***Kanna-Nagashi*: Gathering Iron Sand**

The iron sand used for smelting was originally gathered by sifting through riverbeds, where it accumulated naturally. As wind and rain gradually eroded an iron-bearing mountainside, the iron-rich sediment was carried downstream. However, this naturally occurring stock of iron sand was insufficient for large-scale iron production. In the sixteenth and seventeenth centuries, ironworking communities gradually developed a new technique called *kanna-nagashi* (roughly translated as “water flowing between pools”).

Instead of waiting for the natural erosion process to occur, workers chipped away bit by bit at an exposed cliff face, knocking the sediment into a purpose-built canal. This artificial river carried the dirt and iron sand down to the mountain’s base, where it could be separated using a series of four progressively lower pools. As water flowed through the pools, the lighter sediment was carried out through openings between them, while the heavier iron sand sank to the bottom. The iron sand was then collected, dried, and transported to the production site.

Roughly 200 metric tons of sediment had to be filtered for each metric ton of iron sand, and this artificial increase in sediment flowing downstream disrupted irrigation systems and damaged rice fields. As a result, *kanna-nagashi* was banned in the Matsue domain from 1610 to 1636. Even after the ban was lifted, ironworks were only allowed to gather iron sand between September and March to avoid the main agricultural season.