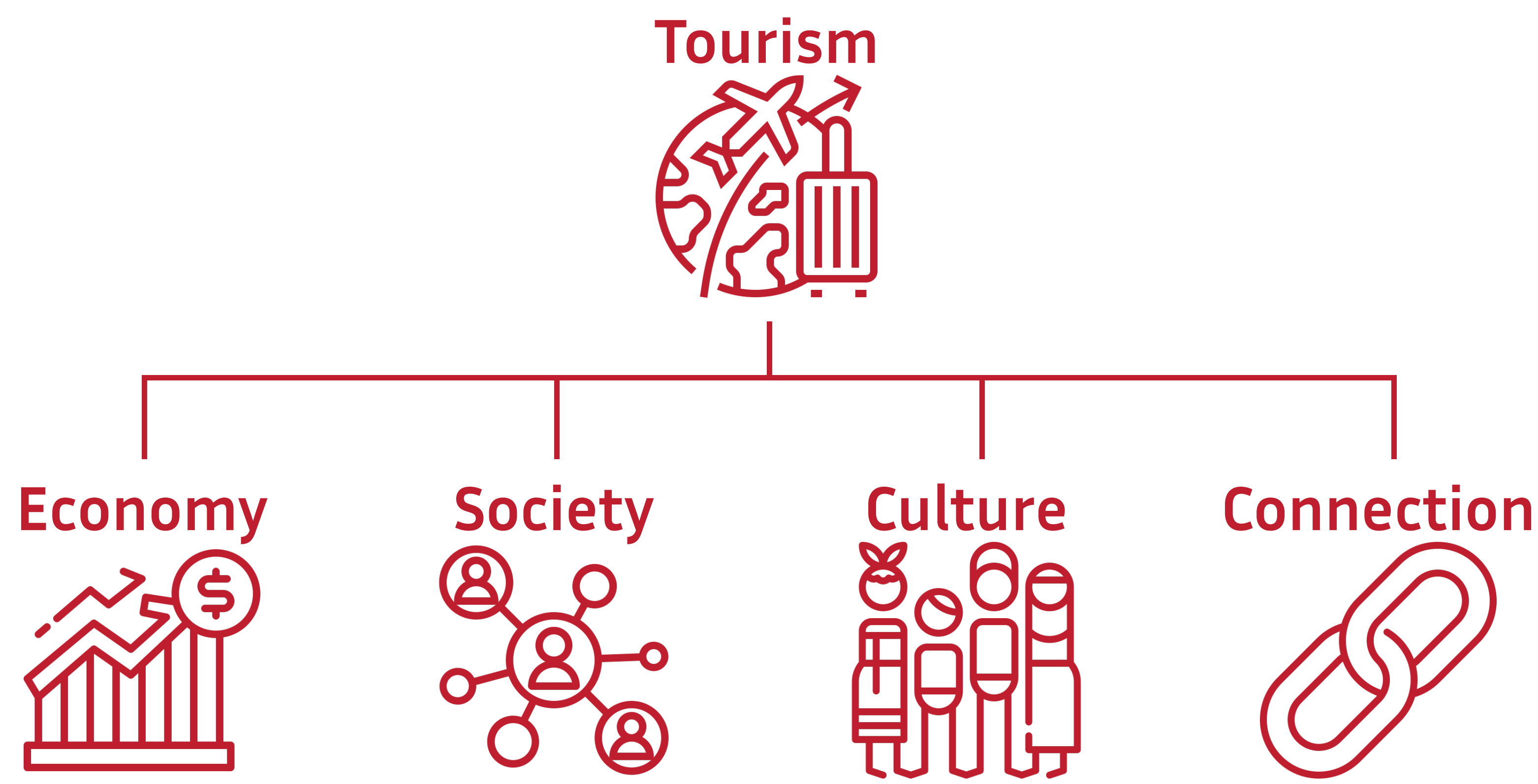# Vietnamese Tourism

Background

Travel and Tourism is an important economic activity in most countries worldwide. As one of the world's largest economic sectors, this sector creates jobs, drives exports, and generates prosperity across the world. Vietnam has great potential for tourism development as it is endowed with favorable geographical location, climate, and natural conditions Vietnam has a long development history over four thousand years with many dynasties. This country has a population of nearly one hundred million people in many ethnic communities including many rich and diverse cultural heritage in many different locations. Vietnam has 54 ethnic communities, it is diverse and rich with many traditional festivals, culture, and cuisine across the country.

