

View from Gedu, Bhutan to the South:





Proposed observatory in Ichhyakamana, Nepal

NEPAL SITE

Proposed observatory





VIEW FROM ICHHYAKAMANA SITE, LOOKING WEST

NEPAL SITE





View from Ichhyakamana site looking north

NEPAL SITE

Annapurna Himalaya

Manaslu Himalaya



# Ichhyakamana & Gedu to be equipped with instruments to measure:

- Carbon dioxide, methane, ozone
- Aerosol size distribution
- Cloud condensation nuclei
- Aerosol composition, including black carbon
- Aerosol optical properties
- meteorology

**CURRENT STATUS:** proposals submitted to governments of Nepal and Bhutan, answered questions... waiting for approval to proceed with construction



# Three satellite stations to be set up in 2014:

- Langtang (just below Mera Glacier)
- Lumbini (Nepal-India border)
- Kathmandu City

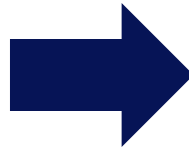


- Assess the menu of choices available:
  - Cook stoves
  - Brick production
  - Transportation
- Do research in those areas where we can provide value-added knowledge.



## Improved biomass cook stoves:

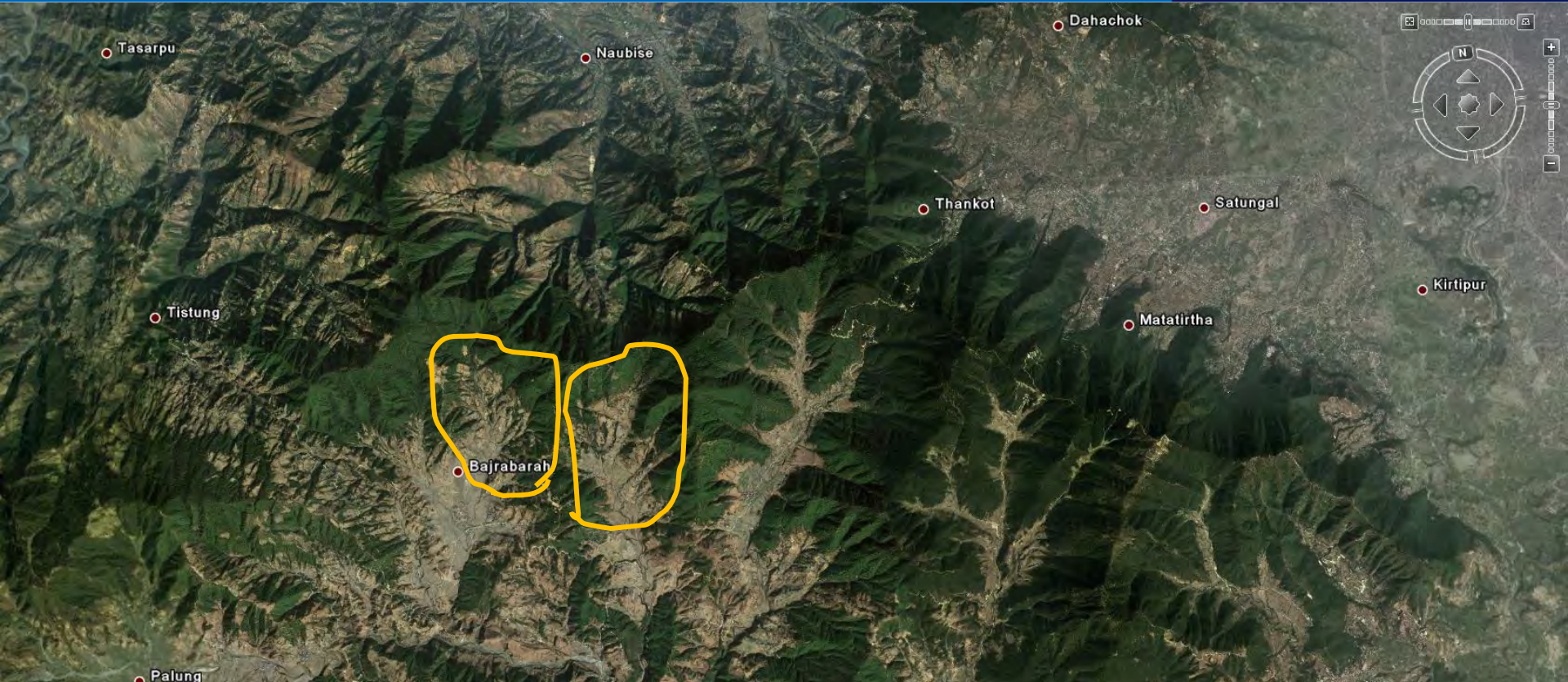
- To what extent do they reduce BC emissions?
- How does one effectively disseminate stoves that reduce BC?





