

Review of the history of lagoons and iron production in San'in Kaigan Geopark

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Geoparks should introduce sacred spot (e.g.,waterfall, spring, megalith, tree), archaeological sites (e.g., ancient tomb, ancient port), legend of minerals (e.g., gold, silver, iron) and traditions of disaster (e.g., earthquake, tsunami, flood, debris flow) for people with the background of "Geo", because people visiting a geopark are interested in not only geology and geography but also ecology, history and culture related to them. In this presentation, the relationship between lagoons and ancient iron productions in Kyotango City, San'in Kaigan Geopark is mainly reviewed from historical and archeological viewpoints.

In the coastal area of the Sea of Japan, Lake Koyama, Kumihama Bay, Asamogawa-gata and Takeno-gata Lagoon had been used as ports for domestic and foreign trade (with China and Korea) in ancient times. Sinmeiyama-kofun Tumulus and the Aminochousiyama-Kofun Tumulus in the area the largest Zenpoko-enfun (large keyhole-shaped tomb) in the coastal area of the Sea of Japan, suggesting society and culture in the area probably played an important role in ancient Japan. These lagoons were utilized as trading ports under the geographical features. The establishment and extinguishment of these ports must be deeply linked the transition of natural environments with the history of the area.

The archeological site of Enjo Site, located the center of the largest iron production area along the Takeno River, might be related to the largest tumulus and the ancient lagoon ports. The iron production in this area probably played an important part in ancient Japanese society in the age of the beginning of the domestic iron production. Iron sands from Miyazu Granite are widely deposited in the coastal area and the ground surface of the mountainous area. The investigation of the mining history of the iron sand in the granites distribution area is important for understanding the relationship of the ancient iron-making culture between Japan and Korea. San'in Kaigan Geopark can introduce geology especially the granites in the area with introduction of the ancient iron production.

In ancient map in 1603, Takeno-gata Lagoon had already disappeared, although that probably had been utilized as port until the 8th century, suggesting the lagoon was buried between the 8th and 16th centuries. According to the legend of the shrine nearby the lagoon, the lagoon was disappeared instantly at a certain time. Considering the location of the shrine and geology of the area, the disappearance was possibly caused by debris flow. After the scientific inspection, this transition will be able to be used as disaster educational material.

As described above, historical and archeological viewpoints will help people to have interest in geology in geoparks. Introduction from different viewpoints about geoparks with scientific inspections enhance its attraction for more people.

Keywords: Geopark, Tango Area, Iron sand, Lagoon, ruins, ancient iron