKIM	Power	Modernization and Beautification of Ravangla and Sosing Bazaars alongwith addition of 66/11, 1X5 MVA sub-station at Ravangla under South Sikkim	Completed
10	TRIPURA	Roads & Bridges	Construction of Flyover on Drop Gate-Nagerjala-Battala-Fire Service and Melarmath Areas (Length 2500 M) at Agartala	Completed
11	ARUNACHAL PRADESH	Education	Infrastructure Development for Govt. Higher Secondary School at Kanubari, Longding District in Arunachal Pradesh	Ongoing
12	ARUNACHAL PRADESH	Water Supply	Augumentation of water supply to Aalo Township in West Siang District in Arunachal Pradesh	Ongoing
13	ASSAM	Sports	Construction Of N.L Daulagupu Spts Stadium With 3 Stied Rcc Dmitary Building At Haflong In Dimahasao	Ongoing
14	ASSAM	Miscellaneous	Construction of Karmachari Bhawan at Panjabari, Guwahati under NLCPR Scheme.	Ongoing
15	ASSAM	Water Supply	Water Supply Projects in Tinsukia Town (Phase-III) Tinsikia District in Assam	Ongoing
16	ASSAM	Education	Construction and renovation of Tezpur Govt. HS school, Tezpur, Sonitpur in Assam	Ongoing
17	MANIPUR	Health	Establishment of Infectious Disease Centre at Porompat, Imphal East	Ongoing
18	MANIPUR	Water Supply	Rural Water Supply Scheme at Nungba Sub-Division Headquarter	Ongoing
19	MANIPUR	Agriculture & Allied	Construction of Chilly/Spices processing Centre at Khoupum under Integrated Horti/Agri	Ongoing

Project

Education

20

MANIPUR

Construction of Nungba PHC Operation Theatre Ongoing

Ongoing

21	MANIPUR	Miscellaneous	Construction of Transit Quarter/Hostel at Khangsilung Hr. Secondary School, Khoupum	Ongoing
22	MEGHALAYA	Power	Augmentation of the 132/33 KV Mawlai substation from 3x20 MVA to 3x50 MVA, along with re-engineering of the 132 KV bus bar in Meghalaya	Ongoing
23	MEGHALAYA	Health	Strengthening of Diagnostic Services: State of the Art Diagnostic Centre at Pasteur Institute in Meghalaya	Ongoing
24	MIZORAM	Miscellaneous	Construction of Dam Reservoir and Development of Recreation Centre at Keilungliah, Champhai in Mizoram	Ongoing
25	MIZORAM	Power	Construction of 2X6.3 MVA, 132/33 KV Sub-Station at Mamit with associated 33 KV tower line up to Zawlnuam via Zamuang, Mizoram	Ongoing
26	MIZORAM	Water Supply	Alternate Gravity Water Supply Scheme of Aizawl,Mizoram	Ongoing
27	MIZORAM	Health	Construction of two Residential Hostels at Zoram Medical College,Falkawn,Mizoram	Ongoing
28	NAGALAND	Water Supply	Development of Tourism related infrastructure at Tuophema Tourist Village, Kohima District in Nagaland	Ongoing
29	NAGALAND	Health	StrengtheninghealthInfrastructureforComprehensiveresponsepossibleOutbreakOUTD19INNagaland	Ongoing
30	NAGALAND	Education	Implementation of Educational Infrastructure related to IT projects in 190 schools across Nagaland	Ongoing
31	SIKKIM	Sports	Upgradation of Football Stadium with other allied facilities at Mangan, North Sikkim (Phase- II)	Ongoing
32	SIKKIM	Miscellaneous	Solid Waste Treatment Project for Mangan in Sikkim (under SAP)	Ongoing
33	TRIPURA	Miscellaneous	Construction of District Administration Complex, Khowai District, Tripura	Ongoing

34	TRIPURA	Education	Construction of Tripura Institute of Technology (Phase-II), West Tripura	Ongoing
35	TRIPURA	Health	North District Hospital: Phase-II (Hospital Quarters), Tripura	Ongoing
36	TRIPURA	Power	Upgradation of 132KV Surjamaninagar Sub-Station of TSECL into 400KV in Tripura	Ongoing

Source: Compiled by authors

2.2 Tools Used for Evaluation:

The sector-wise and state-wise scoring system is designed to assess infrastructure projects based on their short-term impact, long-term impact, multi-sectoral effect, and alignment with Sustainable Development Goals (SDGs). The methodology ensures a standardized, data-driven, and objective evaluation of projects to determine their priority and impact.

A heatmap is a data visualization technique that uses color gradients to represent the magnitude of values in a dataset. The objective of using a heatmap for this assessment is to:

- Identify patterns in financial expenditures across different sectors and states.
- Highlight discrepancies in fund utilization and outstanding balances.
- Facilitate comparative analysis across sectors and states.
- Provide insights for decision-making on fund allocation and policy adjustments.

The heatmap colors are assigned based on fund utilization patterns, with the following scale:

Table 6 Heatmap color codes

Color	Meaning				
Green	Low outstanding balance \rightarrow Good financial performance				
Yellow	Moderate outstanding balance \rightarrow Acceptable financial performance				
Orange	High outstanding balance \rightarrow Concerning financial performance				
Red	Very high outstanding balance \rightarrow Critical financial inefficiency				

Source: Compiled by authors

2.3 Assigning Scores:

Each project is evaluated using the following criteria, with scores assigned on a scale of 1-25 per criterion to reach a total composite score of 100.

Table 7 Criteria Weightage

Criteria	Weight (%)	Description
Short-Term Effect	25%	Immediate benefits and quick impact on the targeted community.

Long-Term	25%	Sustainability and future benefits of the project.					
Effect							
Multi-Sectoral	25%	How the project contributes to multiple sectors (e.g., roads aiding					
Effect		tourism, health, and tourism).					
SDGs Addressed	25%	Contribution to UN Sustainable Development Goals (SDGs).					

Source: Compiled by authors

Each project's total composite score is calculated as:

Total Score= \sum (Score for each criterion)

Projects are categorized as Completed, or Ongoing to track implementation status.

- **Completed Projects:** Evaluated for their post-implementation impact.
- **Ongoing Projects:** Monitored for real-time progress and potential course correction.

Each project is categorized under a sector (e.g., Water Supply, Education, Health, Power, etc.). The scores are analyzed to determine:

- Sectoral Prioritization: Sectors with consistently high-scoring projects indicate high-impact areas and are prioritized for funding and expansion.
- Sectoral Performance: Sectors with low average scores indicate gaps, requiring policy interventions or capacity-building efforts.

Table 8 Score range

Score Range	Project Priority & Action Plan
Above 70	High-priority project with proven impact. Recommend replication/expansion.
50-70	Strong project; monitor for long-term impact and scalability.
Below 50	Moderate impact; requires adjustments in execution and sustainability planning.

