

## Strategies to Create Awareness of Tourism in the Hot Springs in India

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### ABSTRACT

India has a few hot springs in geothermal belts which have been associated with Hindu mythology however the potential has not been exploited. The scope for establishment of green resorts in and around the hot springs provides the possibility of generating revenue not only from international tourists but also from domestic tourists. The economy around the hot springs would also have substantial investment from the hospitality industry creating employment and secondary revenue for the local people. The information technology revolution has created the need for de-stressing and hot springs provide the right platform.

### 1. INTRODUCTION

India has inherited a rich legacy in its heritage thanks to the unity in diversity scheme devised by India's founding governments. Tourism is an amazing form of communicating the rich diversity of every country and the richest of nations also have an organised tourism policy but in India with every state vying with the other the Incredible India campaign has been a farce.

My attempt is to create a plan for tourism promotion and not just create a policy; the approach has to be holistic. The potential of tourism to bring in valuable foreign exchange is one side of the coin and the other side is the gradual reduction of foreign exchange outflow from Indians who go overseas in search of better experiences.

India's tourism potential has not been tapped even marginally and the likes of the Taj Mahal, beaches of Goa, monuments in old Delhi, other beaches (Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu), back waters of Kerala and a few more have been sighted constantly. The real charm of India is gaining public knowledge thanks to the Incredible India campaign being unleashed by the Government of India, but this has all the states vying with each other without creating the right atmosphere to promote tourism.

The problem in India has been that we have everything and that's probably the reason why we look forward to simpler things that have been man-made. We proudly present pictures of us in front or inside swanky Airports, man-made commercial structures, theme based parks and other man-made creations. The legacy of India's heritage is apparent since the beginning of documented history;

- the Indus valley civilization is an acute example
- Hinduism is recorded even before any form of religion was conceived
- Siddhartha is our gift to the world
- Religious tolerance gave room for the growth of Islam and Christianity in the fractured union
- Hinduism spread its wings to most parts of Asia which includes today's Thailand, Indonesia, Cambodia (Angkor formerly called Yashodapura), Malaysia, erstwhile Burma, Nepal, Bhutan and not to mention today's Pakistan and Bangladesh. Some of the infrastructure is maintained to date and promotes the tourism potential of these countries
- The first formal educational centre was Nalandha and it was preceded by Taxila which served as a place of learning all forms of education from art forms, engineering, medicine and war forms;

Hot / natural springs that have been formed in the geothermal terrain in India are also in the same lines.

### 2. HOT SPRINGS IN INDIA

Hot springs in India are a result of geothermal activity. The provinces can be segregated into the following zones:

- The Himalaya province
- Cambay province
- West coast province
- SONATA province
- Bakreshwar province
- Godavari province
- The Barren Island (added after the volcanic eruption);

Barren Island can be excluded from the discussion due to the high level of sea water around the island, unless the Government of India intends to sell the island and private enterprise can work towards power generation or tourism or a combination of both.

The hot springs in India have been used for basic survival, medical, divine or tourism purposes. The springs in the provinces are discussed below.

The hot springs in the North Eastern states of Sikkim and Arunachal Pradesh find a mention as they have been part of the lives of the locals.