Significance

Tourism

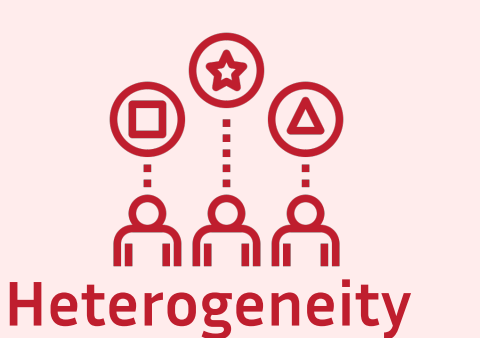Economy — Society — Culture — Connection

Tourism is a driving force for the development of the economy, society, and culture. Tourism can connect people worldwide.

Weaknesses

Although Vietnam's tourism sector gained impressive milestones, there are still many problems needed to be adressed

Vietnam's tourism data is available at heterogeneous sources and structures. It takes tourists a lot of time and effort to collect and combine information from different sources.

Heterogeneity

Knowledge
Tourists do not have a mean to explore the connection between history, culture, people and the tourism attractions in Vietnam.

Tourism businesses have not got enough creative and innovative to exploit the available tourism resources of the country.

Creativity

Communication
Communication skills are one of the most significant weaknesses among Vietnamese employees in the tourism sector. There is still a lack of guides fluent in foreign languages.

The diversity and creativity of IT tourism products is still limited. Vietnamese Tourism would need an open knowledge base and a smart tourism question-answering system on top of that.

Technology

Project description

The project has two main outcomes: (1) to design a tourism ontology and store data in a semantic representation to foster data integration among tourism stakeholders; and (2) to develop a smart tourism question-answering system for Vietnam to leverage the knowledge base of semantic tourism data

The project integrates data from heterogeneous sources to build a rich Vietnamese tourism knowledge base. This requires a unified and common representation of data. Ontology is a positive approach to such a data integration problem. Developing a tourism ontology is a challenging issue as tourism data is abundant and diverse. It involves many subjects of history and culture as a natural feature of tourism. To this end, the project studies the existing tourism ontologies in the literature and adapt them for tourism in Vietnam. The project would focus on the vocabulary of historical sites, historical buildings, religious buildings, historical figures, and traditional festivals.
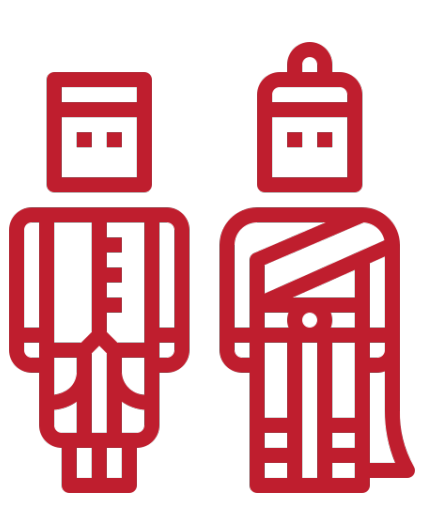
Although an exceeding amount of data on Vietnam's tourism in semi-structured form is available on the Web, lack of annotated semantic data in tourism makes it difficult for smart tourism systems to become a reality. Utilising ontology and certain authoring tools, we can create semantic annotation in the tourism sector. However, manual annotation is expensive, time-consuming and cannot be used to deal with the large volume of the existing tourism data sources. To semi-automate the process of annotating tourism data is crucial.