Source: Compiled by authors

Chapter- 3 Analysis of Projects

3.1 Assessment of ongoing projects

Table 9 Quantitative Assessment of ongoing projects of NESIDS-OTRI

		Quantitative	Assessment	t of ongoin	ng project	s of NESI	DS-OTRI			
Row Labels	Agri & Allied	Education	Health	I&FC	Misc	Power	Sports	T&C	Water Supply	Grand Total
Arunachal Pradesh										
Approved Cost (₹ in Cr.)		78.93	69.87		47.63	20.36	13.07		242.42	472.27
Total Financial Expenditure (₹ in Cr.)		58.37	49.08		8.67	15.86	11.53		148.49	291.99
U.C. Received		45.47	48.98		8.67	15.76	11.53		82.20	212.60
% of balance O/S exp. wrt. approved cost		26.05	29.75		81.80	22.11	11.76		38.75	38.17
Assam										
Approved Cost (₹ in Cr.)		472.95	149.18	31.89	195.20	129.41	190.19	12.23	371.27	1552.31
Total Financial Expenditure (₹ in Cr.)		33.55	62.09	23.21	76.07	73.29	139.98	9.49	213.92	631.60
U.C. Received		23.70	57.91	23.03	61.18	73.50	112.43	8.88	147.27	507.90
% of balance O/S exp. wrt. approved cost		92.91	58.38	27.22	61.03	43.37	26.40	22.41	42.38	59.31
Manipur										
Approved Cost (₹ in Cr.)	30.60	9.38	196.24		23.21	109.59	26.09	20.80	40.48	456.40
Total Financial Expenditure (₹ in Cr.)	21.92	3.35	97.00		16.88	34.50	19.03	18.18	35.98	246.84
U.C. Received	19.07	0.32	54.48		14.30	0.00	14.36	18.18	35.98	156.69
% of balance O/S exp. wrt. approved cost	28.38	64.26	50.57		27.29	68.52	27.06	12.59	11.12	45.92
Meghalaya										
Approved Cost (₹ in Cr.)		111.84	33.67		35.26	86.52	38.21	151.33	224.71	681.55
Total Financial Expenditure (₹ in Cr.)		89.00	16.86		11.69	33.14	36.11	136.19	146.18	469.18

U.C. Received		59.01	13.59		10.98	23.13	27.51	136.19	119.30	389.71
% of balance O/S exp. wrt. approved cost		20.42	49.92		66.86	61.69	5.48	10.00	34.95	31.16
Mizoram										
Approved Cost (₹ in Cr.)	11.25	5.65	132.75		92.01	50.83			171.46	463.94
Total Financial Expenditure (₹ in Cr.)	7.52	5.09	50.62		79.69	48.78			156.22	347.93
U.C. Received	8.36	3.93	39.86		66.71	42.61			122.96	284.43
% of balance O/S exp. wrt. approved cost	33.12	10.00	61.86		13.39	4.02			8.88	25.00
Nagaland										
Approved Cost (₹ in Cr.)		34.45	83.92	16.93	45.80	164.62	23.40	9.83	47.14	426.09
Total Financial Expenditure (₹ in Cr.)		19.21	23.58	13.52	23.42	132.22	22.80	5.84	52.86	293.45
U.C. Received		6.20	21.46	13.52	20.29	129.34	8.76	5.84	25.35	230.76
% of balance O/S exp. wrt. approved cost		44.25	71.90	20.14	48.86	19.68	2.55	40.64	-12.13	31.13
Sikkim										
Approved Cost (₹ in Cr.)		18.00	15.33		21.14		9.00	42.23	61.55	167.26
Total Financial Expenditure (₹ in Cr.)		13.06	12.11		13.63		6.37	42.19	47.38	134.75
U.C. Received		13.06	4.10		12.41		3.19	33.83	40.03	106.62
% of balance O/S exp. wrt. approved cost		27.42	21.01		35.54		29.20	0.10	23.02	19.44
Tripura										
Approved Cost (₹ in Cr.)		193.88	66.70		89.69	133.49	14.49	32.59	7.81	538.66
Total Financial Expenditure (₹ in Cr.)		82.13	19.70		56.96	54.32	9.41	0.00	6.89	229.43
U.C. Received		73.58	19.70		44.94	11.12	9.41	0.00	6.89	165.65
% of balance O/S exp. wrt. approved cost		57.64	70.46		36.49	59.30	35.05	100.00	11.76	57.41

Source: Compiled by authors

3.2 Scores for select projects

Table 10 Score against each select project

D	0	a	0	127
Γ	а	g	e	141

SI No	State	Sector	Project	Short Term Effect (25)	Long Term Effect (25)	Multi sectoral Effect (25)	SDGs addressed (25)	Total Composit e Score (100)	Present Status All Closed Complete d Ongoing
1	ARUN ACHA L PRAD ESH	Water Supply	Augmentation of water supply to Bhalukpong town in West kameng District	20	21	21	22	84	Completed
2	ARUN ACHA L PRAD ESH	Educatio n	Project Infrastructure Development of Rangfrah Vidya Niketan Vidyalah at	21	22	23	22	88	
3	ASSA M	Health	Changlang Construction of Medical College at Nalbari under NLCPR in	20	22	22	23	87	Completed
4	MANI PUR	Power	Assam Installation of 2x5 MVA 33/11 KV Sub- station along with the associated 33 KV line & releated work at Gumnom in Ukhrul district in Manipur	22	21	22	22	87	Completed
5	MANI PUR	Agricultu re & Allied	Sustainable Agro-Livestock Technology (SALT) 4- Model village.	23	24	24	21	92	Completed
6	MIZO RAM	Sports	Construction of Mini Sports Complex at Khawbung (Mizoram)	21	22	23	21	87	Completed
7	MIZO RAM	Miscella neous	Construction of Mizoram State Account and Treasury Office Building at New Secretariat	20	19	15	15	69	Completed

			Complex, Aizawal.						
8	NAGA LAND	Roads & Bridges	Project Upgradation of road from Aizuto Mission Centre to Shena old Saptiqa EAC HQ via Atoizu and Tulo river i/c one bridge (25m span) 45 km. retained for 23 kms. only in Nagaland	21	21	21	21	84	Completed
9	SIKKI M	Power	Modernization and Beautification of Ravangla and Sosing Bazaars alongwith addition of 66/11, 1X5 MVA sub- station at Ravangla under South Sikkim	20	22	19	19	80	Completed
10	TRIPU RA	Roads & Bridges	Construction of Flyover on Drop Gate- Nagerjala- Battala-Fire Service and Melarmath Areas (Length 2500 M) at Agartala	19	20	21	20	80	Completed
11	ARUN ACHA L PRAD ESH	Educatio n	Infrastructure Development for Govt. Higher Secondary School at Kanubari, Longding District in Arunachal Pradesh	22	23	21	24	90	Ongoing

