

THE IMPACTS OF CLIMATE CHANGES ON CONSERVATION AND ENHANCEMENT OF CULTURAL FESTIVALS IN HUE, VIETNAM¹

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Abstract. Located in the heart of Central region which usually suffers from natural disasters, Hue, recognized as World Cultural Heritage and Festival city of Vietnam, has consistently exposed to a broad range of risks of natural disasters. There are a number of concerns about how climate changes affect the festival city and what effective risk management approach there should be for the cultural heritage city. This study aims to document some key impacts of natural disasters on Hue festival and culture city and draw out some policy implications for more integrated efforts for better conservation and development of the heritages.

1. Introduction

At the time I start writing this paper, the outside temperature is about 40°C; big rivers in Vietnam, upon that the hydro-electronic power plants work to ensure electricity supply for production and consumption, has lowered down its water level; the world weather forecast shows that many European countries are suffering from hot weather that have never happened for many decades; whilst not ever before, freezing cold air will hit South America; Nepalese people as many others who love adventures to the top of the Everest share the same worries that global warming, hydropower plants on rivers have exacerbated negative environmental impacts, changing the icy space into rocky trails to the top of the world... In other words², climate change and its impacts have been observed from the space, to the earth, rivers and go into daily life of each family. Climate change has impacted all aspects of human lives. Therefore, raising awareness and searching for a mechanism and some solutions for mitigation and adaptation to climate change cannot rely on efforts of a single organization, government, but people all over the world.

This paper is not to explore the causes of climate changes because it may be clear for each of us when we are responsible for our living environment. The aim of this

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paper is to discuss several main impacts of climate changes on the conservation and enhancement of a festival culture in particular and Hue culture in general. The fact is that while much attention has been paid to the impacts of climate changes, environmentally and economically, these impacts on culture changes have not been observed possibly because of its intangibility and familiarity with people's daily lives. Very little has been recognized about its role in building the local identity, the brand of cultural zones, historical importance and uniqueness of human ecology.

2. Ancient capital Hue and climate changes

Hue is well-known as a Festival city of Vietnam since 2000 and Festival Hue is regularly organized in the first weeks of June every even year since then. After five Festivals have been organized, the time for Hue Festivals is reviewed and rescheduled for April instead of June from 2012, mainly due to dramatic changes in the weather in recent years. The hotter and changeable weather (hot and unpredictable sunny and rainy weather) has caused many difficulties for the organization and management of the cultural events, and impacted on the attendance of visitors and local people in the Festivals as well.

Hue was one of three ancient capitals of Vietnam, and the capital of two feudalistic regimes, namely Tây Sơn (1788-1801) and Nguyễn (1802 - 1945). In *Đại nam thống nhất chí* (one of the most prestige publications about history of Vietnam), Hue is described as “a place where the sea meets the mountains, standing between the North and the South with high plain land and tranquility rivers providing water transportation through deep and mystery sea gates of Thuan An, Tu Hien, and land transportation bordered by Hải Vân, Hoàng Sơn; large river framing in front and high mountain behind, rising dragon flanking tiger, fortifying position that is arranged by God”.

As the capital of the former Southern land reign (“Đàng trong”) and with a long lasting history of more than 700 years (1306 - 2010), Hue has become one of the major culture centers. This city is regarded as the culture zone bridging two culture centers of Vietnam. Hue culture is a combination between the crystallized Vietnamese culture from the North of Vietnam and the Cham strongly affected by Hindu culture. From the Nguyen dynasty, some Western cultures, especially that from France flowed in Vietnam and bequeathed a legacy of western style and culture in Hue culture, especially in architecture (according to a survey conducted in 2000, there are about 240 works constructed with French architecture), prominently Tay Loc street, Dong Ba market, Truong Tien bridge, Van Nien water plant...

Being situated in the best location and forming a tangible systems that manifests Vietnamese thought and culture have made Hue present its uniqueness not only as a prosperous golden age of feudalistic regimes but also the long lasting impression in

each individual having visited this Hue. Hue has embedded in herself two world culture heritages recognized by UNESCO, namely Hue ancient city (11/12/1993) and Master piece of art of Hue Royal Music (7/11/2003).

