

MINUTES OF THE WORKSHOP ON DEVELOPMENT OF GEOPARKS

27 January 2026/09:00-12:30 CET

OPENING

The Workshop on Development of Geoparks was held online to share practical experience from UNESCO Global Geoparks and national geoparks, with a particular focus on how an aspiring geopark in Bhutan could be developed around hot springs as an anchor theme. The workshop prioritised community participation, education and interpretation, and governance arrangements that connect geopark activities to local livelihoods and long-term stewardship.

Martina Pásková opened the meeting, informed participants that the session would be recorded, and invited short introductions from the core contributors and Bhutan colleagues. Presentations were then delivered sequentially, followed by a cross-cutting discussion and summary of next steps.

Attendee's List

Martina Pásková

Josef Zelenka

David Zejda

David Sedlacek

Frantisek Krejci

Luboš Gardon

Abraham Caceres Cabana

Driss Achbal

Norbu Norbu

Karma Gyeltshen

Sonam Younten

Rama Khatibu

Kamal Ait Ouhamchich

Mohamed Bougal

AGENDA

- Welcoming and introductions
- 4GEON network for playful learning about Earth (overview of project pillars and resources)
- Hot Springs - a potential area for Bhutan's first geopark (Bhutan team presentation)
- UNESCO Global Geopark Colca and Andagua Volcanoes - a Peruvian model (Peru team presentation)
- Royal Šumava National Geopark - Czech good practice of geopark colliding with national park area (Šumava team presentation)

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- Barrandien National Geopark - Czech good practice and aspiring pathway (Barrandien team presentation)
- M’Goun UNESCO Global Geopark - Moroccan good practice (Morocco team presentation)
- Cross-cutting discussion, summary, proposal of the next steps, and closing

DISCUSSION

Welcome, introductions, and meeting set-up

The chair (Martina Pásková) reiterated the purpose of the session: to exchange experience relevant to high-mountain and rural contexts, and to support Bhutan colleagues as they explore the potential to develop an aspiring geopark anchored around hot springs. Participants confirmed that the meeting could be recorded. Core contributors introduced their roles, including technical support, tourism and IT expertise, and geopark management experience. Bhutan colleagues introduced themselves and noted their interest in learning from the cases presented.

4GEON project overview and learning resources

- Martina Pásková outlined the 4GEON project logic and its multi-continent partnership, noting that the project builds a shared learning ecosystem through a geoportal, geo-courses, contests, and youth engagement (geo-bus, geo-canoe etc.), and practical tools that support playful geoeducation in geoparks.
- The importance of annual face-to-face meetings in individual 4GEON geoparks was illustrated by photographic documentation of key activities carried out during these events.
- The discussion highlighted the value of multilingual learning materials (including localisation for different cultural contexts) and the importance of linking geology to everyday life through stories, local heritage, and place-based experience.
- A short technical note described the emerging use of AI-supported image generation for geoscience communication, with the caution that such images should be used carefully and verified for scientific accuracy, especially in educational settings.

Bhutan: Hot Springs as an anchor for a potential geopark

- Norbu Norbu presented the hot springs concept and area as a candidate anchor for Bhutan’s first aspiring geopark. The hot springs were described as part of an active Himalayan hydrothermal system with interpretive value for tectonic processes and mineral formation, and as a long-standing cultural and spiritual wellness site used for traditional healing.

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- The presentation emphasised community-based management and livelihood opportunities, including local services and visitor-oriented activities that could be developed in ways consistent with conservation priorities.
- Bhutan colleagues noted that they are at an early stage and requested guidance on the standards, management structures, and interpretation requirements needed to progress from a strong place-based idea to a functioning aspiring geopark pathway.
- Practitioners emphasised that geopark development is typically a multi-year process requiring a clear management body, an experienced local / regional geologist, stakeholder participation (municipalities, guides, cooperatives, schools, and scientific partners), and a practical interpretation plan connected to education and stewardship.

Peru: Colca and Andagua Volcanoes UNESCO Global Geopark (practice insights)

- Abraham Caceres Cabana shared experience from the Colca and Andagua Volcanoes Geopark, highlighting the importance of building an institutional structure that enables coordination across a large territory and links geoheritage protection with education (4GEON clubs at local schools), community benefit, and visitor experience.
- The case discussion emphasised risk-awareness and local capacity in territories where natural hazards are part of the context, and the need to ensure that Indigenous and rural communities benefit directly through community-based services, local gastronomy and products, and structured partnerships.

Czech Republic: Royal Šumava National Geopark (good practice)

- The Šumava team presented the geopark as a living platform built on cooperation with local municipalities and strong coordination with the Šumava National Park Authority and related visitor centres.
- Key lessons shared included the value of training local guides, maintaining clear and positive communication with communities, and using landscape history (glacial features, lakes, peatlands, river networks, and long-term landscape development) as a coherent narrative for education and sustainable tourism.