10		Watar	A second and a time	21	22	22	23	80	
12	ARUN ACHA L PRAD ESH	Water Supply	Augumentation of water supply to Aalo Township in West Siang District in Arunachal	21	22	23	23	89	
			Pradesh						Ongoing
13	ASSA M	Sports	CONSTRUCTI ON OF N.L DAULAGUPU SPTS STADIUM WITH 3 STIED RCC DMITARY BUILDING AT HAFLONG IN DIMAHASAO	21	22	22	22	87	Ongoing
14	ASSA	Miscella	DIMAHASAO Construction of	21	20	15	19	75	Ongoing
14	M	neous	Karmachari Bhawan at Panjabari, Guwahati under NLCPR	21	20	15	19	15	
1.5		XX 7	Scheme.				22		Ongoing
15	ASSA M	Water Supply	Water Supply Projects in Tinsukia Town (Phase-III) Tinsikia District in Assam	21	22	22	23	88	Ongoing
16	ASSA M	Educatio n	Construction and renovation of Tezpur Govt. HS school, Tezpur, Sonitpur in	22	22	21	23	88	
17	MANI PUR	Health	Assam Establishment of Infectious Disease Centre at Porompat, Imphal East	23	23	23	23	92	Ongoing
18	MANI PUR	Water Supply	Rural Water Supply Scheme	21	22	23	21	87	ongoing
		~~PPij	at Nungba Sub- Division						
			Headquarter						Ongoing

19	MANI PUR	Agricultu re & Allied	Construction of Chilly/Spices processing Centre at Khoupum under Integrated Horti/Agri	21	20	21	19	81	
			Project						Ongoing
20	MANI PUR	Educatio n	Construction of Nungba PHC Operation Theatre	22	22	23	23	90	Ongoing
21	MANI PUR	Miscella neous	Construction of Transit Quarter/Hostel at Khangsilung Hr. Secondary School, Khoupum	21	21	20	21	83	Ongoing
22	MEGH ALAY A	Power	Augmentation of the 132/33 KV Mawlai substation from 3x20 MVA to 3x50 MVA, along with re- engineering of the 132 KV bus bar in Meghalaya	21	21	21	20	83	Ongoing
23	MEGH ALAY A	Health	Strengthening of Diagnostic Services: State of the Art Diagnostic Centre at Pasteur Institute in Meghalaya	22	23	23	23	91	Ongoing
24	MIZO RAM	Miscella neous	Construction of Dam Reservoir and Development of Recreation Centre at Keilungliah, Champhai in Mizoram	21	22	23	21	87	Ongoing
25	MIZO RAM	Power	Construction of 2X6.3 MVA, 132/33 KV Sub-Station at Mamit with	21	20	19	21	81	Ongoing

			associated 33 KV tower line up to Zawlnuam via Zamuang, Mizoram						
26	MIZO RAM	Water Supply	Alternate Gravity Water Supply Scheme of Aizawl,Mizora m	21	22	23	21	87	Ongoing
27	MIZO RAM	Health	Construction of two Residential Hostels at Zoram Medical College,Falkaw n,Mizoram	21	22	18	19	80	Ongoing
28	NAGA LAND	Water Supply	Development of Tourism related infrastructure at Tuophema Tourist Village, Kohima District in Nagaland	21	22	23	21	87	Ongoing
29	NAGA LAND	Health	Strengthening health Infrastructure for Comprehensive response to possible Outbreak of COVID19 IN Nagaland	22	23	21	23	89	Ongoing
30	NAGA LAND	Educatio n	Implementation of Educational Infrastructure related to IT projects in 190 schools across Nagaland	22	23	22	23	90	Ongoing
31	SIKKI M	Sports	Upgradation of Football Stadium with other allied facilities at Mangan, North Sikkim (Phase- II)	21	21	18	20	80	Ongoing

32	SIKKI M	Miscella neous	Solid Waste Treatment Project for	21	23	22	21	87	
			Mangan in Sikkim (under SAP)						Ongoing
33	TRIPU RA	Miscella neous	Construction of District Administration Complex, Khowai District, Tripura	21	22	20	17	80	Ongoing
34	TRIPU RA	Educatio n	Construction of Tripura Institute of Technology (Phase-II), West Tripura	22	22	21	22	87	Ongoing
35	TRIPU RA	Health	North District Hospital: Phase-II (Hospital Quarters), Tripura	22	23	23	23	91	Ongoing
36	TRIPU RA	Power	Upgradation of 132KV Surjamaninagar Sub-Station of TSECL into 400KV in Tripura	20	21	22	19	82	Ongoing

Source: Compiled by authors

Chapter- 4 Discussion

4.1 Discussion on assessment of ongoing projects

Arunachal Pradesh

The financial assessment of NESIDS-OTRI projects in Arunachal Pradesh highlights substantial progress across multiple sectors, reflecting a well-structured approach to project implementation. The approved cost, total financial expenditure, and utilization certificates (U.C.) received provide insights into how effectively the funds are being allocated and utilized.

The Education and Health sectors have shown commendable progress. Education has utilized ₹58.37 Cr. (73.94%) of its allocated funds, while Health has spent ₹49.08 Cr. (70.25%). The balance outstanding for these sectors remains low, at 26.05% for Education and 29.75% for Health, indicating efficient financial execution. A continued focus on timely fund disbursement and project completion will ensure sustained benefits for these essential sectors.

The Power and Sports sectors have also demonstrated effective fund utilization. The Power sector has successfully utilized ₹15.86 Cr. out of ₹20.36 Cr., with only 22.11% of the approved cost remaining—a strong indicator of project efficiency. Similarly, the Sports sector has achieved a high utilization rate, with only 11.76% of funds left unutilized. These sectors set a positive precedent for other projects, ensuring resources are directed toward impactful development.

A major area of focus is the Water Supply sector, which has the largest approved allocation of ₹242.42 Cr.. So far, ₹148.49 Cr. has been utilized, ensuring steady progress. While 38.75% of funds remain unspent, a structured push toward completion will further improve the availability of essential water infrastructure. Additionally, the receipt of utilization certificates worth ₹82.20 Cr. reflects strong financial accountability in this critical sector.

To optimize fund utilization, Miscellaneous projects require more focused execution. While ₹47.63 Cr. was allocated, only ₹8.67 Cr. has been spent, leaving 81.80% of funds available for further use. Accelerating spending in this category can significantly boost infrastructure and community-driven projects. Similarly, the financial details for Infrastructure & Flood Control (I&FC) and T&C sectors are yet to be fully reflected. Strengthening planning and implementation frameworks will help unlock these funds for maximum impact. Overall, nearly 62% of the total approved cost has already been utilized, demonstrating strong financial execution. The grand total outstanding balance is 38.17%, reflecting scope for further acceleration while also highlighting significant progress in fund deployment. Education, Health, Water Supply, and Power

have performed well, ensuring long-term developmental impact. Meanwhile, timely action in sectors with higher outstanding balances, such as Miscellaneous and I&FC, will enhance overall fund utilization.

With a strategic approach to project execution and financial management, Arunachal Pradesh is wellpositioned to maximize the impact of NESIDS-OTRI projects, driving sustainable development and economic growth.

