

# Conflicts in construction on hilly areas

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Hilly areas are steep in shape, so the steeper the slope or hill, the harder it can be to work on the site. And the more difficult the task, the more expensive the bills. It can also be harder to lay a foundation properly when working on a slope, which is key to a building's success.

The process of constructing buildings in hilly areas often involves cutting rock, which can disrupt the natural balance of forces and increase the risk of landslides which disturbs the natural conditions and the balance of forces resulting into slips, subsidence and landslide

Some Difficulties Situations are explained below

## Height

At heights the oxygen level is less because at higher altitudes, air becomes thinner and the pressure of oxygen decreases. Thus, breathing becomes difficult on mountains.

## Weather

Extreme weather conditions- On the mountains, weather is very harsh like colds are a bit colder and there are more chances of wildfire

## Difficulty in movement of construction machinery

For the operating of equipment in different terrains, in different seasons and in site congestion, an availability of trained operators are required, also the supply of fuel to site for equipment's will be a challenging factor. To ensure movement of equipment's, Project Manager with experience with equipment is preferred.

## Difficulty in lying concrete on slope:

The lying of concrete on different levels is another confrontation, in order to avoid this hurdle, there is a specific method to do concreting as described below.

## Start at the bottom

Begin pouring concrete at the lowest part of the slope and gradually move upwards. This helps ensure that the concrete stays level and doesn't move downwards.

## Use a stiff mixture

A stiff concrete mixture helps shape the concrete into a slope. If the concrete is too wet, it will slump to the bottom of the slope.

## Allow concrete to flow slowly

Concrete should be allowed to flow slowly into the forms at a vertical angle.

## Soil erosion

Hilly areas are prone to soil erosion and water runoff, especially during heavy rainfall.

## Special structures

The need to construct special structures at different places can increase the cost of construction.

## Filling

Filling can overload weak soil underneath, which can trigger landslides.

## Some Remedial Measures are explained below

### Foundation preferred in hilly areas

Stepped Foundation. This type of foundation is provided in hilly places or in those situations where the ground is sloppy.

### Use of stone material in construction

Because stones are readily available in the hilly region, they are commonly utilized to construct buildings and slate stone roofs. Houses are compact, with small windows, and solid walls to keep out the cold. They also feature heat-protecting heating systems, and houses are built below ground level.

### Terracing on hill slopes



Terracing involves constructing flat or sloping platforms on hills or slopes, controlling water runoff and allowing water to infiltrate into the soil.