

- Dense forest falls under the western region of the watershed is found to be Moderate Hazard.
- Deforestation and soil erosion is highly observed in the sloping area.

6. Conclusion

Unstable slopes are really the challenge in the study area. The Landslides caused usually in Rainy season's causes the loss of property and life. The present study has proven that the advent of GIS techniques with the wide availability of satellite images have greatly facilitated in the identification of landslides hazard zonation. From the above study it is clearly observed that though landslide is a naturally occurring disaster, the landslide happened in Malin village was triggered due to many human caused factors with the close association of heavy rainfall. The main factor responsible for the landslides in Malin village is due to the Padkai scheme of Government which basically is providing plots to the resident for farming purposes with terracing the hill slopes.

7. Preventive Measures

- As the principal of the initiation of mass movement is water, this main causative agent has to be prevented from entering into the affected area.
- The occurrence of the landslides cannot be prevented but its affects can be minimized by taking timely preventive measures.
- The magnitude of the mass movement can be minimized by construction an efficient drainage network
- Landslides can also be minimized by using appropriate engineering technology which involves provision of surface as well as subsurface drainage, removal of unstable slope material and modification of unstable slope to stability, lastly construction of retaining walls in the periphery of the area where Padkai is developed.
- The pore pressure plays an important role in the stability of the slope,
- Soil Erosion is also the causative factor; this can be reduced by increasing the vegetative growth in the sloping areas.
- Public awareness about changing the agricultural practices as well as controlling the human made parameters that can initiate to landslides.
- Most of the landslides are preceded by creep movements over a long period of time, this natural warning can be used to ensure as a preventive control measure.

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