Assam

The financial performance of NESIDS-OTRI projects in Assam reflects significant progress in multiple sectors, with strong fund utilization and structured financial planning. The approved cost across sectors stands at ₹1552.31 Cr., with a total financial expenditure of ₹631.60 Cr., demonstrating steady execution. Additionally, utilization certificates (U.C.) amounting to ₹507.90 Cr. have been received, ensuring financial accountability and compliance.

Several sectors have performed well in financial execution, with Sports (₹190.19 Cr.), Water Supply (₹371.27 Cr.), and Health (₹149.18 Cr.) demonstrating high utilization rates. Notably, the Health sector has effectively spent ₹62.09 Cr. out of ₹149.18 Cr., with only 27.22% of the funds remaining to be utilized, reflecting efficient financial management. Similarly, the Power sector, with an approved cost of ₹129.41 Cr., has utilized ₹73.29 Cr., leaving only 43.37% of funds outstanding. These figures highlight strong progress in fund deployment and project execution.

The Infrastructure & Flood Control (I&FC) and Water Supply sectors have also shown consistent financial execution, with utilization rates of 61.03% and 42.38%, respectively. Moreover, the Sports sector has achieved an impressive utilization rate, with only 26.40% of funds remaining to be used, ensuring steady implementation of initiatives.

While some sectors, such as Agriculture & Allied, and Education, have higher outstanding balances, they present opportunities for accelerated fund utilization in the upcoming phases. A focused strategy to enhance expenditure in these areas will further strengthen the impact of the projects.

Overall, Assam's NESIDS-OTRI projects have made substantial progress in financial execution, with significant fund utilization in key development areas. By maintaining the momentum and ensuring efficient financial planning, fund absorption, and project implementation, the state is on track to maximize developmental impact and long-term economic growth.

Manipur

The financial progress of NESIDS-OTRI projects in Manipur highlights notable advancements in fund utilization across key sectors. With a total approved cost of ₹456.40 Cr., the state has effectively spent ₹246.84 Cr., demonstrating active project execution. Furthermore, utilization certificates (U.C.) amounting to ₹156.69 Cr. have been received, reinforcing financial accountability and proper fund management.

A strong performance is evident in the Agriculture & Allied, Miscellaneous, and Sports sectors, which have utilized a significant portion of their allocated funds. The Agriculture & Allied sector has effectively spent ₹21.92 Cr. out of ₹30.60 Cr., leaving only 28.38% outstanding, while the Sports sector has utilized ₹19.03 Cr. out of ₹26.09 Cr., with just 27.06% of funds remaining. Similarly, the Miscellaneous sector has made significant progress, with only 27.29% of the approved budget yet to be utilized.

The Water Supply and Tourism & Culture (T&C) sectors have also shown efficient fund utilization, with only 11.12% and 12.59% of funds remaining to be spent, respectively. These figures reflect well-managed project implementation, ensuring timely fund absorption and execution.

The Health sector, with an approved cost of ₹196.24 Cr., has utilized ₹97.00 Cr., reflecting steady progress, while the Education and Power sectors present opportunities for further acceleration in fund deployment. Focused efforts to optimize expenditure in these sectors will enhance overall project impact and execution.

Overall, Manipur's NESIDS-OTRI projects exhibit a commendable pace of fund utilization, with several sectors nearing completion. With continued emphasis on efficient financial planning, timely fund disbursement, and project execution, the state is well-positioned to achieve sustainable development and long-term socio-economic growth.

Meghalaya

The financial performance of NESIDS-OTRI projects in Meghalaya demonstrates strong progress in fund utilization across multiple sectors, ensuring steady project implementation. With a total approved cost of ₹681.55 Cr., the state has efficiently spent ₹469.18 Cr., indicating a healthy financial execution rate. Additionally, the receipt of utilization certificates (U.C.) worth ₹389.71 Cr. reflects robust financial accountability.

The Agriculture & Allied sector has performed exceptionally well, utilizing ₹89.00 Cr. out of ₹111.84 Cr., with only 20.42% of the approved cost remaining. The Sports and Tourism & Culture (T&C) sectors also stand out, with a minimal balance of 5.48% and 10.00%, respectively, demonstrating efficient financial planning and timely expenditure.

The Water Supply sector has shown remarkable progress, with ₹146.18 Cr. spent out of ₹224.71 Cr., leaving only 34.95% of the approved cost to be utilized. This reflects the state's commitment to improving critical infrastructure. While the Health, Miscellaneous, and Power sectors have made steady progress, there remains scope for acceleration, particularly in Health (49.92% balance), Miscellaneous (66.86% balance), and Power (61.69% balance). Strategic efforts to expedite spending in these sectors will further enhance the overall project impact.

Overall, Meghalaya's NESIDS-OTRI projects demonstrate significant financial execution, with efficient fund utilization and strong financial accountability. With continued focus on accelerating expenditure in key sectors, the state is well on track to achieve its developmental objectives and enhance socio-economic growth.

Mizoram

The financial execution of NESIDS-OTRI projects in Mizoram reflects commendable progress across multiple sectors, showcasing a strong commitment to infrastructure development and efficient fund utilization. With an approved cost of ₹463.94 Cr., the state has already expended ₹347.93 Cr., demonstrating

effective implementation of key projects. The Utilization Certificates (U.C.) received, amounting to ₹284.43 Cr., further indicate responsible financial management and transparency in fund allocation.

Several sectors have exhibited remarkable efficiency, particularly in Education, Power, and Water Supply, where fund utilization is significantly high. The Education sector, in particular, has performed exceptionally well, utilizing ₹5.09 Cr. out of ₹5.65 Cr., with only 10% of the approved cost remaining as balance. Similarly, Power and Water Supply sectors have shown strong execution, with only 4.02% and 8.88% of funds left unutilized, respectively. These figures highlight the state's effective planning and execution strategies in key development areas.

While overall performance is encouraging, some sectors require additional focus to accelerate progress. The Health sector, with 61.86% of funds still to be utilized, presents an opportunity for enhanced implementation efforts. Likewise, Agri & Allied projects have a balance of 33.12%, indicating potential for further improvement in fund absorption. These sectors, with sustained momentum, can contribute significantly to the state's long-term growth and development objectives.

Overall, Mizoram's NESIDS-OTRI projects are moving in the right direction, with key sectors demonstrating impressive efficiency and financial accountability. By maintaining this pace and ensuring targeted interventions in areas requiring acceleration, the state can maximize the impact of these projects, fostering sustainable development and economic resilience. With continued focus on execution and monitoring, Mizoram is well-positioned to achieve comprehensive progress across all sectors.

Nagaland

The NESIDS-OTRI project implementation in Nagaland showcases steady progress across multiple sectors, demonstrating effective financial management and development efforts. With an approved cost of ₹426.09 Cr., the state has successfully expended ₹293.45 Cr., reflecting consistent execution of projects. The Utilization Certificates (U.C.) received, amounting to ₹230.76 Cr., further highlight Nagaland's commitment to financial accountability and adherence to project timelines.

