

# Mountain natural environments and sustainable accessibility: the Ski-Ability Project

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## Growing interest in nature for well-being and related accessibility challenges.



Natural environments pose unique accessibility challenges due to morphology and climate.

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## Objectives and Challenges



**Objective:** Accessibility in nature settings and the implications for health and inclusivity.

**Challenges:** Terrain, weather, and existing approaches to accessibility are often inadequate.

<https://www.instagram.com/danielefrialdi/>

## Conceptual Framework

### THE CONTEXT

There are almost **13 million** people with disabilities in our country. Although something has been changing in recent years, the percentage of people with disabilities practising sport **is still too low**.

According to data **published by ISTAT** in 2022, among people with disabilities

**only 9.6%**   
stated that they engage in sports-related activities.

Sources: osservatoriosullasalute.it, istat.it

**Focus:** Accessibility vs. usability in natural contexts.

**Insight:** Introducing "equivalent accessibility" and "reasonable accommodation" in challenging environments.

## Accessibility as a Person-Environment Relationship



**Main Concept:** Interplay between person, environment, and the need for flexible solutions..

**Example:** Built environment standards vs. natural terrain adaptations.

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## Limitations of UD in Natural Settings

- **Focus:** UD's limitations in accommodating individual needs in natural environments.
- **Point:** UD for the "greatest number" may not always address specific, variable needs.

## Redefining Accessibility in Natural Environments



**Topic:** Rethinking accessibility approaches for non-designable environments.

**Approach:** Balancing physical interventions with adaptive aids for users.

<https://www.instagram.com/simon.wallner/#>

## Legislation and Accessibility Standards

- **Highlight:** Example from the Veneto Region (Italy) on "equivalent accessibility."
- **Point:** Standards for partial accessibility, mobility aids, and interpretive resources.

## Examples of Accessibility in Nature



**Examples:** Joelettes for mountain trails and adaptive horseback riding in Iceland.

**Takeaway:** Creative, situational solutions enhance access without heavy physical changes.

Joëlette And Co di Ferriol-Matrat  
<https://islandshester.is/tour/ice-riding-and-myvatn-open/>

## Accessibility in Ski Resorts – Challenges and Opportunities



**Challenges:** Seasonal variations, terrain, fragmented management.

**Opportunities:** Accessibility benefits local communities and tourism.

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## Introduction to the Ski-Ability Project



**Project Goal:** Increase accessibility and inclusivity across Alpine ski resorts.

**Funding:** Supported by Arge Alp Community, targeting accessibility solutions in challenging settings.

## Methodology of the Ski-Ability Project

|                                                                                                                          | SKI RESORT 1 | SKI RESORT 2 | SKI RESORT 3 | SKI RESORT 4 | SKI RESORT 5 | SKI RESORT 6 | SKI RESORT 7 |
|--------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>SKI SLOPES</b>                                                                                                        |              |              |              |              |              |              |              |
| 1 Are there disabled parking spaces near the ski lifts?                                                                  |              |              |              |              |              |              |              |
| a How far are they from the ski lift/ticket office?                                                                      |              |              |              |              |              |              |              |
| b How many are there?                                                                                                    |              |              |              |              |              |              |              |
| c Are they kept snow-blown?                                                                                              |              |              |              |              |              |              |              |
| d How often are they snow-blown?                                                                                         |              |              |              |              |              |              |              |
| e Is it equipped with a cover?                                                                                           |              |              |              |              |              |              |              |
| f Is there an accessible route?                                                                                          |              |              |              |              |              |              |              |
| g Is the route feasible with a wheelchair? With skis? Is it equipped with signage for the blind?                         |              |              |              |              |              |              |              |
| 2 Is there a shuttle service accessible from car parks or accommodation facilities?                                      |              |              |              |              |              |              |              |
| a At what distance from the ski lift/ticket office/accommodation facility?                                               |              |              |              |              |              |              |              |
| b How many are there?                                                                                                    |              |              |              |              |              |              |              |
| c What is the frequency?                                                                                                 |              |              |              |              |              |              |              |
| d Describe the type of service                                                                                           |              |              |              |              |              |              |              |
| 3 How many ski lifts are there? What kind?                                                                               |              |              |              |              |              |              |              |
| a Are there turnstiles?                                                                                                  |              |              |              |              |              |              |              |
| b Are there dedicated lanes for disabled persons?                                                                        |              |              |              |              |              |              |              |
| c Is there an assistance service?                                                                                        |              |              |              |              |              |              |              |
| 4 Are there specialised instructors?                                                                                     |              |              |              |              |              |              |              |
| 5 Refreshment/Refuges                                                                                                    |              |              |              |              |              |              |              |
| a How many are there for each lift and each ski slope?                                                                   |              |              |              |              |              |              |              |
| b Are they accessible? To what level? What initiatives have been implemented or are in the process of being implemented? |              |              |              |              |              |              |              |
| c Are there accessible toilets? How many for each ski slope?                                                             |              |              |              |              |              |              |              |
| d What kind of support is provided to the disabled persons?                                                              |              |              |              |              |              |              |              |
| e Are there sledges or other means of support?                                                                           |              |              |              |              |              |              |              |

