

Architecture design II

Lecturer: Dr. Sardar Swar Zeewar

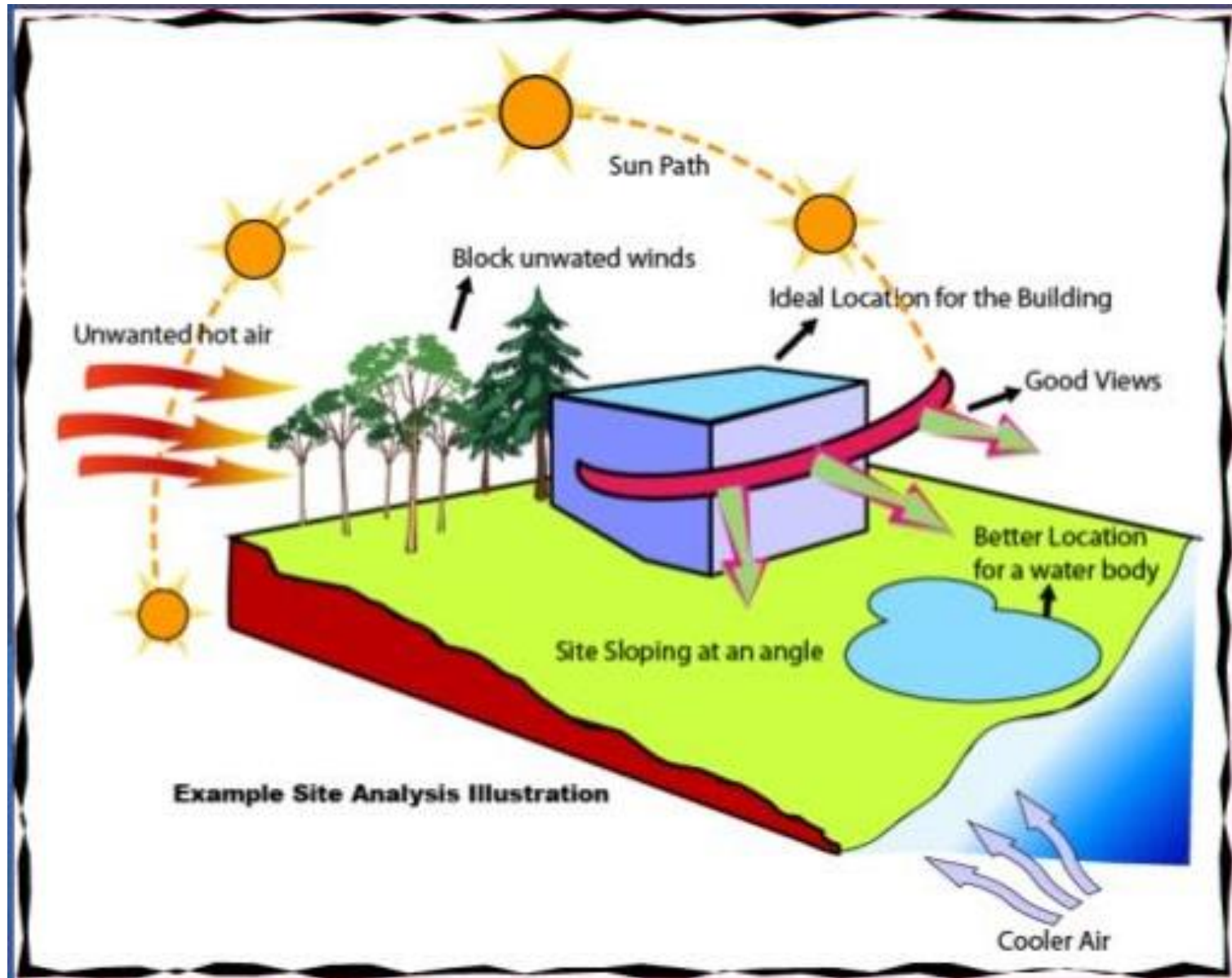
Site analysis

- Objectives of site analysis
- Example Site condition
- Inventory List

Objectives of site analysis

- To achieve a successful design, site analysis is a must and should be done carefully.
- Gather relevant information about the properties of the site, from topography to climate to wind pattern and vegetation.
- Site analysis involves taking an inventory of site and analyzing these factors relative to the client needs and aims.
- Analyze these features and incorporate them into the design.