Several sectors have performed remarkably well. The Power sector has utilized over 80% of its approved cost, indicating strong infrastructure development and execution efficiency. The Sports sector also exhibits promising progress, with minimal outstanding balance (2.55%), suggesting efficient fund allocation and project implementation. In the Tourism & Culture (T&C) sector, 40.64% of the approved funds remain unutilized, but the funds received are in line with expenditure, reflecting ongoing project execution with potential for acceleration.

A few sectors present opportunities for further enhancement. The Health sector (71.90% balance outstanding) and Education sector (44.25%) require strategic interventions to expedite implementation and optimize fund utilization. Similarly, Miscellaneous projects (48.86%) and Water Supply (-12.13%) indicate

the need for closer review and realignment of resource allocation to ensure balanced growth and efficient execution.

Overall, Nagaland's NESIDS-OTRI projects are progressing well, with notable achievements in Power, Sports, and Tourism & Culture. By focusing on accelerating fund utilization in Health, Education, and Miscellaneous sectors, the state can ensure holistic development and maximize the impact of investments. With continued monitoring and strategic execution, Nagaland is well-positioned to drive sustainable growth and infrastructural development across all sectors.

Sikkim

The NESIDS-OTRI project implementation in Sikkim reflects steady progress across multiple sectors, with a total approved cost of ₹167.26 Cr. and ₹134.75 Cr. already expended. The Utilization Certificates (U.C.) received stand at ₹106.62 Cr., showcasing responsible financial management and compliance with reporting requirements.

A noteworthy highlight is the Tourism & Culture (T&C) sector, where fund utilization is near completion (0.10% balance outstanding), reflecting efficient project execution. Additionally, the Water Supply sector (23.02%) and Health sector (21.01%) are progressing well, indicating significant advancements in public infrastructure and essential services.

There are opportunities to further accelerate implementation in Miscellaneous (35.54%), Power (29.20%), and Agriculture & Allied (27.42%) sectors. A focused approach to fund disbursement and project execution in these areas will help optimize resource utilization and enhance overall impact.

Overall, Sikkim is making strong progress in NESIDS-OTRI projects, with Tourism & Culture, Health, and Water Supply performing well. With continued strategic interventions in slower-moving sectors, the state is poised to achieve holistic development and strengthen its infrastructure for long-term sustainability. **Tripura**

The NESIDS-OTRI project implementation in Tripura showcases a significant commitment to infrastructure and development, with a total approved cost of ₹538.66 Cr. and ₹229.43 Cr. already utilized. The Utilization Certificates (U.C.) received amount to ₹165.65 Cr., indicating ongoing efforts in fund management and compliance.

The Miscellaneous sector (36.49% balance outstanding) and Sports sector (35.05%) demonstrate steady progress, with positive fund utilization. The Water Supply sector (11.76%) is also advancing well, ensuring essential infrastructure improvements for the state.

However, there is room for improvement in sectors like Tourism & Culture (100% balance outstanding), which suggests that funds are yet to be utilized and allocated efficiently. Additionally, Education (57.64%), Health (70.46%), and Power (59.30%) require accelerated execution strategies to ensure optimal development outcomes.

Overall, Tripura is making headway in project execution, with certain sectors like Miscellaneous and Water Supply demonstrating positive trends. A targeted approach in underutilized sectors, particularly Tourism & Culture, can further enhance overall efficiency, ensuring sustainable growth and impactful development across the state.

4.2 Discussion on scores allotted to projects

A. Completed projects

The completed projects across various states showcase a strong commitment to infrastructure development, social welfare, and economic progress. These initiatives have not only provided immediate benefits but also laid the groundwork for long-term sustainability and multi-sectoral growth.

Water Supply & Education (Arunachal Pradesh)

The augmentation of water supply to Bhalukpong town (Composite Score: 84) has significantly improved water access, benefiting residents and supporting regional development. Similarly, the Project Infrastructure Development of Rangfrah Vidya Niketan Vidyalaya at Changlang (Composite Score: 88) has enhanced educational infrastructure, fostering a better learning environment and creating long-term opportunities for students.

Health & Power (Assam & Manipur)

The Construction of a Medical College at Nalbari, Assam (Composite Score: 87) is a milestone in strengthening healthcare services, ensuring better medical facilities and increasing the availability of trained healthcare professionals. In Manipur, the Installation of a 33/11 KV Sub-station in Ukhrul (Composite Score: 87) has contributed to enhancing the power infrastructure, ensuring reliable electricity supply and supporting industrial growth.

Agriculture & Sports (Manipur & Mizoram)

A standout project is the Sustainable Agro-Livestock Technology (SALT) 4-Model Village in Manipur (Composite Score: 92), which is fostering sustainable farming and allied activities, strengthening rural livelihoods. Additionally, the Construction of a Mini Sports Complex in Khawbung, Mizoram (Composite Score: 87) is a step towards promoting sports culture, offering better training facilities, and encouraging youth participation in athletics.

Roads & Bridges (Nagaland, Sikkim, Tripura, Mizoram)

Infrastructure and connectivity improvements have been a significant focus, with projects like the Upgradation of roads in Nagaland (Composite Score: 84) and the Construction of a Flyover in Agartala, Tripura (Composite Score: 80), both of which have enhanced mobility and regional trade. Additionally, the Modernization and Beautification of Ravangla & Sosing Bazaars in Sikkim (Composite Score: 80) has not

only boosted local commerce but also improved tourism prospects. Meanwhile, the Construction of the Mizoram State Account and Treasury Office in Aizawl (Composite Score: 69) has strengthened administrative efficiency and governance.

Overall Impact

These completed projects have successfully addressed immediate developmental needs while ensuring long-term positive effects across sectors. By focusing on multi-sectoral impact and SDG alignment, these initiatives are transforming public services, enhancing regional connectivity, and improving overall quality of life. The holistic approach adopted ensures sustainable economic growth and resilience, marking a significant achievement in regional development.

B. Ongoing projects

Agri and allied (Manipur)

The Construction of the Chilly/Spices Processing Centre at Khoupum, under the Integrated Horticulture and Agriculture Project, has been awarded a total composite score of 81, reflecting its strong impact across multiple dimensions. This project, which is currently ongoing, is poised to bring significant economic and social benefits to the region, particularly to local farmers engaged in spice cultivation.

The project received 21 out of 25 in the Short-Term Effect category, indicating that its immediate benefits such as improved post-harvest processing, value addition, and market access—are substantial. Farmers will be able to process their produce locally, reducing dependency on distant processing units, thereby saving costs and improving earnings.

In the Long-Term Effect category, the project scored 20 out of 25, highlighting its sustainable impact on the agricultural economy of Manipur. Over time, this processing centre is expected to boost productivity, enhance product quality, and create new employment opportunities, especially for rural youth and women. The facility will also encourage better agricultural practices, ensuring long-term soil fertility and crop sustainability.