Thua Thien Hue lies on a position of $15^{\circ}59'30''$ - $16^{\circ}44'30''$ North latitude within the tropical monsoon area, where it is high intemperature and humidity. Hue is known as the transitional climate zone of two regions: the North and the South of Vietnam. It can be said that Thua Thien Hue is one of the provinces that most suffers from weather hazards in Vietnam. Like many other provinces in Central Vietnam, Thua Thien Hue is strongly affected by tropical monsoon. Its complex topography with high narrow mountain ranges sloping from the West, added with low forest covers has strongly affected the diverse and harsh weather in Thua Thien Hue. Furthermore, the high atmosphere circulation activated by seasons from atmosphere pressure centers has a strong effect on the weather patterns of this city. From September to March, Thua Thien Hue is affected by high pressure air flows from Siberia of Asia continent together with the low pressure air flow from Oceania characterized as Northeastern monsoon, causing temperature drop and rain. From April to June, the tropical air flows from Northern Indian Ocean to the West side of the province causes the dry atmosphere at this time of the year called the dry season.

From July to September, Thua Thien Hue is affected by hot humid and unpredictable air flows from the south of Pacific Ocean, causing bad weather events such as tropical typhoon and storms. Lying within the North tropical belt with a high altitude ($50^{\circ}18'$ - $87^{\circ}58'$) and long daytime (11 - 13 hours), Thua Thien Hue has a high level of solar radiation. The total heat radiation assumes about 232 - 233 Kcal/cm²/year, but under the impact of water evaporation and cloud, the solar radiation reduces to 50-60% and reaches 124 - 126 Kcal/cm²/year.

The above features have made the weather in Thua Thien Hue even much harsher – much sunnier and there is more rain. The total of hours with sunshine in Thua Thien Hue is about 1700-2000 hours/year. The hottest period is from May to July (about 200 sunny hours per month). The rain pattern in Hue is very typical, characterized by pours lasting continuously for many days, which is often known as “Mua Hue” (Hue rain), and creating unfavorable conditions for production and daily life activities.

It can be said that Thua Thien Hue is among the provinces having the highest rainfall in Vietnam. The annual average rainfall in Hue is about 2.600 mm. In some places as Bach Ma mountain (a famous tourism site in Thua Thien Hue built under French colony), Thua Luu, the annual rainfall is recorded as 4.000 mm. The total of rainy days is up to 220 days per year in the mountainous areas and 150-170 days in the lowland. During the rainy season, there are about 16-24 rainy days; it is sometimes raining continuously for 4-6 days covering a large area causing floods. For instance, the

rain lasted from 28/10 to 1/11/1999 with the total rainfall of 2.294 mm which contributed to the top history flood in Thua Thien Hue. The 1999 flood removed the Hoa Duan sea gate of Tam Giang lagoon to the sea. For Hue people this flood was recorded as a millennium flood or a mega-flood. The statistics show that this flood caused not only huge economic loss but also cultural damage including many of festival cultural items. Moreover, in recent years, as in many other places, the weather phenomenon of El Nino has caused Thua Thien Hue to suffer from droughts and high temperatures which aggravate the severity of weather hazards to production and people health, such as those in the years 1977, 1983, 1993, 1994, 1997, 1998, 2002, 2007, 2009...

Likewise, the statistics over 116 years (1884 – 2000) show that on average, Thua Thien Hue experiences 0.84 storms per year. There were no storms in some few years but storms occurred three or four times in many other years, some of which were described as severe as mega storms. An example is the storm in 1904 which caused great damaged including 724 being killed, 22,027 houses being collapsed, 4 spans of the Truong Tien Bridge being broken, 529 boats and ships being wrecked. Another example is the one in 1985 which damaged 214.000 houses, 2.000 school rooms, 200 clinics and hospitals, 600 high voltage poles, many historical and cultural relics in Thua Thien Hue and Quang tri, which was part of Binh Tri Thien province. Typhoons usually cause heavy rain lasting for many days with the average rainfall of about 300-400mm, and sometimes up to 500-600mm. This high rainfall is accompanied with cold wind leading to bad weather. On average, 15 -20 times a year does Thua Thien Hue experience the Northeast monsoon which is commonly accelerated by the tropical atmosphere circulation that causes very heavy rains. This weather phenomenon is often worsened by lightening, whirlwinds, hails, fog and drizzles, etc, which characterizes the weather in Thua Thien Hue as very hot in summer and very cold in winter with high humidity. This clearly impacts the production activities and people lives economically, environmentally, mentally and culturally. This weather makes the conservation and enhancement of world cultural heritages much harder tasks.

