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# Rehabilitation of Taliye GAON in Mahad at Raigad District

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**ABSTRACT:** The Study deals with the main aspects of geological hazard assessment by presenting a review of the GIS based methodology for identification and analyses of hazard. In India every year more than hundred disaster accrues. Whole Maharashtra effectuated from different disasters like a cyclones, tsunamis, earthquake, and volcanic eruption, etc. 3 Landslide is one of the common threats in many parts of the word.

The 13th July 2021 on date landslide is occurred in Taliye gaon on mahad at raigad district rain water is infiltrated in crunical depth of hill and the top soil layer moved under the influence of gravity and destroy the houses, school, shops, and roads. Etc. We also visit on site discuss with the villagers and village sarpanch problems faces and which facilities Govt. are providing to him. Our project deals with the design the Houses in low cost with new technique (EPS) and also design the amenities like school for children, primary healthcare or hospital for villagers, water tank design for whole village, solid waste management, design the road with waste from plastic, etc.

**KEYWORDS:** Taliye gaon, EPS panel, construction, School, Hospital or Primary Health care, etc.

## I. INTRODUCTION

In the INDIA every year more than hundred disaster accrues. In these main aspects of Geological hazard assessment by presenting the GIS-based methodology for identification and analyses of hazard. In INDIA Maharashtra State is one the Landslide hazard affected areas. Landslide is a Geological hazard accord in Taliye Gaon on 29th July 2021. The village is located in Mahad at Raigad district, lower reaches of their respective potential threatening mountain slope, forest and hilly area, the settlement of the village is scatted but along the hill slope.

The vital issue which universally is demanding is the kind of the construction materials are to be used in such situations and how construction management will play it role. Our Research attempted to study to understand the cultural, technical, structural, and economics complexities that were in rebuilding those dwellings and coming up with the cost-effective solution. The dwellings have been designed with stand serve landslides to the best considering the above side aspects illuminated by natural light during the day with and provision for proper ventilation this house drafted foster a healthy living. This research is emphasis in cost effective construction materials. We provided a dwelling for the poor villagers where a sense of stability of the elementary values of protection exists and gave better live hood to develop a framework. This paper present and applies a conceptual frame work to deal with Nature`s Vulnerability action such as landslide, earthquake, floods, cyclone etc. and also design and suggest amenities like Hospital, School, Water Tank, ATM, Bank, Roads, Etc.

## II. RELATED WORK

This study has analysed a strip footing is that in which a continuous strip of concrete is placed below the load bearing walls. It spreads the load of the load wall evenly across the entire area of the soil. 4 The footing are often made in either Plain concrete or ferroconcrete Strip footing is usually used as foundations for load bearing walls; and when the soil has good bearing capacity. It is preferred for low rise to medium rise residential buildings. Here a strip of concrete runs below the entire length of the wall, thereby distributing the load from the walls to ground. This offers better stability to the building.

In this study, mesh-based method such 2 Mesh based methods such as the finite element method (FEM) are the most usually used techniques for analyzing soil-structure interaction problems in geotechnical engineering. Nevertheless, standard FEM is unable to simulate large deformations and contact, hindering the realistic simulation of rotational,



sliding, pull-out and overturning behaviors. Contemporary ‘particle’ methods, such as the material point method (MPM), do not use a mesh to discretise the material, allowing large deformations to be simulated. In this paper, a recently developed technique to simulate contact using implicit MPM is tested by simulating soil-structure interaction problems and a landslide.

Expanded Polystyrene (EPS) Core Panel system may be a modern, Efficient Safe and economic construction system for the development of buildings. These panels can be used both as load bearing and non-load bearing elements. 9 (EPS) core panel is a 3D panel consisting of 3-dimensional welded wire space frame provided with the polystyrene insulation core. Panel is placed in position and shotcrete on both the edges. 11 EPS panel includes welded reinforcing meshes of high strength wire diagonal wire, and self-extinguishing expanded polystyrene uncoated concrete, manufactured in factory and shotcrete is applied to the panel assembled at construction site, which give the bearing capacity of the structure.

In this study 10 report deals with study and development of village as a sensible village as bundle of services of which are delivered to its residence and businesses in an effective and efficient manner. “Smart 6 village” is that modern energy access acts as a catalyst for development in education, health, security, productive enterprise, environment that in turns support further improvement in energy access. In this report we focused on improved resources use efficiency, local self-governance, access to assure basic amenities and responsible individual and community behavior to build happy society. We making smart decisions using smart technologies and services.

Various methods adopted 3 for Landslide Hazard Assessment in India include heuristic, Semi-quantitative, quantitative, Probabilistic, etc. 8 However, no single method are often perfectly suitable considering the variability and variety of landslides. to spot the varied approaches to landslide hazard assessment, different articles are compared supported landslide type, geo-environmental factors, and approaches to landslide hazard assessment during this review.