# Upcoming study in Makwanpur, Nepal

## Controlled experiment



- 2 very similar valleys, in Bajrabarahi (intervention) and Chitlang (control).
- Work with local women's group to distribute best available fan-assisted biomass cookstove in 700 households of Bajrabarahi.
- Monitor indoor, outdoor air quality, people's health (with medical students)
- Study social aspects of cookstove distribution.

- Planning a new Masters' and PhD programme in atmospheric science, focused on issues in the mountain areas of our region.
  - Need people on an international advisory board
- Short training courses.
- Documentary films, websites, teaching materials.

## ALSO: HIRING TWO NEW STAFF:

- Aerosol scientist
- Air quality specialist/engineer

Details at: [www.icimod.org/vacancies](http://www.icimod.org/vacancies)



# Collaborations & Contributions to Policy

- Facilitating the creation of a network of scientists in the region collaborating across borders.
- Ministerial meetings, raising awareness about trans-boundary interdependences.
- Active membership in the Climate and Clean Air Coalition (CCAC).

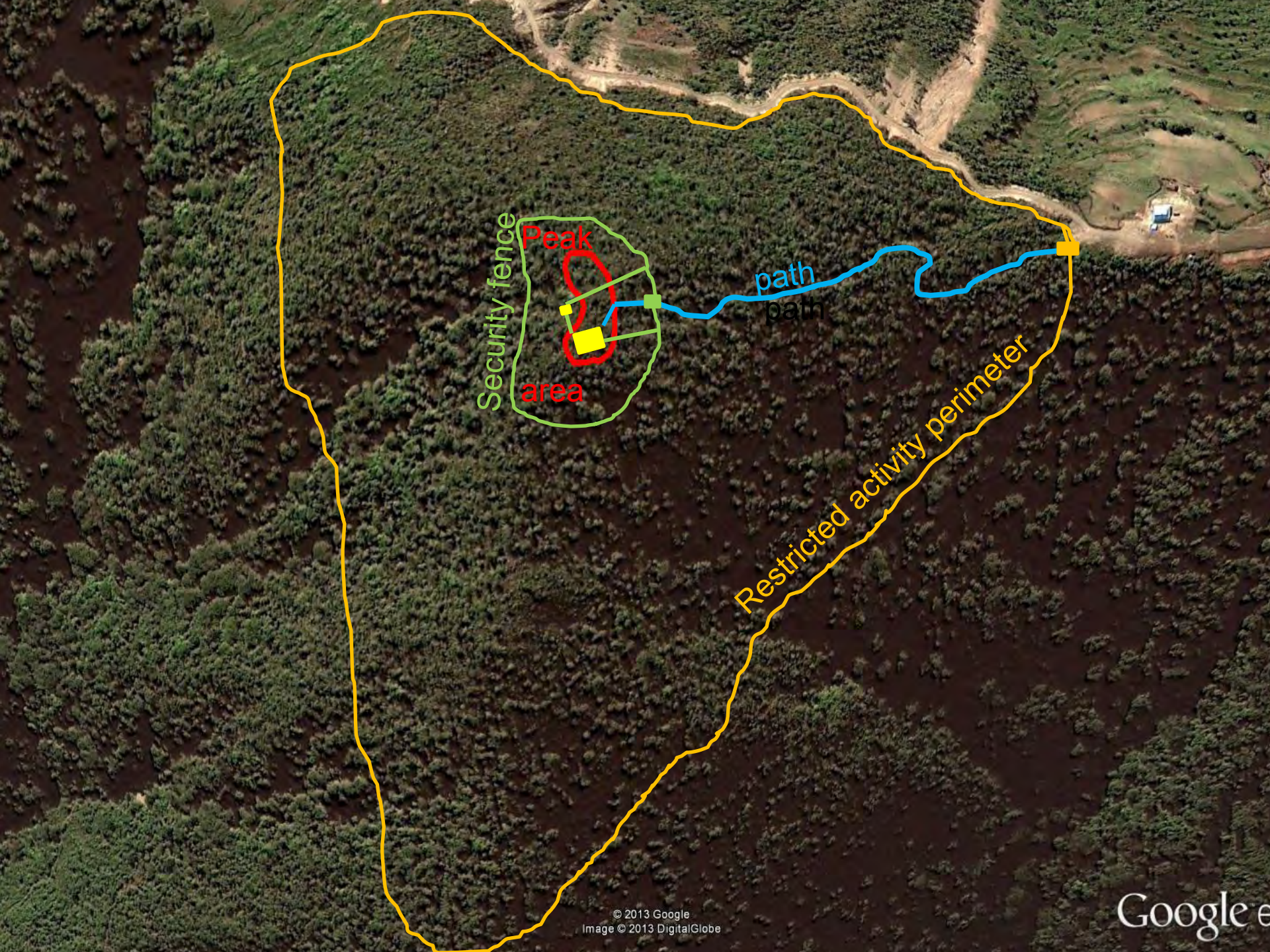


THANK YOU!