To explore the knowledge base of tourism data, users can interact with the question-answering system by formulating their questions in natural language. The system identifies entities and intended touristic activities. The question is then translated into a machine understandable query and sent to the previously created knowledge base, making use of semantic annotations.
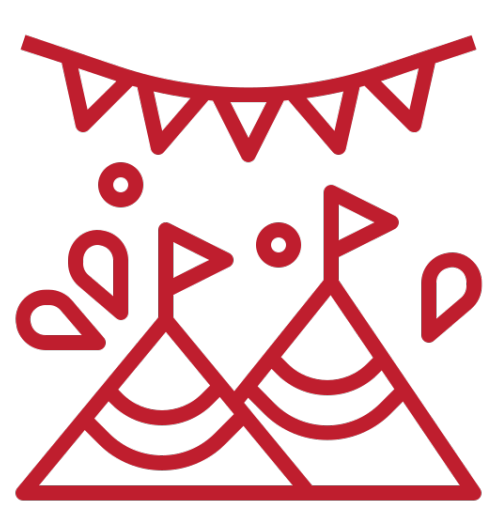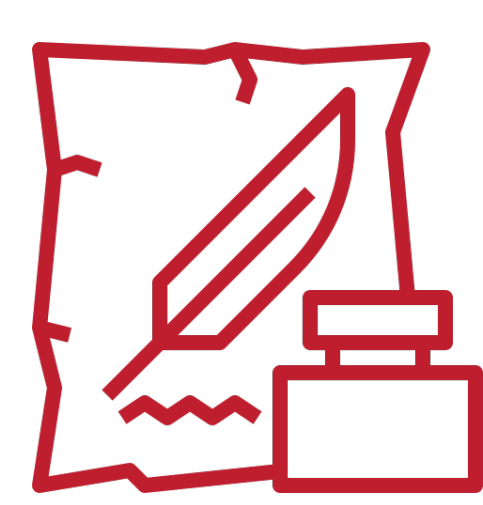
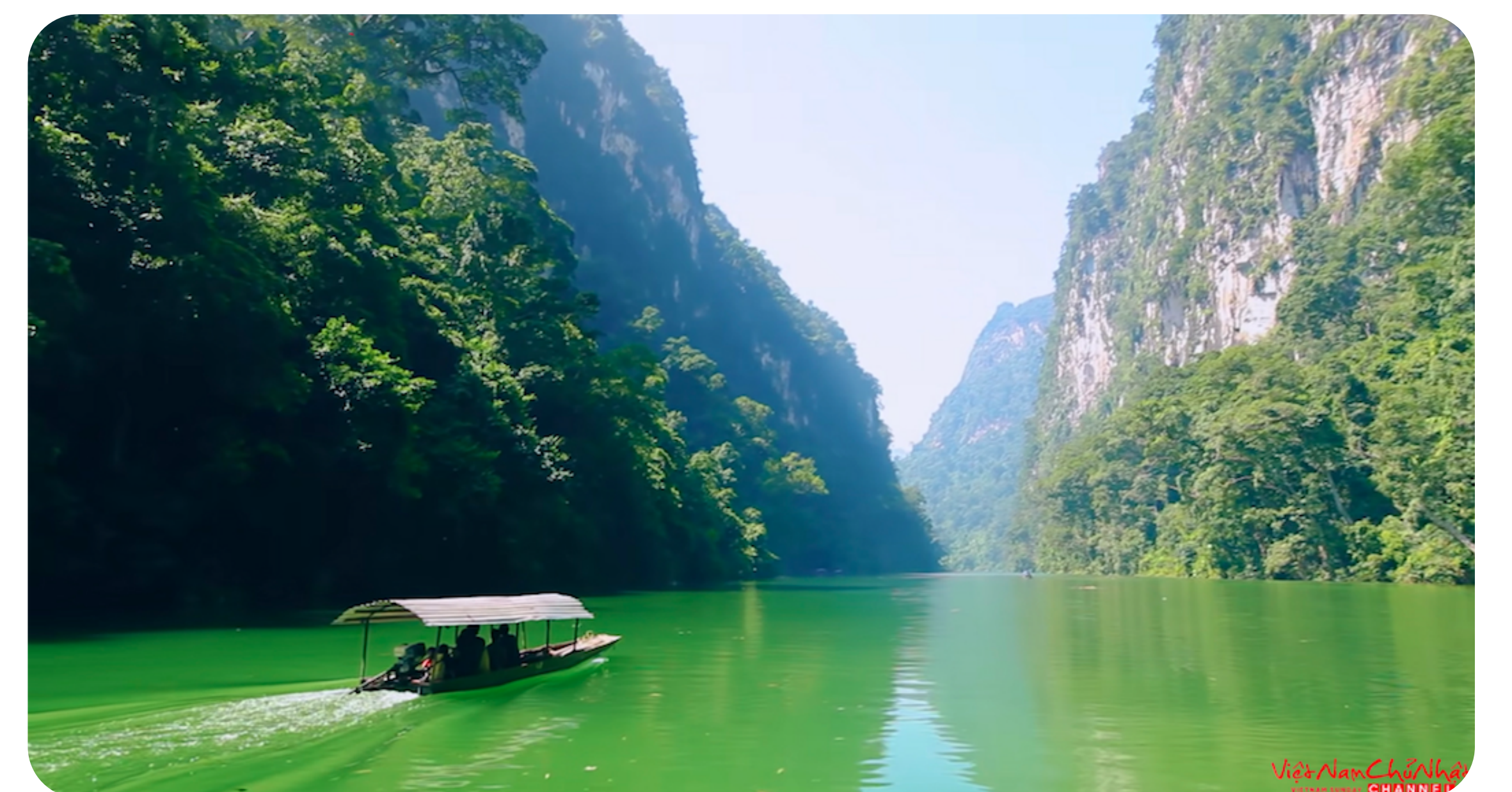**Period** **Ethnic** **Festival** **HeritageSite** **HistoricEvent** **Person** **Place** **Religion**

Partnership & Contact

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