In sum, the weather in Thua Thien Hue manifests more unpredictable nature but it is not an exceptional phenomenon in Vietnam, nor is it elsewhere in the world. It is important to note that apart from the common global climate change, the severity of the climate change in Thua Thien Hue could be more typical due to the interaction between people and their responses to the living environment, which impacts not only on economic activities but also on the mental, cultural and spiritual lives of local people in the area.

3. An overview on cultural festivals in Thua Thien Hue

In spite of harsh weather conditions, Hue culture possesses sufficient tangibles

and intangible values. It can be said that the festival culture in Thua Thien Hue typically represents for festival cultures in Vietnam. However, different characteristics in topography, interaction between human beings and the environment in which they live, the interrelation among people and with their production activities as well as spiritual beliefs all together have nurtured the uniqueness of Hue culture, especially festival culture traits. According to a recent survey, Thua Thien Hue has the largest number of cultural festivals in Vietnam. From anthropological perspectives, cultural festivals in Hue reflect the survival interrelationship of human beings. Talking about cultural festivals could not exclude the issues on human spirit and spiritual beliefs. In Thua Thien Hue, it is Hue uniqueness that forms the Hue festival culture known as “nowhere-else-haves” with both indirect and direct meanings. Also, nowhere else in Vietnam have the impacts of living conditions, preventive behaviors and adaptation to the harsh changing weather inspired not only festival culture but also people’s daily lives and then cultivated to become a trait of cultural beauty of Hue. For instance, mussel rice - a special cuisine of Hue, embeds in itself a long history about Hue people, who are fearless, strenuous to face up unfavorable environment. It also manifests their sorrow and pain, and a thirst for a peaceful life from generation to generation.

To have better view on festival culture in Thua Thien Hue within the frame of this paper, only some key features of Hue festivals are drawn out from which some suggestions and policy implications will be made for better conservation and enhancement of Hue festival culture within the current context of climate change and adaption.

Generally speaking, culture festivals encompass two types: traditional and contemporary festivals. Traditional festivals have a long lasting history and have become indispensable in people daily lives. Contemporary festivals are often associated with the introduction and promotion of a destination, its people and culture such as 'Tam Giang waves' (*Sóng nước Tam Giang*), 'Legend of the sea' (*Huyền thoại biển*), 'Breath of water' (*Hơi thở của nước*), etc. In our viewpoint, this is by nature the result of a cultural development process. As the Chinese said “Truong giang’s wave is immiscible, one rushes over another”. That is eternally truth. However, these contemporary festivals will not be discussed here. Traditional festivals in Thua Thien Hue can be classified into the following groups:

First, ritual ceremonies for village land explorers (so-called Spring rites – Xuan te, Autumn rites – Thu te). These are occasions for local people to pay their respect and gratefulness to predecessors who opened new land for their village settlement, often known as the motherland. Some examples are Autumn rites of Xuan Hoa village, Thê Chí Tây village, ritual festival of Chuồn village (An Truyền), Lang Sinh wrestling, fishery rites at Thái Dương village (Thuận An), Village House festival of Co Bi, Autumn rites at such villages as Thanh Can, Duong No, Phu Oc, Winter rites at Phu Bai,

An Nong, ritual ceremony for four village founders at My Loi, Phuc O...

Second, the profession ceremony rites, which are held for commemorating the profession founders who were accredited with creating new livelihood for the local people. Even in some cases, the profession was recognized as typically traditional one of the region or nation. For instance, ceremony rites of carpentry, plastering, goldsmith, bronze casting, ceramics making, Tuong (classical drama), Hue music...

Third, religious rituals, which are thought to be the way to the connection between men and God, man and Heaven, alive and death people, between human beings and supernatural forces. In other words, this type of festivals manifests human being's aspiration for better lives. Such festivals include rituals at Hon Chen Temple, worship rite of Thai Duong Lady, rites for Souls' Day...

Fourth, festivals for commemoration of national and historical celebrities. These ceremonies are organized in memory of heroes who deserve credit for building and defending the country such as Tran Thi Dao Lady, master Vo Dai Nho...

