

PRESERVING PIULONG MEADOW

Piulong Meadow, also known as the *Bunning Meadow* or *N-piulong Valley*, is a stunning natural attraction located in the Tamenglong district of Manipur State, India. This picturesque meadow is situated in the Tamei Tehsil and covers a vast area of uneven small mounts, making it an ideal destination for tourists who love to explore the natural scenic beauty of India. The Piulong Meadow is a spectacle of flora and fauna that are not to be found everywhere. The meadow is home to many species of orchids, wild lilies, and several other colorful little flowers that decorate the mounts creating an almost unimaginable picture. During summers, precisely in the month of June, the meadow adorns itself like a beautiful bride with a plethora of colorful flowers that can leave anyone in awe. Hoolock, gibbons, and foxes are some of the animals that can be found in the Piulong Meadow. The diversity of wildlife in the meadow makes it an attractive destination for wildlife enthusiasts who want to get up close and personal with nature. Piulong Meadow's natural beauty is one of the reasons that have made Tamenglong district a well-known tourist destination in Manipur State. The meadow is a haven for photographers and nature lovers, and it is not hard to see why. The meadow's picturesque landscape is a remarkable sight, with the lush greenery of the mounts and the colorful flowers that adorn it. Piulong village, where the meadow is situated, is in the Tamei Tehsil in Tamenglong District, Manipur State, India. The village is located 45 Km towards the north from the district headquarters of Tamenglong and 13 Km from Tamei and 126 Km from state capital, Imphal. It is situated at an altitude of **25.1347° N** and a longitude of **93.6129° E**. The village is well connected to the rest of the state, with regular transportation available for tourists who want to visit the meadow. The best time to visit Piulong Meadow is during March and April, when the meadow is adorned with lush green grass and the edible mushroom such as *Auricularia delicata* also known as Uchina (Meitei), *Lentinula edodes* also known as Uyen (Meitei), *Pleurotus ostreatus* also known as Chengum (Meitei),

Schizophyllum commune also known as Kanglayen (Meitei), *Volvariella esculenta* also known as Charuyen (Meitei), and *Auricularia polytricha* are available during this season. Visitors can enjoy the sight of the fresh grass waving gently in the wind, creating a peaceful ambiance that can be quite soothing to the soul. During winter, the meadow transforms into a snowy landscape, creating a stunning contrast against the greenery of the surrounding mountains. Preserving Piulong Meadow is crucial to maintaining the delicate ecosystem that exists within it. The meadow is home to a diverse range of flora and fauna, and any disruption to this delicate balance can have severe consequences. Therefore, it is important to ensure that tourism activities within the meadow are carried out sustainably, without causing any damage to the natural environment.

Piulong Meadow, a delicate ecosystem, faces a looming threat from human activities such as deforestation, overgrazing, and land use changes. The impact of these activities is alarming and has put the biodiversity of the meadow at risk. Therefore, it is crucial to implement effective conservation measures to preserve the meadow and protect the species that call it home. Deforestation, driven by the demand for timber and agricultural expansion, is one of the major causes of environmental degradation in Piulong Meadow. Trees play a vital role in the ecosystem by providing shelter, food, and nesting sites for animals. Their removal destabilizes the ecosystem and puts animal species at risk of extinction. Overgrazing by domestic animals also leads to soil erosion, which can cause further damage to the ecosystem. To preserve Piulong Meadow, it is necessary to implement effective conservation measures. These measures include afforestation, which involves planting trees to restore degraded areas, and the establishment of protected areas that limit human activities. Additionally, it is essential to promote sustainable land use practices that consider the needs of both people and the environment.

First and foremost, the government should declare Piulong Meadow as a protected area under the Wildlife Protection Act of India. This legal status would provide comprehensive protection to the meadow's flora and fauna prohibit any human activities that would disturb the natural ecosystem, and ensure that any developmental activities within the area are conducted with due diligence and environmental impact assessments.

Secondly, community-based conservation initiatives must be undertaken to raise awareness among the local communities and engage them in the conservation efforts. The local communities should be involved in the decision-making process and trained in sustainable agricultural practices, ecotourism, and other alternative livelihood opportunities that are compatible with the conservation objectives. The active involvement of local communities in the conservation efforts would ensure the long-term sustainability of the meadow and create a sense of ownership and responsibility towards its protection.

Thirdly, an effective monitoring and evaluation system should be established to assess the conservation outcomes and measure the effectiveness of the conservation measures. The monitoring system should track the changes in the biodiversity of the meadow, including the populations of flora and fauna species, and the ecological processes that support them. The evaluation system should assess the impact of the conservation measures on the local communities and the overall ecological sustainability of the meadow.

Fourthly, ecotourism can be developed as a sustainable source of income for the local communities while simultaneously promoting the conservation of the meadow. The ecotourism activities should be designed to minimize the ecological footprint, respect the cultural values and traditions of the local communities, and provide educational opportunities to the tourists. The revenue generated from the ecotourism activities can be invested in the conservation efforts, infrastructure

development, and other community development projects.

Finally, capacity building and research initiatives should be undertaken to enhance the knowledge and skills of the local communities, conservation practitioners, and researchers in the conservation of Piulong Meadow. Capacity building initiatives should focus on developing the technical, managerial, and leadership skills of the stakeholders, while research initiatives should generate new knowledge and understanding of the ecological processes and the conservation challenges of the meadow.

In conclusion, Piulong Meadow is a precious natural asset that requires immediate conservation attention to protect its unique biodiversity and ecological processes. Legal protection, community-based conservation initiatives, monitoring and evaluation, ecotourism, capacity building, and research are all necessary measures to ensure the long-term sustainability of the meadow. By implementing these conservation measures, we can create a brighter future for the local communities, tourists, and the ecosystem. It is the responsibility of all stakeholders to work together towards preserving this valuable natural heritage for future generations.

Silinbou Newmai - Tamei

Masters of Technology in Thermal & Fluid Engineering

NIT Imphal, Manipur.