**Process:** Surveys, observations, and qualitative research in Alpine ski areas.

**Focus:** Current state assessments, stakeholder perspectives, and practical data collection.

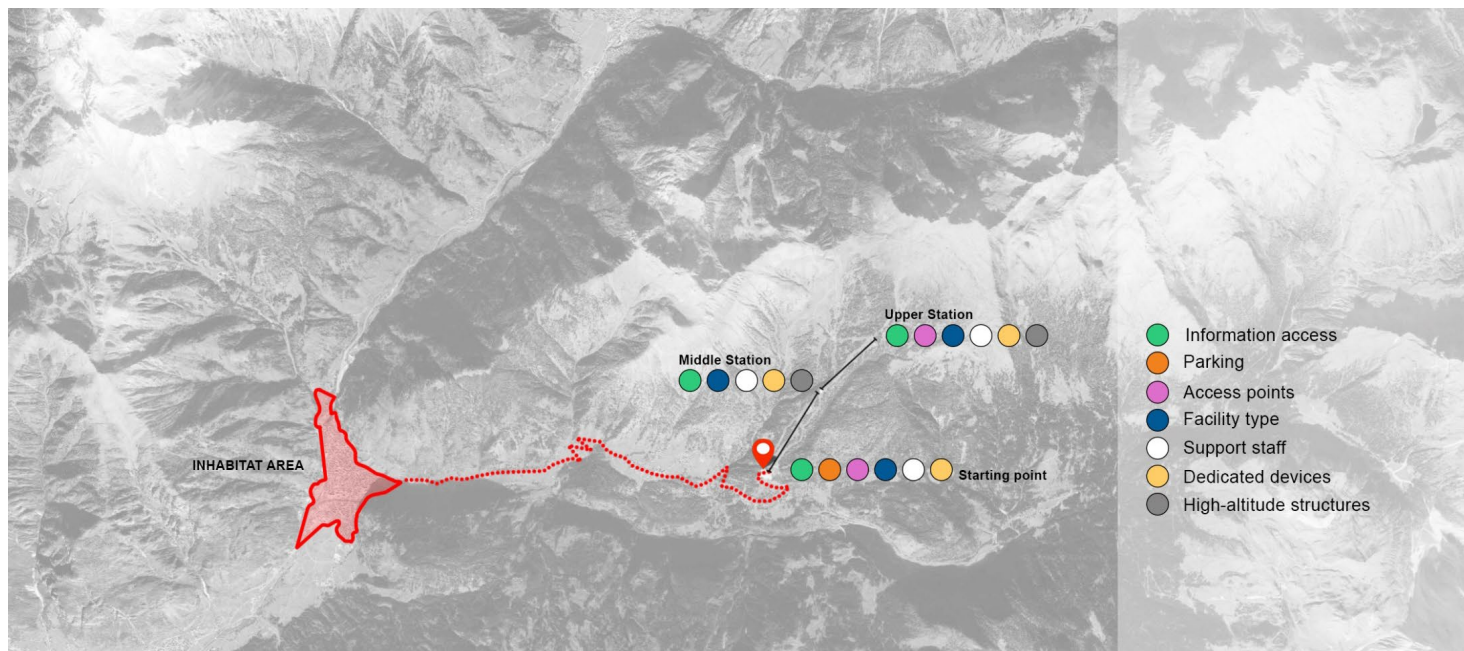
Legend:

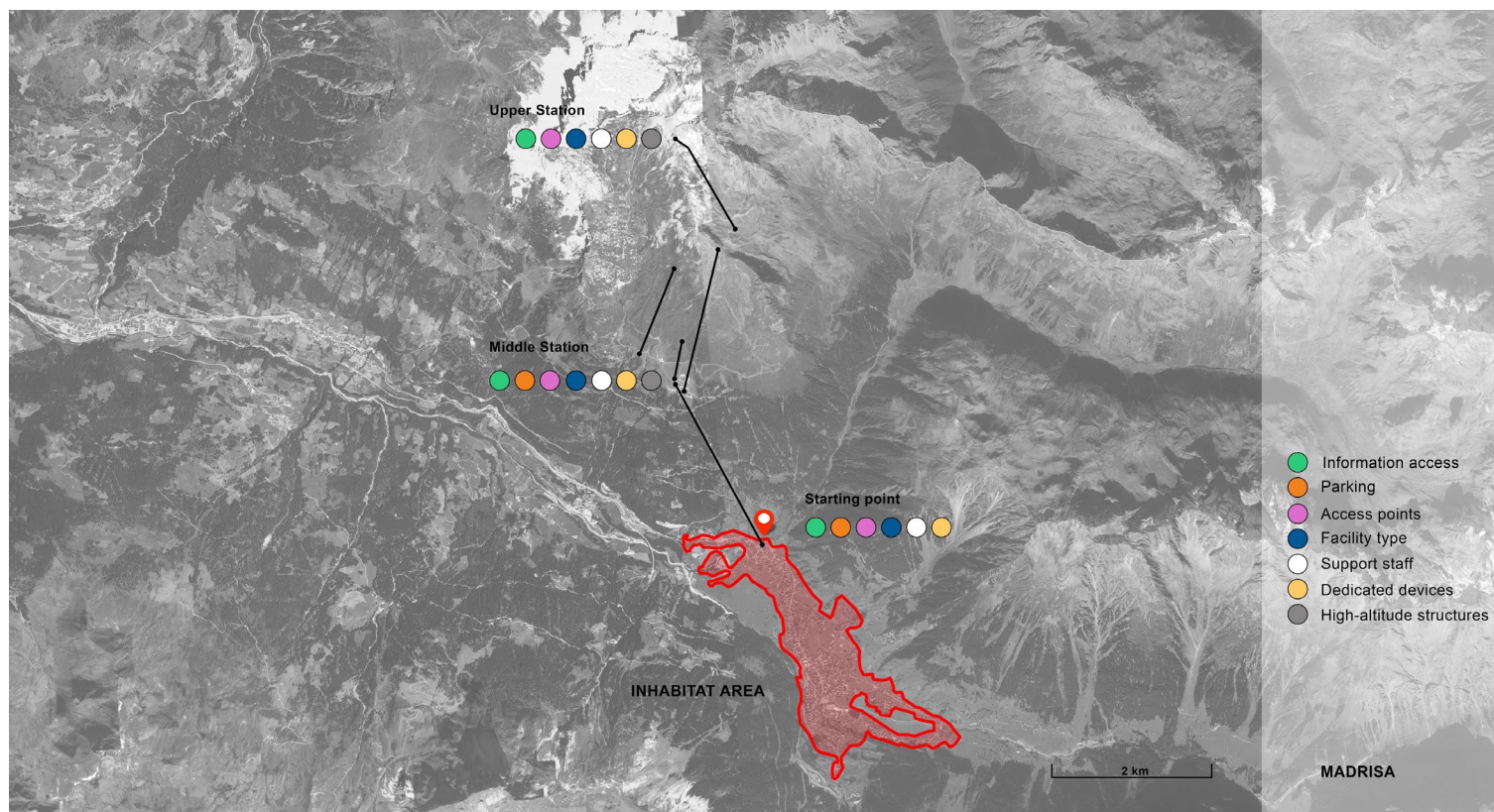


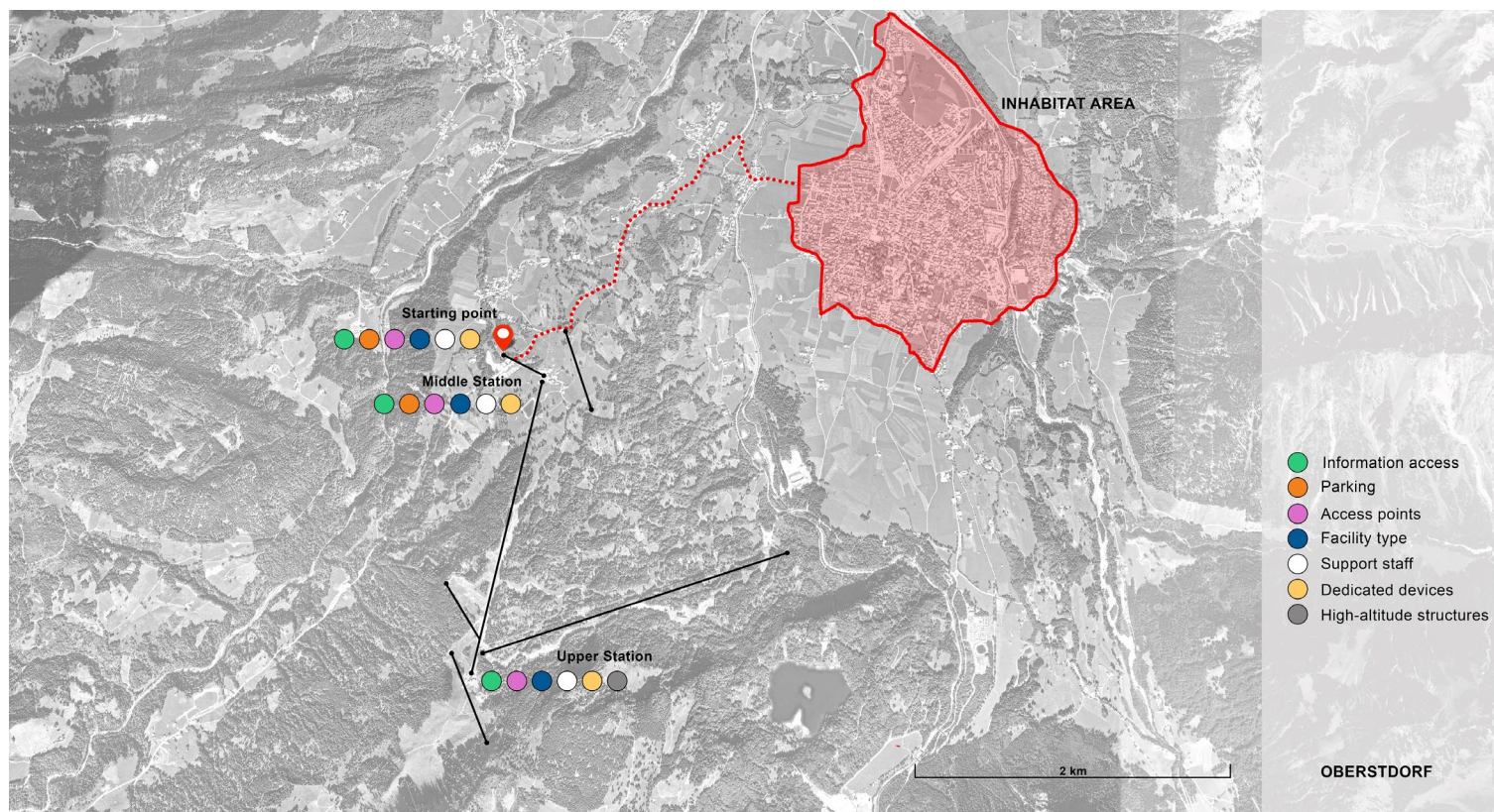
## Research Findings – Key Insights

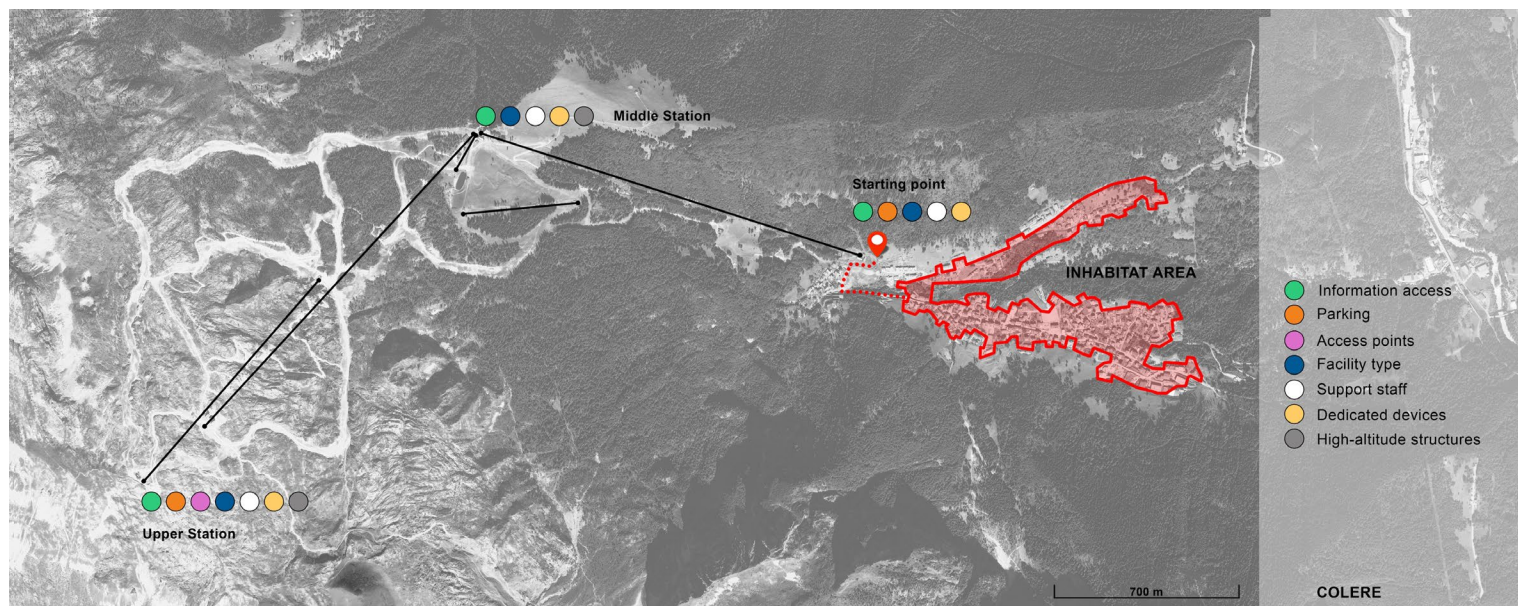
- **Main Insights:** Varying degrees of accessibility and readiness in ski resorts.
- **Focus:** Importance of consistent standards and understanding local conditions

## Research Findings – Key Insights









## Proposed Strategies for Improvement



**Strategies:** Equipment funding, community partnerships, and accessibility-focused staff training.

**Goals:** Enhance inclusivity, enjoyment, and overall user experience for all abilities.

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## Conclusion and Future Directions



**Summary:** Adaptive approaches are essential for accessibility in natural environments

**Future Steps:** Ongoing research, community involvement, and sustainable development in mountain areas.



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**SKI-ABILITY**



**ARGEALP**



**Regione  
Lombardia**