Facilitation and Awareness for Local Talent

Milestone 4: Facilitate and enhance awareness among local talent to effectively utilize the existing infrastructure of 5G Labs for developing locally relevant solutions.

Achievement: A total of **200+ workshops** have been successfully conducted across the 8 established 5G Labs. These workshops were designed to engage students, faculty, startups, and innovators, providing them with exposure to 5G-enabled tools and applications.

5G Labs NER State	Number of Workshops
COA, Pasighat, Arunachal Pradesh	20
Govt Serchhip College, Serchhip, Mizoram	19
Immanuel College, Dimapur, Nagaland	23
MIT, Imphal, Manipur	13
NEHU, Shillong, Meghalaya	32
Sanchaman Limboo Govt Degree College, Geyzing, West Sikkim	37
Tech City, Guwahati, Assam	46
Tripura University, Agartala, Tripura	25
Grand Total	**215**

Focus Areas of Workshops:

- **Orientation Sessions on 5G Infrastructure and its Applications:** These sessions laid the foundational knowledge for participants, unpacking the complexities of 5G infrastructure and demonstrating its far-reaching potential across various industries. From network design to deployment strategies, attendees gained a comprehensive understanding of how 5G will reshape communication and drive technological evolution. The goal was to demystify the technology, offering all participants—from students to professionals—the tools they need to become active contributors in the 5G revolution.

- **Training on Use Case Development in Healthcare, Agriculture, and Smart City Domains:**
These specialized training sessions took practical applications of 5G into real-world scenarios, focusing on how the technology can transform key sectors like healthcare, agriculture, and smart cities. Participants didn't just learn the theory—they were trained to develop actionable use cases, ranging from telemedicine solutions that bridge healthcare gaps, to precision farming techniques that use IoT and 5G to boost crop yield and sustainability. In the smart city domain, participants explored how 5G can drive intelligent infrastructure, improve urban mobility, and enhance citizen engagement. These sessions empowered innovators to create solutions that address some of the region's most pressing challenges.

- **Awareness Programs for Startups and Entrepreneurs to Leverage 5G for Scalable Solutions:**
Startups and entrepreneurs are at the forefront of innovation, and these awareness programs gave them the knowledge and resources to harness 5G's full potential for creating scalable solutions. By engaging with industry experts and learning how 5G can fuel business growth, participants were introduced to a world of endless possibilities, from launching smart products to developing game-changing apps. The programs also highlighted the economic advantages of 5G, enabling entrepreneurs to see how they can tap into global markets, expand their reach, and accelerate growth by integrating 5G into their offerings.

- **Hands-On Sessions for Students and Faculty to Encourage Experimentation and Product Development:**
These hands-on sessions were designed to ignite a culture of experimentation and entrepreneurship within the academic community. Students and faculty didn't just attend lectures—they were given the chance to roll up their sleeves and work on real-life projects, turning ideas into working prototypes. The sessions encouraged out-of-the-box thinking, where participants were able to test their ideas, troubleshoot, and iterate on products that could have a lasting impact on the 5G ecosystem. This environment fostered a dynamic, innovation-driven mindset, where learning and development went hand-in-hand with actual product creation.

Impact:

- **Strengthened the Capacity of Local Talent to Design and Test Innovative Solutions**
  The workshops significantly enhanced the capabilities of local talent, providing them with hands-on exposure to advanced 5G tools, technologies, and frameworks. This allowed participants to not just learn, but to create. The knowledge gained has equipped a new generation of innovators to design, prototype, and test real-world solutions that can address local and global challenges. As a result, the region is now home to a growing pool of talent that can contribute to the global 5G ecosystem, with a deep understanding of how to innovate and scale.

- **Enabled Grassroots Innovators to Address Regional Challenges Through Technology:**
  By empowering grassroots innovators with access to cutting-edge technology, the workshops were able to bridge the gap between the digital divide and regional problem-solving. Local innovators now have the skills and tools to tackle specific challenges faced by their communities, whether it's improving agricultural productivity, enhancing healthcare accessibility, or advancing urban infrastructure. The focus on regional, technology-driven solutions means that 5G can be a force for positive change, tackling issues that matter most to local populations.

- **Promoted a Culture of R&D and Entrepreneurship Within the North Eastern Region (NER):**
  The workshops have played a key role in cultivating a strong culture of research and development (R&D) across the NER. By actively involving students, faculty, and entrepreneurs in real-world technological problem-solving, the initiative has ignited an entrepreneurial spirit that wasn't there before. Participants are now driven to explore new avenues for R&D, with many eager to start businesses, create startups, and conduct research that will continue to shape the region's technological future. The long-term effect of these workshops is a thriving ecosystem of R&D that will sustain innovation and entrepreneurship in the NER for years to come.

- **Enhanced Participation of Youth, Particularly from Tier-2 and Tier-3 Cities, in Advanced Telecom Research:**
One of the most remarkable impacts of these workshops was the increased participation of youth, especially from Tier-2 and Tier-3 cities, in advanced telecom research. For the first time, young minds from these often overlooked regions had the opportunity to engage in high-level technological research, providing them with a platform to contribute to cutting-edge advancements in the field of 5G. This shift not only democratized access to advanced telecom research but also empowered a new generation of youth from all corners of NER to actively shape the future of the telecom sector.