Fifth, festivals upon local customs that are mainly aimed at preserving and introducing the local traditions and customs which transmit from generation to generation though origins are unknown. These include rowing practice dance, Hue kiting festivals, rituals seeking for fish, for rain, peace....

From a survey of 50 typical festivals in Thua Thien Hue, it has been found by the author that, after the war, cultural festivals have been not only restored but also promoted extensively in different ways. On one hand, this presents the improvement of social, cultural, spiritual and economic lives of the local people. On the other hand, more effort is called for in order to preserve and enhance values of these cultural festivals in the changing environment (socio-economic and natural environment and climate change). Obviously, no one would assure that science can explain everything, especially the spiritual psyche (festival culture is a prominent form), even though that could be the greatest invention of humankind. It is also undeniable that the more people understand about the nature, the less they know about themselves. Therefore, for better preservation and enhancement, it is necessary to have a better understanding about the positive and negative factors to the festival culture, including factors of climate changes.

It is also important to note that selected cultural festivals, though not all, in Thua Thien Hue should be conserved following the nature of development process. Some festivals may gradually fade in people's mind because they do not meet the people's needs, both practically and spiritually. In some cases, they may have negative effects. Otherwise, there may be the birth of a new festival that does well in reflecting the current ways of life.

Festivals in Thua Thien Hue not only manifest a rich cultural nature but, with

sports activities, also represent the survival thirst of people for strength needed to dominate nature, living environment and human beings themselves. A majority of these festivals are outdoor activities that are often changeable in the time schedule and the form of presentation. This is because of bad weather conditions such as typhoon, flooding, whirlwind...

As a part of spiritual culture, Hue cultural festivals' solemnity is at a top priority. Festival culture is also an important aspect of daily life culture, thus the relationship between the popularity and solemnity should be recognized. The fact shows that very often the loss of many cultural festivals is due to their commercialization though a provision of supplementing services is needed for the festivals to take place favourably.

4. Climate changes and the conservation of festival cultural heritages

Although cultural heritages in Thua Thien Hue have drawn much effort from different parties for conservation and enhancement, the outcome has not reached the level yet and warnings of their degradation should be given. Among the causes are insufficient fund for conservation, lack of efficient technological supports and unfavorable weather adding to the dust of timelines. Moreover, many historical and cultural relics used for front during the war were heavily ruined and therefore need special care and conservation in order that they will not fade away.

Examining possible impacts of climate changes on cultural conservation and enhancement is not a new issue in many developed countries, but it is in underdeveloped ones like Vietnam where the income per capita is under \$1000, especially in poor provinces of the Central region. The conservation and enhancement of cultural festivals should be explored from several perspectives: (1) climate changes may have impacts on the nature of the festivals and/or the way they are organized and scheduled; (2) climate changes may influence the conservation activities, including approaches, methods and technology required; (3) learning conservation experiences from other countries for flexible application under specific conditions of the region should be a must for more efficient conservation.

4.1. Climate change impacts on the nature and the ways festivals are organized

It seems that only recently are Hue people more interested in the rehabilitation and conservation of traditional festivals, many of which are to pray for better weather and peacefully life. It may be either because people have become more concerned about the spirit lives only when the material life is getting better and better or because natural hazards due to climate changes have been increased in number. Local people and their communities have recognized the increasing need for joining together to cope with hash weather and natural disasters, mentally, spiritually and physically. Many communities tend to pay much more attention on the recovery of many spiritual festivals and other

cultural traits, which were almost forgotten for many years, to express their wishes to the God that they believe in, and to strengthen their community spirit as well in order to help each others to overcome the difficult times. Furthermore, the festivals are regularly organized in a larger extent with full agenda for activities and higher solemnity.

