Experience of Protecting World Heritage in Norway: a Case Study of Røros Town

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Abstract. As an important public resource, the economic value of heritage has been increasingly concerned by stakeholders in the process of social development. Currently, there is an on-going discussion between professionals, politicians and local owners concerning how and what to preserve the the economic value of heritage. This research takes Røros town, a world heritage in Norway as case study. It attempts to discuss what is the sustainable approach to protect world heritage from Norway’s practise. How it can be adopted by China.

1. Introduction
As an important public resource, the economic value of heritage has been increasingly concerned by stakeholders in the process of social development. According to the theory of conservation economics, heritage is an economic commodity that has an asset life cycle much longer. It’s also a “cultural capital” with both cultural attribute and economic attribute. The experience of other countries in the world shows that the heritage is also a non-renewable resource, which makes it a priceless treasure for human. Through the combination of heritage and business, economic benefits could be created in tourism industry. The combination will also promote the development of other derivative industries, like the tertiary industry around the heritage site. In a word, heritage plays an active role in market economy and local economy.

The heritage has direct value and indirect value as its two major economic values. The direct value includes the income mainly from the rent, commercial stores, tourism activities, entertainment industry, etc. The indirect value includes its culture value and aesthetic value, which are unique and have potential economic growth point in the future. This research focus on investigating what is Norway’s experience to protect its world heritage site.
Figure 1. The World Heritage sites and the Buffer zone

Figure 2. The Town and Cultural Landscapes

Figure 3. The Winter Transport Route
2. Historic Background
Røros is an old mining town situated on a mountain plateau in a remote part of Trøndelag County in Norway. After a copper ore was discovered in 1644 a town was established and Røros Copper Works was active for 333 years. In 1977 it closed down after the mining company was declared bankrupt. In 1980 it was inscribed on UNESCO's World Heritage List, and in 2010 extended to include a buffer zone of approximately 480 ha.

The owners of the works were mostly rich citizens of Trondheim, the closest town approximately 100 kilometres away. The king gave the owners rights to a number of privileges. They had the right to use all the ores they found and free access to waterfalls and forest. In addition, they had the right to labour from people in the area, for a reasonable pay. After some time the Copper Works were to become one of the richest mines in Europe.

At the start Røros had a very small population. However, the possibility for paid work was very attractive and the population grew quickly. This was mainly from surrounding areas, but also from bordering areas in Sweden. A few German mining experts also came, introducing technology the Norwegian did not have. Main part of the workers came from simple backgrounds, probably tenants and younger sons of farmers. There was also a small upper-class consisting of Danish-speaking owners of the copper mines. In 1700 the population had grown to around 2000, from almost zero.

This new society developed a unique culture different from the medieval farming system they came from. First of all a working class developed, being wage earners. In addition to this they were smallholders, holding cattle for their own consumption. This was important for surviving through hard times of unemployment or wars. This combination of wage earning and farming has been typical for Røros up to our time.

The people owned their townhouses, and if no one had a claim to land they could take it for production of grass to the cattle. Most households had two to three plots of land around the town. The last household to keep cattle in the outhouse building in town ended in the mid-1980s.

Included in the heritage site is the town, consisting of one and two story wooden houses surrounding the smelter and waterway system? The industrial rural cultural landscape and urban agricultural practice are preserved in addition to the transportation system, including a winter route open from November to May. The totality of this traditional settlement shows how shaping of the cultural landscape and a unique way of life developed.

3. Røros Town
The most visible landmarks of Røros today are the church, the slag heap that grew steadily, and the lack of threes after the forest being felled very quickly to be used in the production. The houses were at first mainly consisting of one floor, with a basement. Later two floored became more common. Up until the end of the 19th century the facades towards the streets were dominated by blackened logs. In the back of the house, surrounding a yard, were the cowsheds and stables, in addition to other buildings used for the necessities of running a farm. It is a very dense and efficient use of space. From around the 1880s important changes took place. Swiss-style dominated more and more, and the shape of the houses and roofs changed. There were sporadic discussions about creating a museum and preserve some of the buildings. In 1920 this finally came through. The Protection of Building Act preserved eight houses and building groups.

The inter-war period was a very difficult time for people living in Røros. This meant, among other things, that houses in bad condition was repaired, and not torn down which would probably have been the case under normal circumstances. This is one of the reasons Røros is relatively well preserved. In the 1960s the Swiss style was removed with the intent to bring the style back to 1700 - 1800 Røros. Reasonable loans from the governmental Housing Bank and support from the governmental office of Cultural Heritage were given to house owners that wanted to repair and conserve their homes.