Czech Republic: Barrandien National Geopark (education and site protection)

- The Barrandien presentation focused on school engagement and public outreach through lectures, information centres, and guided excursions. The team described a two-part educational approach combining classroom sessions with field excursions supported by interactive materials (props, pictures, and hands-on demonstrations).
- Practical site-protection lessons were shared for areas with high interest in fossils and minerals. The team noted that unmanaged collection can concentrate pressure on a few

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popular locations, so guided activities and the careful distribution of field learning across different sites can reduce harm while maintaining visitor interest.

Morocco: M’Goun UNESCO Global Geopark (community value and local products)

- Driss Achbal presented the M’Goun geopark experience, stressing community value creation through geopark centers, local product promotion, and links to women’s cooperatives and community organisations. The role of signage and digital interpretation (including QR-code access) was highlighted as a low-cost way to widen access to information.
- The presentation also described how sustainable agriculture and local product markets can reinforce geopark identity, and how outdoor sports and event-based tourism (trail running and marathon events) can generate employment and support small businesses when aligned with conservation and visitor management.

Cross-cutting governance discussion: minerals and fossils trade

- A cross-cutting discussion addressed the challenge of informal mineral and fossil trade and the risk of unauthorised extraction driven by tourism demand. Practitioners noted that geopark rules can restrict such activities within the geopark territory, but wider market dynamics may require ongoing dialogue with geology and mining authorities, public awareness, and the development of alternative livelihood pathways.

Support offers and next steps for Bhutan

- Rama Khatibu welcomed Bhutan colleagues and offered peer support, including the possibility of a sistership-style exchange. The chair proposed a follow-up Bhutan-focused workshop after circulation of the Bhutan presentation and suggested exploring discussion with the UNESCO Global Geoparks secretariat regarding potential expert support.

DECISIONS AND AGREEMENTS

- Presentations and the workshop recording will be shared with participants, subject to access arrangements.
- Bhutan colleagues will circulate their hot springs presentation to enable structured feedback from geopark practitioners.
- A dedicated follow-up workshop will be organised to discuss Bhutan’s aspiring geopark pathway in more detail.
- The organisers will explore engagement with the UNESCO Global Geoparks secretariat on options for expert guidance and support.

ACTION ITEMS

Martina Pásková

- Share the workshop recording and consolidate the presentations for participant access.
- Coordinate a Bhutan-focused follow-up workshop for structured feedback on the aspiring geopark pathway.
- Explore engagement with the UNESCO Global Geoparks secretariat regarding potential expert support/mission options.

Norbu Norbu (Bhutan team)

- Send the hot springs presentation and any supporting maps/materials to Martina Pásková for circulation to practitioners.

All presenters (Peru, Czech Republic, Morocco)

- Provide any additional reference materials, links, or illustrative examples that could support Bhutan's pathway (interpretation planning, community engagement, governance structure).

David Zejda (technical support, Czech team)

- Support access management for shared materials and ensure that workshop outputs are stored in agreed folders.

Rama Khatibu (Tanzania)

- Share contact details for peer support and coordinate any sistership-style mentoring exchange if Bhutan colleagues wish to proceed.

CLOSING

The chair thanked all presenters and participants for their contributions and reiterated that the objective is mutual learning and practical support. The meeting closed with encouragement for Bhutan to maintain authenticity in shaping its own geopark concept while building the necessary governance and interpretation foundations.

Next meeting: To be confirmed (Bhutan-focused follow-up workshop).



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Submitted by: Taiwo Lasisi

Corrected and approved by: Martina Pásková

ANNEX



Workshop on Development of Geoparks

Date: January 27, 2026
Time: 9:00–12:30 CET

Format: Online

Programme



9:00

Welcoming and introduction of participants

9:15

4GEON as a network for playful learning about Earth

Martina Pásková, Chair of the National Geoparks Council of the Czech Republic, 4GEON Leader

9:30

Discussion

9:40

Hot Springs – potential area for the first Bhutanese geopark

Norbu Norbu, Senior Forest Ranger, Jigme Dorji National Park, Bhutan

10:00

Discussion

10:10

Colca y Volcanes de Andagua UNESCO Global Geopark

Abraham Caceres Cabana, Specialist in Sustainable Tourism, Rural Development and Community Empowerment, 4GEON Co-leader, Consultant in Business Management and Sustainable Tourism
Good practice example of geopark operation in high-mountain conditions, involvement of local communities, economic benefits and entrepreneurial opportunities

Figure 1. Workshop Programme