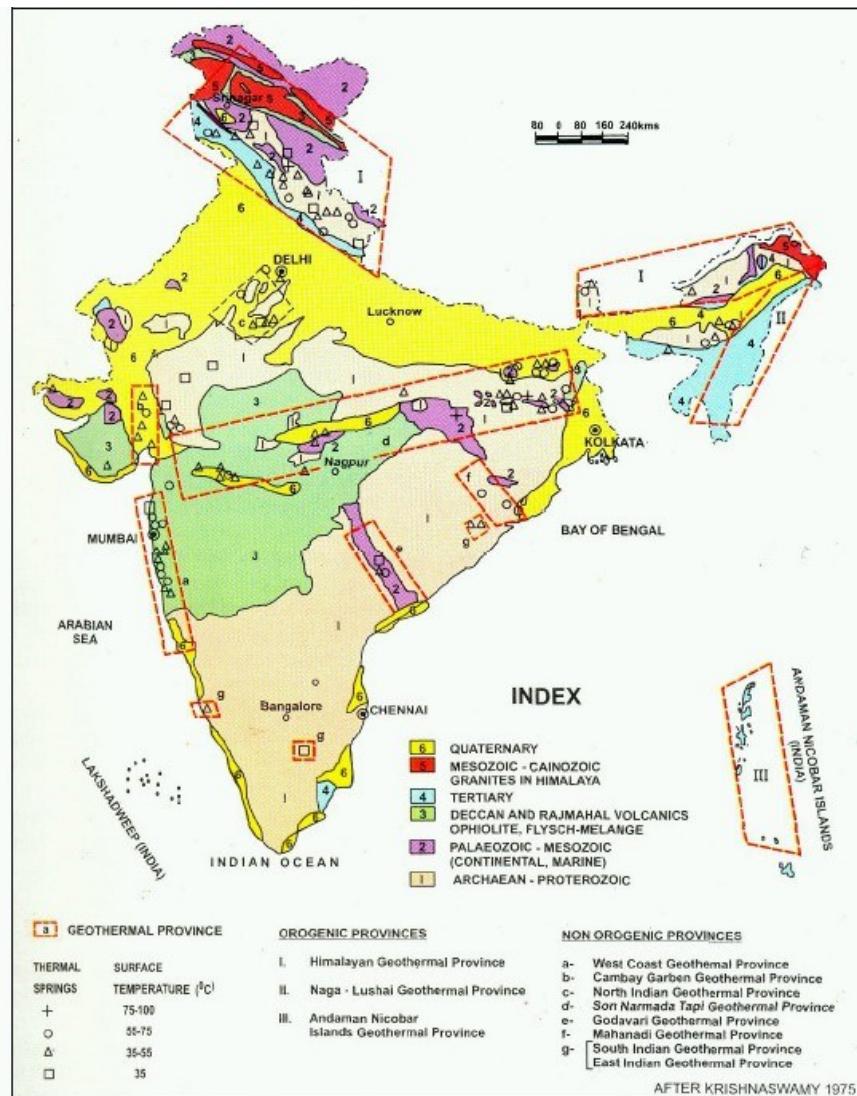


Figure 1. Geothermal provinces in India.

## 2.1 The Himalayan Province

This province holds the greatest geothermal activity in India and Jammu & Kashmir holds a key place in this province. Puga and Chhumathang geothermal fields are located at altitudes of 4000 to 4400 m in the Ladakh district, about 180 and 150 km respectively from Leh. Panamik, close to the Siachen glacier is extremely dangerous with water bubbling at the surface level and the rocks around it slippery with algae indicating adjustment of vegetation to the environment.

Jammu & Kashmir tourism has seen a lull during the high militancy days but recently the initiative has seen an impetus with the State Government opening the state to the rest of the world.

Manikaran in Himachal Pradesh is a source of geothermal activity and the state can capitalise on it to bring in scores of foreign tourists using the hot springs as a base. But care must be taken in developing the tourism initiative because some waters are rich in uranium and water at surface levels may be above boiling temperature in some areas. Yamunotri spring in Uttarakhand is traditionally used to cook rice by packing it in a cloth and dipping in the hot water. Pilgrims take this cooked rice as "Prasad" and it is customary to have a bath in another hot spring, Surya Kund, on the banks of the river Alakananda before entering the Badrinath temple.

Vasisht, situated 3 kms from Manali is a natural sulphur spring and is named after the great Sage Vasisht. The sprouts of the temple fall into the tank which is maintained by the Government.

## 2.2 The Cambay Province

The hot springs in Tuwa and Tulshiyam can be made into a hub around which the tourism initiative can be planned. These two zones have strong reservoir temperatures and the establishment of geothermal power plants in the near future could augment the arrival of tourists.



Figure 2. Prof. D Chandrasekaram in Puga (Jammu & Kashmir)



Figure 3. Hot Spring in Manikaran, Himachal Pradesh



Figure 4. Hot spring in Vasisht, Himachal Pradesh

### 2.3. The West Coast Province

Vajresjwari (in Maharashtra) located in the foot of Mandakini mountain has several hot springs located around Akoli, Ganeshpuri and Satvali with temperatures varying between 42-49°C provisions have been made for exclusive and closed baths known as

“Kothawalla Baths”. Successive state governments of Maharashtra have tried to make a difference, adding to the Mumbai (Bombay) and Pune bandwagon by tourism initiatives in the rest of the state.

#### **2.4. The SONATA Province**

This province has proved to have immense potential in geothermal resources and this stretch is mainly strengthened by Tattapani & Surajkund in Chattisgarh. The Government of Chattisgarh initiated plans to setup spas, saunas, restaurants and convention centres to tap the sulphur rich water from the hot springs. The province is a classic case of creating a cascade method to a power plant and post – turbine the fluid can be used to create a lagoon or pond for storage.

#### **2.5. Bakreswar Province**

The hot springs in this province are linked to the Hindu religion and most of the springs have temples in close proximity.

Bakreswar in West Bengal is a famous pilgrimage spot and boasts of 10 hot springs, naturally rich in therapeutic minerals. People from far and wide converge here for a bath.

Atri hot springs comes with its own superstitions; women take both in the thermal water on auspicious Mahashivaratri and Makar Sankranti to heal impotency and get divine blessings for motherhood. The temperature in these hot springs is maintained between 55-58°C throughout the day. Bathing ponds have been built adjoining the springs for the alternative cures or for fun.

Taptani hot water spring is located in a densely populated forest and is said to contain medicinal properties that cures skin ailments.

#### **2.6. The Godavari Province**

This province has a number of hot springs. Temperatures have been recorded in experiments conducted to date between 50-60°C and a few of them have the capability for small power generation plants. These can follow the cascade model for applications which then flow into tourist facilities for further use.