Various methods adopted for Landslide Hazard Assessment in India include heuristic, Semi-quantitative, quantitative, Probabilistic, etc. However, no single method can be perfectly suitable considering the variety and diversity of landslides. To identify the various approaches to landslide hazard assessment, different articles are compared based on landslide type, geo-environmental factors, and approaches to landslide hazard assessment in this review article.

Landslide are predominant present disasters 7 in hilly terrains, often characterized by rugged hills with steep slope related to loose unconsolidated soil. 14 With its peak occurrence during the monsoon season the magnitude of its effects are often disastrous counting on certain additional control factors both natural and manmade. 7 this study encompasses the spatial analysis of the landslide’s prone areas nearby Malin village using satellite data alongside the sector data during a GIS Environment. Using GIS technique, Thematic layers like lithology, geological structures, slopes morphology, geomorphology and land use/land protect deriving the landslide hazard zones. the load age rating systems were used for various classes of thematic layers which are supported relative importance of varied causative factors.

### III. OBJECTIVE

1. To analysis and discussing with villagers to know the problems are facing.
2. To design the House in EPS (Expanded Polystyrene Sandwich) panel in low cost and extreme weather suitable.
3. To estimate the overall budget coming to developing the village.
4. To prepare a data of village to design like a (no. of house. Total population of village as per they need)
5. To design the amenities to villagers, roads, water tank, sewer line, school, primary health care etc.

### IV. PROPOSED METHODOLOGY

Exploratory meeting to be held with Sarpanch / Panchayat for briefing about the project, aim & objective, scope value addition to the village, planning & development, process and methodology to be followed for implementation and consent for going ahead with the project.

Discuss with the all residents or villagers for understanding the problems, needs and priorities, their vision, participatory mechanism, suggestions from villagers. Carrying out a Socio-economic survey and asking for priorities of development / infrastructure in the village. Preparing the inventory of problems, deficiency in infrastructure, amenities, additional facilities needed etc. Preparing Development plan of the village based on study made and analysis carried out, vision and priorities defined, problems identified, needs and requirements of the village projected in terms of development/amenities/services quantified and rough cost development.



Fig.No.1 Taliye Gaon before Landslide



Fig.No.2 Taliye Gaon after Landslide

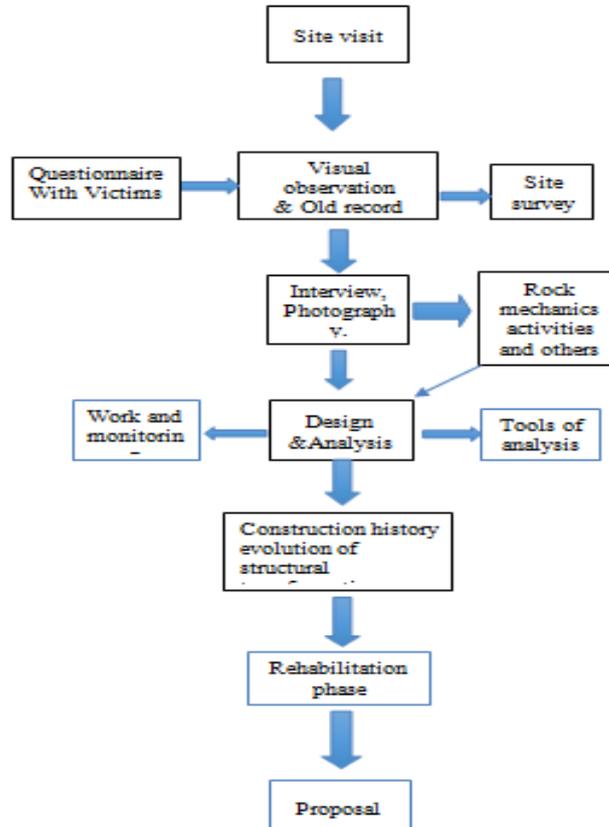


Fig.No.3 Temporary Houses provides for vilagers



Fig.No.4 Site survey with gaon sarpanch of Sampat Tandalekar

**V. PROPOSED METHODOLOGY**





## VI. EXPECTED OUTCOME

Exploratory meeting to be held with Sarpanch / Panchayat for 13 briefing about the project, aim & objective, scope value addition to the village, planning & development, process and methodology to be followed for implementation and consent for going ahead with the project.

Discuss with the all residents or villagers for understanding the problems, needs and priorities, their vision, participatory mechanism, suggestions from villagers. Carrying out a Socio-economic survey and asking for priorities of development / infrastructure in the village. Preparing the inventory of problems, deficiency in infrastructure, amenities, additional facilities needed etc. Preparing Development plan of the village based on study made and analysis carried out, vision and priorities defined, problems identified needs and requirements of the village projected in terms of development/amenities/services quantified and rough cost development.

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