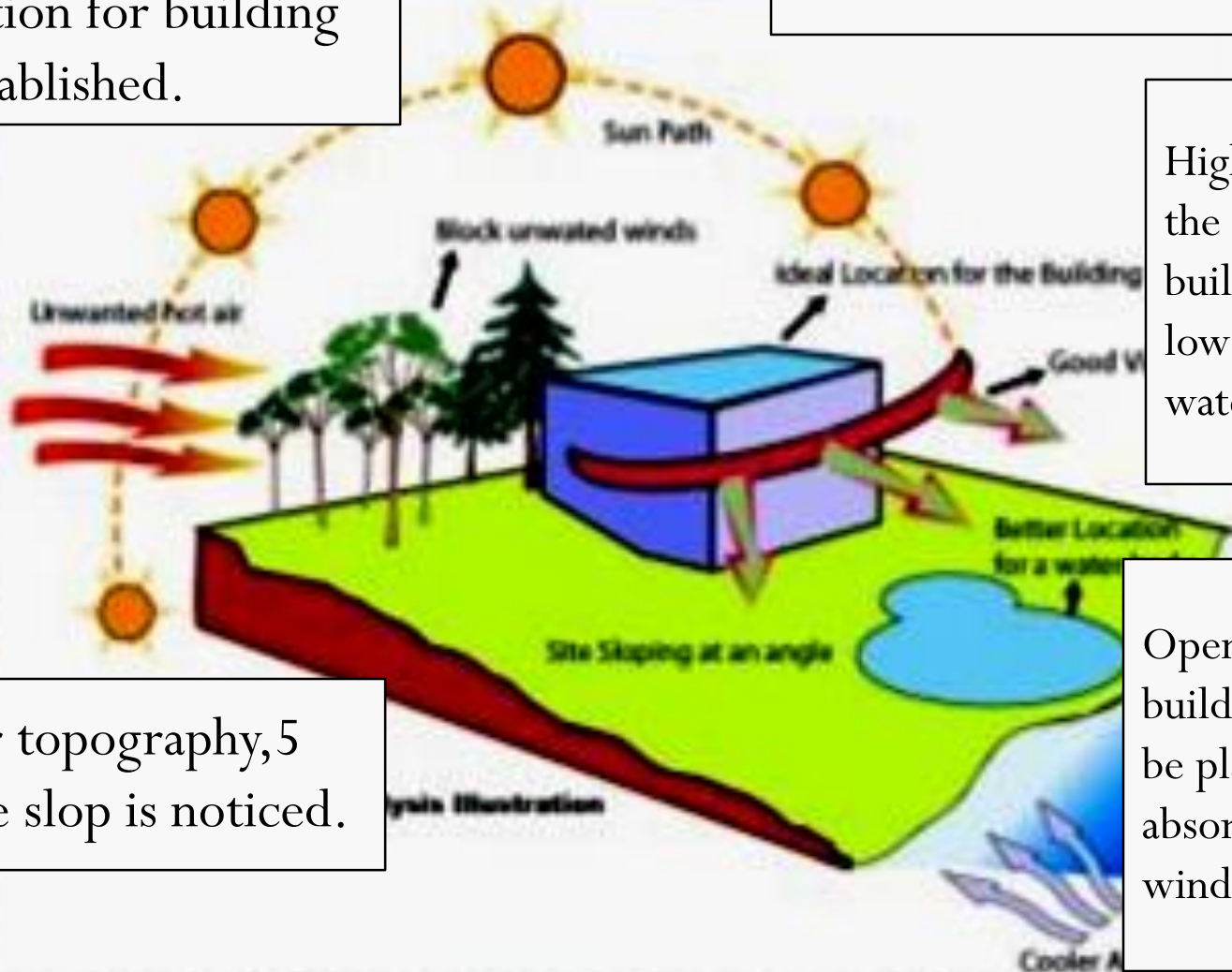
Example Site Analysis illustration:



Example Site Condition:

Analyzing the conditions, ideal location for building can be established.

For prevailing hot winds, trees would act as buffer



High spot might be the right for building and low spot for water body.

Openings in building could be placed to absorb cooler wind

Under topography, 5 degree slop is noticed.

Site Analysis: Inventory List

➤ Subsurface Features

- **Geology:** Geological history of the area, bedrock type & depth etc.
- **Hydrology:** Underground water table, aquifers, springs etc.
- **Soil Genesis:** erosion susceptibility, moisture (pF), reaction (pH) organic content, bearing capacity etc.

Site Analysis: Inventory List

➤ Natural Surface Features

- **Vegetation:** Type, size, location, shade pattern, aesthetics, ecology etc.
- **Slopes:** Gradient, landforms, elevations, drainage patterns
- **Wild Life:** ecology, species etc.
- **Climate:** precipitation, annual rain/snow, humidity, wind direction, solar intensity & orientation, average/highest/lowest temperature

Site Analysis: Inventory List

➤ Cultural & Man-made Features

- **Utilities:** sanitary, water supply, gas, electrical etc.
- **Land use:** Usage of site, adjacent use, zoning restrictions, easement etc.
- **Historic notes:** archeological sites, landmarks, building type, size, condition
- **Circulation:** linkages an transit roads, auto & pedestrian access, mass transit routes etc.
- **Social Factors:** population, intensity, educational level, economic & political factors, ethnicity, cultural typology etc.

Site Analysis: Inventory List

➤ Aesthetic Factors:

- **Perceptual:** from an auto, by pedestrian, by bike etc.
- **Spatial Pattern:** views of the site, views from the site, spaces existing, potential for new areas, sequential relationship
- **Natural Features:** significant natural features of the site, water elements, rock formations, plant materials