ICIMOD







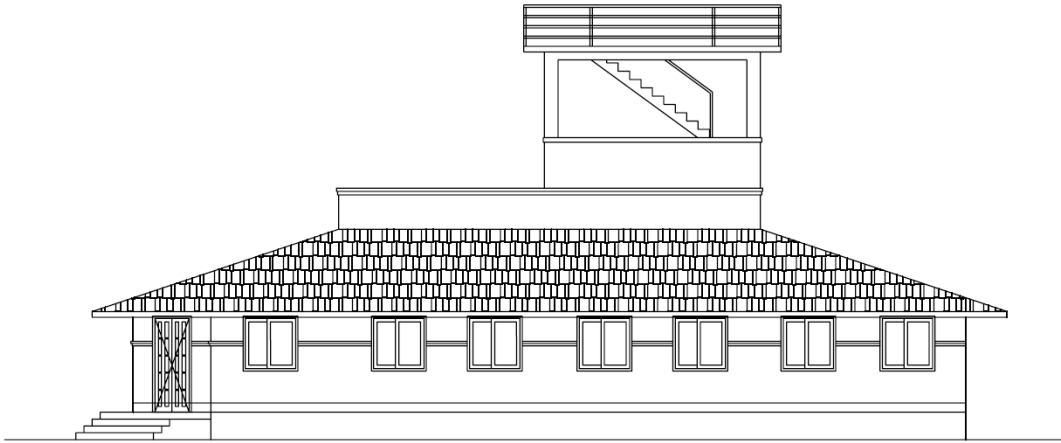
Security fence

Peak  
area

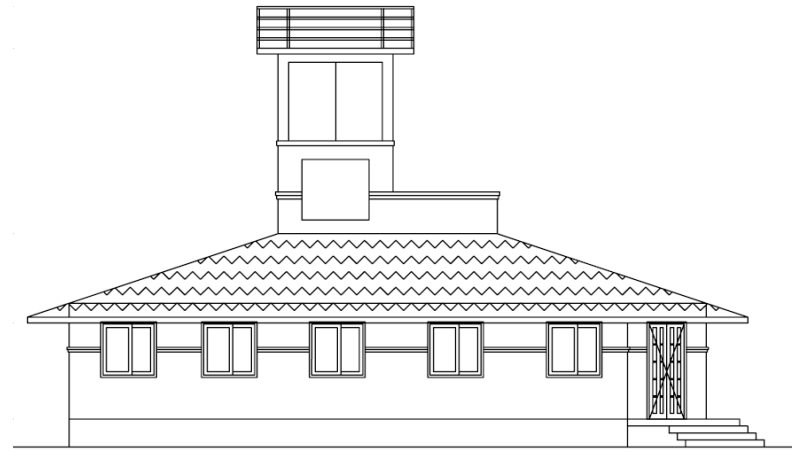
path  
path

Restricted activity perimeter

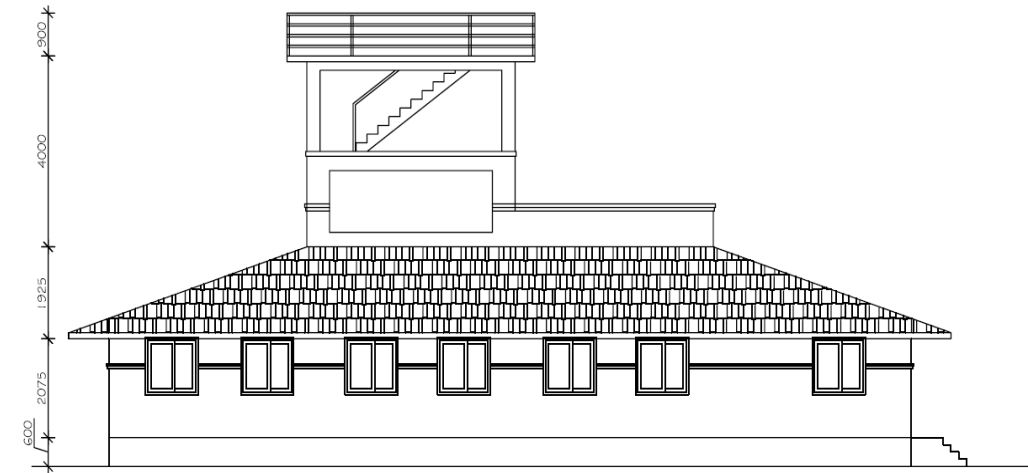




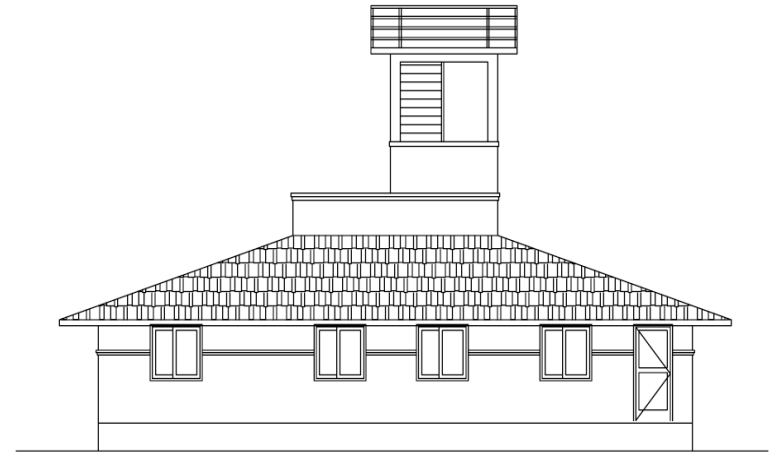
