

Industrial promotion in the Edo period

As agriculture and commerce grew, pre-modern manufacturing such as handicrafts and food processing also began to develop. Each region created specialized products which were marketed all over Japan. For example, tea, tobacco, wax, indigo, salt, knives, sword, pottery, lacquer ware, silk, cotton, soy sauce, sake, paper, cut stone, medicine, and chemicals were traded widely. Emergence of these regional specialties was mainly the result of private effort, but in some cases the support of local governments also made a difference.

In order to enrich the local population and increase the tax revenue, many hans promoted local industries, and some even succeeded (Nishikawa and Amano, 1989). Here are some examples:

- *Yonezawa Han* (adding value to local inputs)—When Uesugi Yozan (1751-1822) became the daimyo of Yonezawa Han in Northeast Japan, the han finance was bankrupt and samurais and farmers were destitute. Retainers even considered closing the han and returning it to the Bakufu. Yozan introduced austerity measures, encouraged research and learning, and promoted industries. He repelled the conservative faction who opposed his reform. He opened new farmland and installed irrigation. His main strategy was to add value to local materials instead of selling them in raw form. *Aoso*, a plant material for high-quality textile, was transformed into finished kimono by importing weaving technology. Mulberry plantation was encouraged for producing silk kimono. Lacquer trees were planted to manufacture lacquer ware and wax. Safflowers were introduced to produce orange dye. Thanks to Yozan's reform, the economic situation improved and Yonezawa Han was able to repay all the debt.
- *Tokushima Han* (indigo)—Farmers produced indigo along the Yoshino River in Shikoku Island and their output gradually grew. But indigo distribution was monopolized by Osaka merchants who imposed high interests on loans. In order to protect local farmers and encourage local merchants, Tokushima Han created an indigo exchange and provided financial and distribution services. The Bakufu objected to this move, prohibiting official bodies to engage in such activity. In reality, the Bakufu wanted to protect Osaka merchants who contributed financially to its coffer. In response, the han privatized the indigo exchange and other services.
- *Takamatsu Han* (sugar)—This local government, also in Shikoku, issued local paper money to promote various industries but its attempts generally failed, and its money depreciated. After many failures, the han finally succeeded in pilot production of sugar from sugar beets and commercializing the technology. As sugar production greatly increased, the han encouraged inter-han trade to expand the market. But again, the Bakufu intervened to discourage such trade not brokered by Osaka merchants.
- *Satsuma Han* (trade gains for military buildup)—Satsuma Han in southern Kyushu was also broke with huge debt in the early 19th century. Zusho Hiroshige (1776-1849), Satsuma's high official, adopted austerity and implemented administrative and agricultural reforms. He intimidated merchant lenders into rescheduling Satsuma's debt

for 250 years with no interest, which was practically cancellation. He started han monopoly of sugar trade with southern islands as well as illegal trade with China via Okinawa, both of which were very profitable. After international trade was resumed in 1859, Satsuma Han vigorously traded with China and the West, and purchased new technology including blast furnace, cannons, western ships and latest guns. By building wealth and military capability, Satsuma Han later played the leading role in toppling the Bakufu and establishing the Meiji government.

Other hans were also successfully engaged in industrial promotion of one kind or another including Choshu Han (paper, wax), Akita Han (silk and silk dress), Hizen Han (pottery, coal) and Higo Han (lumber, silk). In the late Edo period there was dynamic competition among hans to supply nationally marketable products which was either privately driven or policy-triggered. Industrial promotion combined with fiscal reform was the key to the survival of impoverished hans. But we should not forget that there were also many hans which were less innovative and fell deeply into economic difficulty and debt. These hans borrowed large sums of money from private merchants but never repaid.

Thus, at the local level, some hans produced economic leaders who solved the domain's fiscal crisis, promoted local industries and actively engaged in domestic (and later international) trade. This is in sharp contrast to the central government which was throughout unable to propose any policy to support and tax the growing national economy. Japan at the end of the Edo period was ripe for a new set of economic visions and policies which were more proactive than those put down by the Bakufu leaders.