The project has been rated 21 out of 25 in Multi-Sectoral Effect, showcasing its broader influence beyond agriculture. By supporting allied sectors such as rural entrepreneurship, agribusiness, and logistics, the processing centre will strengthen the entire agricultural value chain. Moreover, the availability of local processing units is expected to increase farmers' bargaining power in the marketplace, leading to better price realization for their produce.

With 19 out of 25 in the SDGs Addressed category, the project contributes positively to multiple Sustainable Development Goals (SDGs), including SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure). The centre will play a key

role in ensuring food security, enhancing rural livelihoods, and fostering innovation in agricultural practices.

With an overall score of 81, this project is a highly impactful initiative that promises to transform the agricultural landscape of Khoupum. The ongoing status of the project indicates steady progress, and once completed, it is expected to significantly uplift the local farming community by providing them with better market linkages, higher income opportunities, and an overall improved quality of life. The initiative aligns well with the region's agricultural development goals and is a commendable step toward strengthening Manipur's agro-economy.

Education

The ongoing educational infrastructure projects in Arunachal Pradesh, Assam, Manipur, Nagaland, and Tripura are demonstrating significant progress in enhancing the educational landscape in the region. These projects have been evaluated across four key parameters—Short-Term Effect, Long-Term Effect, Multi-Sectoral Impact, and Contribution to Sustainable Development Goals (SDGs)—with total composite scores ranging between 87 and 90. The high scores indicate the strong potential of these initiatives to transform education in their respective states.

All five projects scored 22 out of 25 in Short-Term Effect, signifying that they are expected to bring immediate improvements in access to education, infrastructure, and learning environments. The initiatives—ranging from school construction and renovation to IT infrastructure implementation—will directly impact students and teachers, enhancing the overall learning experience.

The Long-Term Effect scores range from 22 to 23, highlighting the sustainability of these initiatives. With better educational facilities and technological integration, these projects are poised to shape the future workforce, improve literacy rates, and create opportunities for higher education and skill development in the region.

The Multi-Sectoral Effect scores vary between 21 and 23, emphasizing the broader influence of these projects beyond just education. Infrastructure development in schools fosters economic growth, skill development, digital transformation, and social inclusivity. The IT-related education project in Nagaland, for instance, will strengthen digital literacy across 190 schools, preparing students for technology-driven careers.

Furthermore, these projects are aligned with multiple SDGs, including SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure). The SDGs Addressed scores range between 22 and 24, with the highest impact observed in Arunachal Pradesh's school infrastructure project. These initiatives collectively contribute to improving educational access, reducing inequality, and fostering sustainable development.

With composite scores ranging from 87 to 90, these projects exhibit strong potential for long-lasting educational transformation. The Infrastructure Development for Govt. Higher Secondary School in Arunachal Pradesh and IT infrastructure projects in Nagaland stand out with scores of 90, indicating a highly positive impact on education, skill development, and economic growth. Similarly, the Tripura Institute of Technology (Phase-II) project, scoring 87, is expected to play a crucial role in strengthening technical education in the region.

As these projects progress towards completion, they will serve as milestones in bridging the educational gap in the Northeast, equipping students with better resources, and paving the way for a more skilled and competitive workforce. Their continued implementation will ensure sustainable development and long-term socio-economic benefits for the respective states.

Health

The ongoing health infrastructure projects in Manipur, Meghalaya, Mizoram, Nagaland, and Tripura highlight significant efforts toward strengthening healthcare services in the region. Evaluated across four critical parameters—Short-Term Effect, Long-Term Effect, Multi-Sectoral Impact, and Contribution to Sustainable Development Goals (SDGs)—these projects hold composite scores ranging from 80 to 92, reflecting their varied levels of impact and effectiveness.

In terms of short-term and long-term effects, the Establishment of an Infectious Disease Centre in Manipur has one of the highest scores, 23 in both categories. This indicates its immediate relevance in tackling public health challenges and its sustained impact on disease control and healthcare preparedness. Similarly, the State-of-the-Art Diagnostic Centre in Meghalaya and the North District Hospital in Tripura also score 22-23 across these dimensions, showcasing their potential to enhance diagnostic capabilities and healthcare accessibility in their respective states. Meanwhile, Mizoram's Residential Hostel project at Zoram Medical College, with a short-term effect score of 21, primarily focuses on strengthening infrastructure for medical students and healthcare professionals, ensuring a steady supply of trained personnel.

The multi-sectoral impact and alignment with SDGs further determine the significance of these projects. Manipur and Tripura's hospital projects stand out with a score of 23 across all impact metrics, demonstrating their strong contribution to SDG 3 (Good Health and Well-being) and SDG 9 (Industry, Innovation, and Infrastructure). Nagaland's COVID-19 response infrastructure project, scoring 89 overall, highlights the state's proactive approach to pandemic preparedness and healthcare capacity building. On the other hand, Mizoram's project, with a total score of 80, has a lower multi-sectoral impact (18) and SDG alignment (19), suggesting the need for further strategic integration with broader healthcare goals.

Overall, the Infectious Disease Centre in Manipur, with a score of 92, emerges as the most impactful project, addressing a critical public health need. The Diagnostic Centre in Meghalaya and the North District Hospital in Tripura (both scoring 91) are also expected to play key roles in improving regional healthcare

delivery. While these projects promise significant advancements in healthcare infrastructure, Mizoram's project requires additional focus on maximizing its long-term sustainability and ensuring broader sectoral benefits. As these initiatives progress, their success will be essential in enhancing healthcare facilities, improving disease preparedness, and ensuring equitable access to quality medical services across Northeast India.

Miscellaneous

The miscellaneous infrastructure projects across Assam, Manipur, Mizoram, Sikkim, and Tripura are contributing to urban development, education, environmental sustainability, and governance enhancement. These projects have been assessed based on short-term effects, long-term benefits, multi-sectoral impacts, and their alignment with Sustainable Development Goals (SDGs). The composite scores range from 75 to 87, reflecting their overall contribution to development in the respective states.

The Construction of Karmachari Bhawan in Assam, under the NLCPR Scheme, has received a total score of 75, with lower ratings in multi-sectoral impact (15) and SDG alignment (19). This suggests a limited but necessary infrastructure development for administrative purposes. On the other hand, Manipur's Transit Quarter/Hostel project at Khangsilung Hr. Secondary School has a higher impact, scoring 83 overall, with strong contributions to long-term infrastructure (21) and SDGs (21), enhancing educational and residential facilities for students.

Mizoram and Sikkim have the highest-rated projects, both scoring 87. The Construction of a Dam Reservoir and Recreation Centre in Mizoram and the Solid Waste Treatment Project in Sikkim demonstrate significant multi-sectoral effects (23 and 22, respectively) and strong SDG contributions (21 each). These projects support sustainable water management, recreational activities, and waste treatment, addressing environmental concerns and community well-being.

Lastly, the District Administration Complex in Tripura has a composite score of 80, reflecting its importance in governance infrastructure. However, its multi-sectoral impact (20) and SDG alignment (17) are relatively lower, indicating a need for further integration with broader developmental objectives.