#### **2.7. Other Noteworthy Springs**

Apart from the provinces that have with geothermal activity that can be used for power generation or direct application, the Southern part of India which includes the states of Karnataka, Tamil Nadu and Kerala have records of hot springs. But almost all of these springs have religious sentiments attached to them. Kerala boasts of presence of hot springs in its already famous tourism spot Varkala and Tamil Nadu has natural springs in Mannargudi-Thiruthuraiapundi and Aranthangi area where the water from the springs is diverted to a temple and the water is believed to be sacred by pilgrims.

Karnataka records hot springs of luke warm temperature, one of them is called Bentre Theertha. A lack of initiative from the Government and locals seems to have had serious impact on the hot springs and needs immediate attention. The other hot spring in the area is Panekal spring and originates under the crevices of rocks and forms a small pond.

As an extension to the Bakreswar province, it is worth listing a few hot springs in the North Eastern states of Sikkim, Arunachal Pradesh and Meghalaya. The Thingbu and Tsachu hot water springs in Arunachal Pradesh is said to be healing hot spots. Located in the Tawang district, the springs are flocked to by locals.

Sikkim has about 14 hot springs and Yumesamdong near the Chinese border. It is well recognised and the state administration works with its people in maintaining nature's gifts. The right infrastructure is in place with a good hotel and restaurants around the hot springs but the issue with the North Eastern part of India is the lack of air-connectivity or good rail connections between major cities and the rest of the country.

### **3. EXPERIENCES FROM TOURSIM BASED ON GEOTHERMAL SOURCES AROUND THE WORLD**

Though India has not progressed much in harnessing its tourism potential, some of the developed / developing countries have always worked to enhance revenue from tourism which brings in valuable foreign exchange and provides direct / indirect employment.

New Zealand, Iceland, Japan, United States, Russia and many other nations have exploited their geothermal terrain and some of the top geysers and hot springs have shown their mystic nature. From colours ranging from shades of blue to yellow to green to red, varied growth of plants and trees in the terrain in close proximity to the geothermal resource, the excitement around these areas has assured a steady stream of visitors, both domestic as well as from foreign countries. Even Africa has joined the bandwagon with the Dallol volcanic crater in Ethiopia, with strong resemblance to the world famous Yellowstone Geyser in USA.

Experiences of the Waikato region in New Zealand, which is home to internationally important geothermal sites, attracted more than 2.5 million tourists in 2011, provided local employment, brought in tourism dollars and aided New Zealand's foreign exchange balance. It is worth \$ 180 million to the regional economy and geothermal tourism also promotes public awareness and support for preserving natural areas.

The experience of Iceland, which is often referred to as the Geothermal Disneyland, is similar. The number of tourists have more than doubled since 2000 and Iceland's geothermal zones form the centre of the attraction. The Blue Lagoon is a Geothermal Spa located in a lava field between Keflavik International Airport and Reykjavik. The lagoon is a byproduct of the nearby geothermal power plant and the fluid after running through the turbines and passing through a heat exchanger to provide heat for a municipal hot water heating system is finally fed into the lagoon. The water is rich in minerals and bathing in the Blue Lagoon is reputed to help many people suffering from skin diseases. The temperature is maintained around 40°C throughout the year, even during the freezing winters. Iceland has now created a project to protect its geothermal provinces and is pushing the concept of sustainable tourism and conservation of nature.

The presence of tourists has a few negative effects on geothermal features but with careful management these effects can be minimised. This is the most important basis from which India's sustainable geothermal tourism plan needs to be evolved. Our heritage sites have been a subject to lack of adequate care. Most of them are lost and few of them need urgent attention to retain them in their current form and prevent further destruction.

#### 4. CONCLUSION

Drawing inspiration from the experiences of nations that use their geothermal resources to create a sustainable tourism model, it is time that India takes another look at its rich Hindu mythology and evolves a model to turn nature's gift into a concept for promoting other forms of tourism in India.

India today boasts of 28 states and 7 union territories as of December 31, 2013 and with the possibility of further splitting of the federal union of states. The strategy adopted by team comprising Mountbatten, Gandhi, Nehru, Patel and Jinnah prior to the formation of India and Pakistan ultimately resulted in a marriage of varied cultures & beliefs into a single federal state. Even after 66 years we exist, married but with differences, and cannot separate due to the federal structure created.

I am neither a historian nor a revolutionary but have made an attempt to identify niche potential and work towards creating a sustainable model that can create US \$ 20 billion by 2030 if a plan is well drafted and implemented and geothermal model can play a critical part as it speaks more on its mythology.

- It is not adequate that hotel rooms be created and airports be upgraded in public-private partnership or by the Airports Authority of India or by the erratic plans of the Tourism Ministry of the Government but in creating better tourist friendly infrastructure across the country; toilets, cafes / restaurants with healthy food, stronger telecom – internet connectivity, better connectivity by air, train, road and water
- Establishing “Athithi Devo Bhava” believers as a tourism police team across the country
- Re-positioning of the country's assets
- Weave the right story behind each hot spring
- Creating souvenir industry
- Identifying the specialised art forms closer to the hot springs to promote local employment and revenue.

Care should be taken to maintain our assets in its current form and not deteriorate them from their existing state. Every part of the country has its potential and but for the union territory of Goa the assets remain untapped.

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