Front Elevation



L.H.S. Elevation

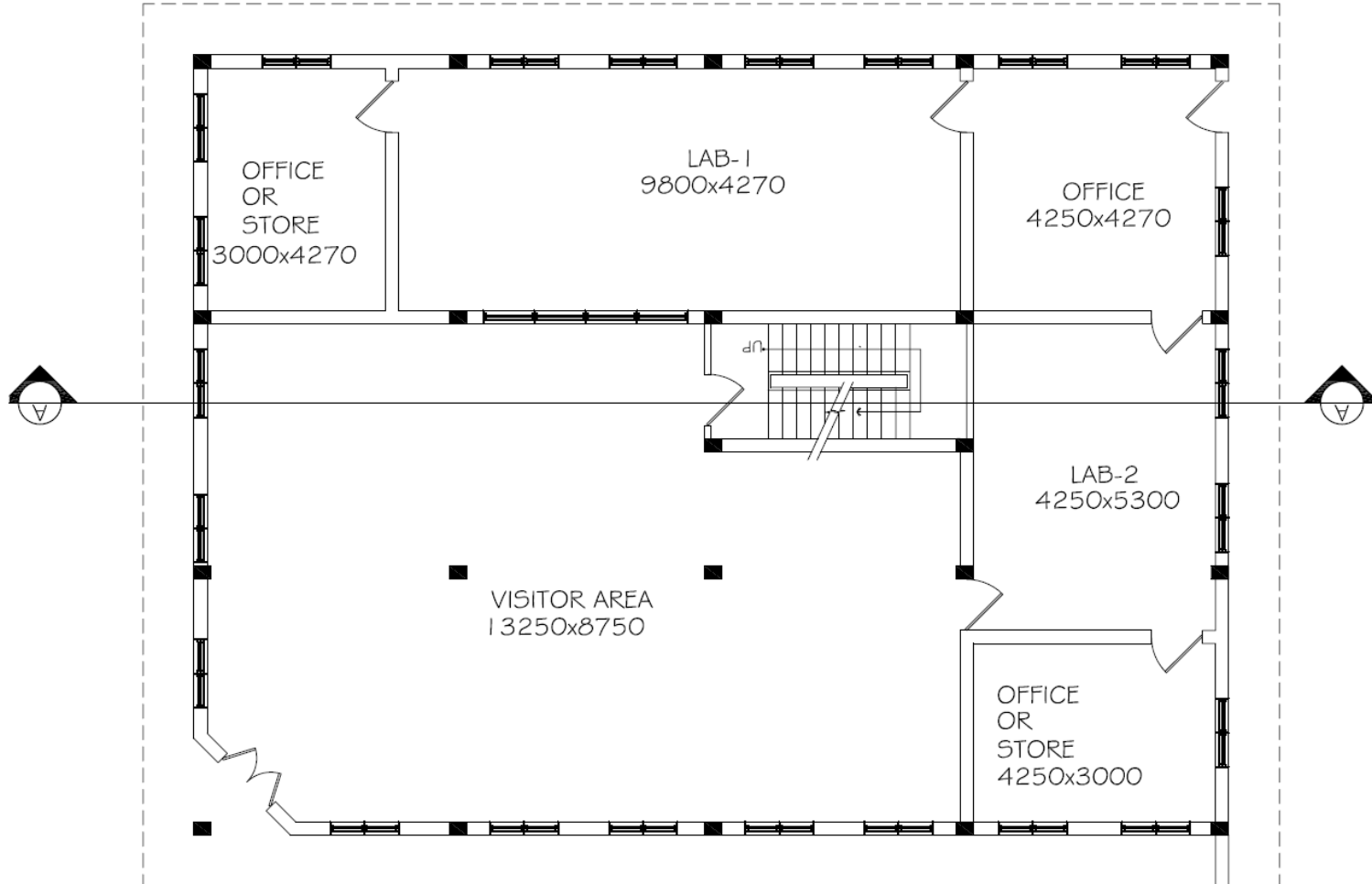


Rear Elevation

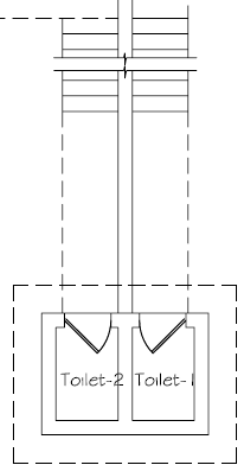


R.H.S. Elevation





Plan Level-1  
BUA=2750.00 Sq ft



# The Atmosphere Initiative's contribution to science:

- Assess current atmospheric monitoring network across the Himalaya and identify gaps.
- Work towards a regional monitoring plan.
- Establish ICIMOD-initiated atmospheric observatories in collaboration with national partners.
- Organize field research campaigns.