For the time being, activities for the conservation of cultural festivals in Thua Thien Hue under the undeniable impacts of climate changes should be considered organizational matters in scientific and reasonable manner. Commonly, the time for organizing festivals is traditionally predetermined and religiously unchangeable. Therefore, the organization and management of an event should be carefully planned with several scenarios and proactive prevention measures. This will help to avoid uncertainty and passive implementation that hurt the festivals' solemnity. Moreover, promotion activities for the festivals should be integrated with the raising of public awareness toward the relationship between climate changes and festival culture. Festivals were not organized out space, thus the protection of our living environment helps to conserve festivals in a right spirit and solemnity. Joining the Earth Hour is a good example. On an economic viewpoint, this helps to save the electricity source and resources and therefore economic cost will be reduced. Moreover, the Earth Hour helps enhance people awareness and their responsibility in the saving of the environment in which we live, which is unconvertible in money term. This is a twofold aspect of cultural festivals in connection with climate changes.

Another important issue is that in examining impacts of climate changes on festival culture in Thua Thien Hue, the relationship between festivals and religious belief should be considered. At present, religious activities play an important role in people's lives. Therefore, cultural festivals are expected to enhance the goods and abolish the evils in each individual via such simple ways as food habit (no discussion from medical perspective), saving living things, doing the good things....

Likewise, the organization of cultural festivals should be put in the context of cooperation and exchanges with other cultures and sub-cultures, which brings in better opportunities to raise common sense in environment protection as a basic instinct of the human being. However, the way of cultural exchanges and cooperation should be decided by the nature and content of the festivals.

4.2. Climate change influences the conservation activities

It is clear that the conservation of cultural festivals is culturally, environmentally and technologically sensitive, which is out of discussion in this paper. However, for the common sense, the conservation of cultural heritages should be based on sufficient database about socio-cultural, environmental, economic and technological aspects. The fact is that many tangible and intangible values of heritages, especially cultural heritages, may be damaged or degraded due to improper conservation activities.

Likewise, many construction works of conservation become nullified due to either harsh weather and natural disasters or overuse/underuse of technology. This calls for more suitable approaches, methods and technology for more efficient and sustainable conservation of cultural heritages in general and cultural festivals in particular, in which the experience exchanges among national and international stakeholders should be crucial for the success.

4.3. Partnership in conservation

The conservation and enhancement of cultural festivals in Thua Thien Hue under the impacts of climate changes should be carried out with cooperative efforts of different governmental organizations in Vietnam and other related international agencies in which the roles of Hue communities and their behaviors toward this matter is of great importance.

For better conservation, first of all, climate changes and possible impacts in Thua Thien Hue in general and cultural heritages in particular should be well forecasted, from which specific strategies for the conservation and enhancement of the heritages are planned in accordance with conditions and mobilized resources.

The conservation of festival heritages in Thua Thien Hue should not be separated from education and the raising of awareness in local people toward environment protection. This is not only incorporated into the school curriculum or via slogans in streets; it should be revealed in the locals' lifestyles where the culture is deep-rooted.

There appears a trend that climate changes have accordantly formed festival activities, which is anticipated to give a birth for a pure form of festival culture of climate changes. This is due to people's spirit and wish as well as the need from the fact of life. It is less arguable that cultural festivals in each nation contain at least some traits of festivals reflecting changes in weather and living environment from the primitive age. Therefore, people consciousness becomes vital in determining their attitude and behavior to the living environment. Once people take less care of their living environment or fail to treat it well, intentionally or unintentionally, they contribute to worsening their own living environment and by all means it is acceptable.

Likewise, impacts of climate changes on cultural festivals could not be seen now but they could be in the long term. Time dimension of conservation should be important factors that need to be treated fairly and scientifically because the fear in human being is after all the pass of time. Many cultural values have been buried by time and many civilizations have lost due to impacts of climate changes over the times, which add to work burden for scientists seeking for the recovery.

5. Conclusion

This paper is not to examine all aspects of climate change impacts on festivals in Thua Thien Hue and Vietnam in general, but to discuss issues forming a vector of scatter dynamics related to the theme. Recognized as the world important heritage with richness of cultural festivals and heritages, Hue authority and her people should be more conscious about the climate and its impacts on cultural preservation and enhancement in general, and cultural festivals in particular. Conservation of Hue cultural festivals should aim to minimize the impacts of climate change and natural disasters and preserve the originality and authenticity of the Hue cultural festivals. This calls for more proactive efforts from different parties, of which the building of partnership among governmental and non-governmental organizations, industry people and local community is vital.

Climate changes are no longer the written issues. They exist in every corner of our daily lives. Culture, environment and climate changes are two folds of an issue. One hardly becomes better without better care for the other.

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