This combination of farming and townhouse we find in Røros is unique in Norway. With good financial help the homes, and the facades towards the street was taken care of, preserving a most valuable and charming town. However, the outhouses surrounding the yard suffered. By the 1950s most of them were no longer in use, quickly leading to deterioration. In 1996 “The Outhouse Project” started to rescue this unique combination of farming and townhouse. The project is still going, the
goal being to renovate and repair 400 outhouses. Much attention is paid to traditional craftsmanship, and remove as little as possible of the old material.

4. Experience of Protecting of Røros town

There is an on-going discussion between professionals, politicians and local owners concerning how and what to preserve. This includes everything from what kind of windows are acceptable, what colour is the original to what kind of new buildings should be allowed. That many of the houses and the ground are in private ownership adds to these disagreements. An intangible aspect is also a part of this. There are for example residence requirements for anyone buying a house inside the town centre, requiring the buyer to live there at least 6 months of the year. This is to avoid Røros becoming a holiday resort.

Being on UNESCOs World Heritage List comes with responsibility. To increase the importance and value of the site the area under preservation was recently extended to include a buffer zone, identical to the old “Circumference”. This is the area where the Copper Work was given privileges to water, forest and workers. This gives us an almost complete picture of human adaptation in a remote area with extreme weather condition. It now includes the mining, smelter, transport systems, cultural landscape, technology and a way of life.

Today Røros is a vibrant town, even though the cobber mines closed a long time ago. Tourism, conferences and income from cabin owners are of course an important part of the new economy. This is reflected in the shops, with for example many clothing stores and locally produced handicraft. In the yearly marked, arranged in accordance with tradition in February, local traditional food products are for sale. This includes both Norwegian and South-Sami traditions. It also includes not so traditional items, with products you find in any market or fairground. It is likely to assume that the architectural and spatial environment is a vital part of the success. In addition, Røros has managed to attract new industry, replacing the old copper mine.

The tourism industry development of Røros brings a obvious benefit. On the one hand, tourism development of Røros brings more job opportunities for the residents, and increases their income; they get economic benefits by selling tourism products; they have more opportunities to communicate with outside. On the other hand, tourism development of Røros has both positive and negative impact on the community. For instance, population load of Røros increases constantly, if not strictly controlled, it will surpass the population carrying capacity, and natural environment of heritage site will be destroyed. Tourism development means increasing visitors, and shock to local lifestyle, ideology and heritage concept.

From a larger perspective, it’s clear that the market economy also has both positive and negative effects to the heritage protection. It will provide the financial support to the heritage protection projects, and will also help to build up a competitive mechanism for the heritage protection; sometime it could even inspire the citizens to participate in the process of heritage protection.

Cultural tourism is one of the fastest growing tourism sectors. It is often seen as a generator of the resources necessary to preserve and enhance cultural heritage (Chiabai et al., 2013). It is also considered to be the main motivation for tourists and a recreational activity since the early 1980s (Lord, 1999; Kowsurat, 2010; UNWTO, 2015). According to the International Council on Monuments and Sites (ICOMOS, 1976) cultural tourism should exert positive effects on these sites by contributing to the maintenance, protection, and socio-economic benefits of the local population (ICOMOS, 1976). Also, Robinson and Smith (2006) in their book “Cultural Tourism in a Changing World” argue that tourism can be seen as the main way to generate rapid economic development in countries with limited natural resources. On the other hand, they further elaborate that the development of a (cultural) tourism industry includes additional responsibility in terms of interpretation and representation of events and activities (Robinson and Smith, 2006). Indeed, Timothy (2011) stresses the role of interpretation in revealing the importance of places, peoples, and events, as well as the need for considering the community in the interpretive planning process.

However, while tourism may contribute in socio-economic development, it can also lead to irreversible damage and destruction of heritage resources (Orbaşlı, 2000; Russo and Borg.Jan, 2002; Dumont et al., 2005; EUA, E. a., 2009; Kowsurat, 2010), as well as negative impacts on the local
community in terms of social disruption and increased costs of living (Albert et al., 2012). Therefore, the appropriate management of tourism is needed to create harmony between conservation management and tourism planning in a way that satisfies the goals of both and reduces its negative impacts. So the concept of sustainable tourism emerged to meet the needs of tourists and host communities while simultaneously maintaining the integrity of cultural sites (UNEP and WTO, 2005; Boniface, 2013; UNWTO, 2015) without compromising the ability of future generations to meet their own needs (WCED, W.C., 1987; Swarbrooke, 1999; EUA, E. a., 2009; UNEP and WTO, 2005). This requires a multi-faceted approach aiming at fulfilling the economic, socio-cultural and environmental needs of the targeted communities as well as tourist ambitions and expectations.

In the recently years, the attention that Røros also pays attention to the intangible cultural heritage prompts the protection and usage of it and then make more of it be shown, to be protected, be restored and be further developed. Many protective measures have been discussed and undergone experimental tests. The experience of protecting world heritage in Norway could be shared by China.

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