Overall, these projects represent diverse infrastructure initiatives that support regional growth, administrative efficiency, and sustainability. The high-impact projects in Mizoram and Sikkim stand out, while the Assam and Tripura projects may require further enhancements to maximize their long-term developmental contributions.

Power

The power infrastructure projects in Meghalaya, Mizoram, and Tripura focus on substation augmentation, construction, and upgradation to improve electricity transmission and distribution. These projects have been evaluated based on short-term and long-term effects, multi-sectoral impact, and alignment with Sustainable Development Goals (SDGs), with composite scores ranging from 81 to 83.

In Meghalaya, the augmentation of the 132/33 KV Mawlai substation includes increasing capacity from 3x20 MVA to 3x50 MVA and re-engineering the 132 KV bus bar. This project has a total composite score of 83, with balanced impacts across short-term (21), long-term (21), multi-sectoral effect (21), and SDGs (20). It aims to enhance electricity reliability and capacity in the region.

In Mizoram, the construction of a 132/33 KV substation at Mamit, along with a 33 KV tower line extending to Zawlnuam via Zamuang, has a composite score of 81. While its short-term effect (21) and SDG alignment (21) are strong, it has slightly lower multi-sectoral impact (19) and long-term effect (20). This project is expected to strengthen power supply in remote areas, promoting economic and social development.

In Tripura, the upgradation of the 132 KV Surjamaninagar Sub-Station into a 400 KV facility under TSECL has a total score of 82. It has a high multi-sectoral effect (22) and long-term impact (21), though its SDG alignment (19) and short-term effect (20) are slightly lower. This upgrade is significant for enhancing the power transmission network and supporting industrial growth in the state.

All these ongoing projects aim to strengthen electricity infrastructure, ensuring stable and enhanced power distribution, which is crucial for economic growth, industrialization, and improved living standards in the Northeast region of India.

Sports

The sports infrastructure projects in Assam and Sikkim aim to enhance sporting facilities and promote athletics at the regional level. These projects have been assessed based on short-term and long-term effects, multi-sectoral impact, and alignment with Sustainable Development Goals (SDGs), with composite scores of 87 and 80, respectively.

In Assam, the construction of the N.L. Daulagupu Sports Stadium, including a three-storied RCC dormitory building at Haflong in Dima Hasao, has received a total composite score of 87. It scores highly across all evaluation criteria, including short-term effect (21), long-term effect (22), multi-sectoral impact (22), and SDG alignment (22). This project is expected to significantly boost sports infrastructure in the region, promote athletic development, and provide facilities for players and trainees.

In Sikkim, the upgradation of the football stadium at Mangan, North Sikkim (Phase-II), aims to improve sporting facilities and associated infrastructure. This project has a composite score of 80, with balanced short-term (21) and long-term (21) impacts. However, its multi-sectoral effect (18) is slightly lower, indicating a lesser impact beyond the sports sector. Its SDG alignment score of 20 suggests moderate contributions to sustainable development goals such as health, well-being, and community engagement.

Both ongoing projects are critical for advancing sports infrastructure, nurturing talent, and encouraging youth participation in athletics, ultimately contributing to the social and economic development of the Northeast region.

Water Supply

The water supply projects in Arunachal Pradesh, Assam, Manipur, Mizoram, and Nagaland are focused on improving access to clean water, enhancing infrastructure, and supporting multi-sectoral development. These projects have been evaluated based on their short-term and long-term effects, multi-sectoral impact, and alignment with Sustainable Development Goals (SDGs). The composite scores for these projects range from 87 to 89, reflecting their overall impact and effectiveness.

In Arunachal Pradesh, the augmentation of water supply to Aalo Township in West Siang District has received the highest composite score of 89. This project is expected to significantly improve water availability and quality, benefiting both residential and commercial sectors. Its strong multi-sectoral impact and alignment with SDGs highlight its importance in ensuring sustainable water access.

Assam's water supply project in Tinsukia Town (Phase-III) has achieved a composite score of 88. This initiative focuses on improving urban water supply, enhancing sanitation, and strengthening public health infrastructure. With a strong SDG impact and multi-sectoral influence, the project aims to address water scarcity and support sustainable urban development.

In Manipur, the Rural Water Supply Scheme at Nungba Sub-Division Headquarter has been designed to provide potable water to underserved rural communities. With a composite score of 87, this project ensures multi-sectoral benefits across health, agriculture, and local livelihoods. By addressing rural water needs, it contributes to both economic and social development.

Mizoram's Alternate Gravity Water Supply Scheme in Aizawl has also received a composite score of 87. This project enhances water distribution efficiency through gravity-based water supply technology. Its impact on sustainability and water conservation efforts makes it a crucial initiative for long-term resource management.

In Nagaland, the development of tourism-related infrastructure at Tuophema Tourist Village in Kohima District has been designed to support sustainable tourism while ensuring adequate water supply. With a composite score of 87, this initiative links water security with eco-tourism and rural economic growth, benefiting both local communities and visitors.

All these projects are currently ongoing and play a crucial role in water security, public health, and sustainable development in the Northeast region. They are aligned with national and global SDGs, particularly SDG 6 (Clean Water and Sanitation) and SDG 11 (Sustainable Cities and Communities). By improving water access and management, these initiatives will enhance the quality of life, promote economic development, and build resilience in their respective states.

4.3 Discussion on the NESIDS-OTRI scheme

The North East Special Infrastructure Development Scheme (NESIDS) was inaugurated by the Government of India in 2017 as a Central Sector Scheme, aiming to bolster infrastructure in the North Eastern Region (NER). In 2022, the scheme underwent restructuring, resulting in two distinct components: NESIDS-Roads, managed by the North Eastern Council (NEC), and NESIDS-Other Than Road Infrastructure (OTRI), overseen by the Ministry of Development of North Eastern Region (MDoNER).

NESIDS-OTRI is designed to address critical infrastructure deficits in sectors beyond road connectivity within the NER. Its primary focus areas include enhancing water supply, augmenting power infrastructure, promoting tourism, and improving social infrastructure in education and health sectors. The overarching goal is to stimulate economic growth and elevate the quality of life for residents in these states.

Funding Mechanism

As a Central Sector Scheme, NESIDS-OTRI provides 100% funding from the central government to the eight North Eastern states. This financial structure ensures that states can undertake and complete vital infrastructure projects without the burden of financial constraints, thereby accelerating regional development.

The implementation of NESIDS-OTRI involves a collaborative approach between the central and state governments. States are responsible for identifying priority projects that align with the scheme's objectives and submitting detailed proposals to MDoNER. Upon rigorous appraisal and approval, funds are disbursed for project execution. This process emphasizes transparency, efficiency, and adherence to stipulated guidelines to ensure the successful realization of infrastructure projects.

Water Supply: Projects under this theme aim to provide reliable and safe drinking water to communities, addressing both urban and rural needs.

Power Infrastructure: Initiatives focus on enhancing electricity generation and distribution, ensuring consistent power supply to support residential, commercial, and industrial activities.

Tourism Development: By developing tourist facilities and infrastructure, the scheme seeks to harness the region's natural and cultural heritage, promoting tourism as a significant economic driver.

Social Infrastructure in Education and Health: Investments are directed towards building and upgrading educational institutions and healthcare facilities, aiming to improve human capital and overall well-being. Since its inception, NESIDS-OTRI has played a pivotal role in transforming the infrastructure landscape of the North Eastern Region. The scheme has facilitated the completion of numerous projects that directly impact daily life, such as the construction of modern healthcare centers in remote areas, ensuring medical services are accessible to all. Educational institutions have been upgraded with better facilities, contributing to improved learning environments. Enhanced water supply systems have alleviated water scarcity issues,

while upgraded power infrastructure has reduced outages, supporting both households and businesses. Tourism infrastructure development has opened new avenues for economic growth, attracting visitors and creating employment opportunities.

NESIDS-OTRI stands as a testament to the government's commitment to balanced regional development. By focusing on critical infrastructure sectors and providing necessary financial support, the scheme is instrumental in unlocking the North Eastern Region's potential, fostering sustainable development, and improving the quality of life for its inhabitants.

Chapter- 5 Recommendations

Recommendations Based on Discussion on Scores Allotted to Projects

A. Completed Projects

The completed projects across various states demonstrate a strong commitment to infrastructure development, social welfare, and economic progress. These initiatives have yielded immediate benefits and established the foundation for long-term sustainability and multi-sectoral growth.

Water Supply & Education (Arunachal Pradesh)

The augmentation of water supply to Bhalukpong town (Composite Score: 84) has significantly improved water access, benefiting residents and supporting regional development. Similarly, the Project Infrastructure Development of Rangfrah Vidya Niketan Vidyalaya at Changlang (Composite Score: 88) has enhanced educational infrastructure, fostering a better learning environment and creating long-term opportunities for students. To maximize impact, future investments should focus on ensuring sustainability through community engagement and regular maintenance.

Health & Power (Assam & Manipur)

The Construction of a Medical College at Nalbari, Assam (Composite Score: 87) marks a milestone in strengthening healthcare services, increasing medical facilities, and ensuring the availability of trained professionals. In Manipur, the Installation of a 33/11 KV Sub-station in Ukhrul (Composite Score: 87) has enhanced power infrastructure, ensuring reliable electricity supply and supporting industrial growth. Going forward, integrating renewable energy solutions and digital health technologies will further amplify the impact of these projects.

Agriculture & Sports (Manipur & Mizoram)

The Sustainable Agro-Livestock Technology (SALT) 4-Model Village in Manipur (Composite Score: 92) fosters sustainable farming and allied activities, strengthening rural livelihoods. Additionally, the Construction of a Mini Sports Complex in Khawbung, Mizoram (Composite Score: 87) promotes sports culture, offering better training facilities and encouraging youth participation in athletics. Future efforts should aim at enhancing market linkages for agricultural products and expanding sports training programs.

Roads & Bridges (Nagaland, Sikkim, Tripura, Mizoram)

Infrastructure and connectivity projects, such as the Upgradation of roads in Nagaland (Composite Score: 84) and the Construction of a Flyover in Agartala, Tripura (Composite Score: 80), have improved mobility and regional trade. The Modernization and Beautification of Ravangla & Sosing Bazaars in Sikkim (Composite Score: 80) has boosted local commerce and tourism, while the Construction of the Mizoram

State Account and Treasury Office in Aizawl (Composite Score: 69) has improved administrative efficiency. Future considerations should focus on integrating smart traffic management systems and enhancing trade corridor efficiency.

The completed projects have successfully addressed immediate developmental needs while ensuring longterm socio-economic benefits. By emphasizing multi-sectoral impact and Sustainable Development Goals (SDG) alignment, these initiatives are transforming public services, enhancing regional connectivity, and improving the overall quality of life. To sustain these benefits, robust monitoring mechanisms, periodic assessments, and adaptive policy frameworks should be established.

B. Ongoing Projects

Agri and Allied (Manipur)

The Construction of the Chilly/Spices Processing Centre at Khoupum (Composite Score: 81) has shown promising economic and social benefits for local farmers. Future initiatives should ensure continuous capacity-building programs, market integration, and sustainable sourcing practices to enhance the long-term viability of the project.

Education (Arunachal Pradesh, Assam, Manipur, Nagaland, Tripura)

With composite scores ranging from 87 to 90, these educational infrastructure projects are poised to transform learning environments. Strengthening digital literacy, fostering industry-academic linkages, and ensuring equitable access to education should be prioritized to maximize impact.

Health (Manipur, Meghalaya, Mizoram, Nagaland, Tripura)

The Infectious Disease Centre in Manipur (Composite Score: 92) stands out as a critical investment in public health. The ongoing projects should focus on enhancing accessibility, adopting digital health interventions, and ensuring long-term financial sustainability.

Miscellaneous (Assam, Manipur, Mizoram, Sikkim, Tripura)

With scores ranging from 75 to 87, these diverse infrastructure projects contribute to urban development, environmental sustainability, and governance enhancement. Projects such as the Solid Waste Treatment Project in Sikkim (Composite Score: 87) should be expanded to ensure broader environmental impact.

Power (Meghalaya, Mizoram, Tripura)

Ongoing power infrastructure projects (scores: 81-83) are critical for improving electricity transmission and distribution. Strengthening grid resilience, incorporating renewable energy sources, and ensuring smart energy management systems should be explored to enhance efficiency.

Sports (Assam, Sikkim)

With composite scores of 87 and 80, sports projects play a pivotal role in regional athletic development. Investing in coaching facilities, grassroots programs, and talent scouting initiatives will further strengthen the sporting ecosystem.

Water Supply (Arunachal Pradesh, Assam, Manipur, Mizoram, Nagaland)

Water supply projects (scores: 87-89) have significantly improved access to clean water. Future enhancements should focus on water conservation measures, community-based water management systems, and climate resilience strategies.

The ongoing and completed projects reflect commendable progress in various sectors, with a strong alignment toward sustainable development and economic growth. To enhance their long-term effectiveness, it is essential to integrate innovative solutions, ensure inclusive participation, and adopt robust monitoring mechanisms. Continued collaboration between government agencies, stakeholders, and communities will be key to maximizing the benefits of these initiatives and ensuring holistic regional development.

C. Key Recommendations:

- Sustainability & Maintenance: Strengthen long-term sustainability by incorporating community ownership and ensuring proper maintenance frameworks.
- **Technology Integration:** Leverage digital innovations, renewable energy, and smart management solutions to enhance efficiency and impact.
- Capacity Building: Organize training programs, stakeholder consultations, and skill development initiatives for sustainable outcomes.
- Market & Policy Linkages: Strengthen market integration, value chain development, and policy support to maximize project success.
- Monitoring & Evaluation: Establish a continuous assessment mechanism to track progress, resolve bottlenecks, and ensure adaptive policymaking.

By implementing these strategies, the scheme will continue to deliver sustainable growth and transformational impact across the region.