

## **Doctoral Dissertation: Summary of “A Giant Corporation and the Local Community – Fuji Spinning Company and Oyama Town, Shizuoka Prefecture”**

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This study examines how a capitalist economy and capitalism-adapted local community were established as a reflection of Japan as a modern state, with evidence-based research on Fuji Spinning Company (hereinafter “Fujibo”), one of Japan’s six largest cotton and silk spinning firms that played a central role during the country’s industrial revolution, and Oyama, a local town in Shizuoka Prefecture where Fujibo’s main factory was located. The goal of this study is to explore various approaches to discover how this giant corporation developed as well as how Fujibo and the surrounding communities overcame numerous problems arising between the two sides to prosper together through mutual support.

First, historical research on Fujibo’s business revealed extensive findings in a host of areas, including the company’s management structure, production, sales and financing (Kazuo Sugiyama), exports of cotton fabrics to the Korean market (Naosuke Takamura), development of the hydro-electricity business (Naofumi Nakamura), and the labor management system for factory and office workers (Ryoji Kaneko). This study narrows its focus and seeks to capture the entire picture of Fujibo’s business administration, including its disaster risk management system.

Next, regarding the relationships between Fujibo and the surrounding local communities, a series of studies have been conducted since the Japan Humanities Society pioneered collaborative research focusing on the nation’s mining and spinning industries. These include the resistance movement of farmers against Hitachi, Ltd.’s land acquisition (Naoto Yamashita), urban planning for industrial sites (Akinobu Numajiri), and the development of businesses and establishment of various facilities in company towns (Shigeo Nakano). Based on these findings, this study looks further at the internal issues related to business management and investigates how widely Fujibo’s expansion affected the economic, administrative, financial and political aspects of the downtown areas and farming villages.

The first part of this study analyzes Fujibo’s historical development from its establishment in 1896 to 1915. In tracing the background of Fujibo’s establishment with extremely limited resources, government officials (Tetsunosuke Tomita, Tomotsune Koumuchi and Hideji Kawase) involved in Japan’s exports to the United States and

industrialization policy worked together with entrepreneurs (Ichizaemon Morimura and Ichiro Murata) using contacts with Yukichi Fukuzawa and Kaishu Katsu since around 1874 to deepen their cooperation through business activities of the Bank of Japan and the Tokyo Chamber of Commerce. By 1881, these individuals had fostered partnerships and formed a group called “Suiryoku Gumi (Water Power Union)” to promote the use of cheap and abundant water for the development of new industries. After establishing Onagigawa Cotton Fabrics and Fuji Paper Company, while also collaborating with cotton fiber and cloth wholesalers in Tokyo, they built Fujibo Oyama Factory in 1896 in Suganuma (present-day Oyama), Shizuoka Prefecture, a village boasting ample underflow water from Mt. Fuji and situated close to Oyama Station on the Tokaido Line, a major railway line convenient for transporting raw materials and products (Chapter 1).

At the time of its foundation, Fujibo was organized by water-powered mill engineers from Shimada Spinning Company, operating spinning machinery with 2,000 spindles; executives from Kanebo, including a head office manager, chief engineer and managing director; and silk-spinning engineers from the successors of the state-run Shinmachi Spinning Mill. With low-count thick yarns becoming a mainstay in the cotton industry, Fujibo launched its strategic product lineup focusing on the production of medium and high-count fine cotton yarns and the booming silk spinning business. However, the company quickly fell into a serious slump for lack of talented, experienced managers, provoking continued conflicts between executive members such as Tanizo Kakinuma, a cotton fiber and cloth dealer, and Suiryoku Gumi’s management, including its chairman, Tetsunosuke Tomita. Moreover, Masahiro Tamura, dispatched from Kanakin Weaving Company by the executive members, forced through business reforms that included the dismissal of key engineers, resulting in chaos in the workplace and stagnant revenues.

Subsequently, Heizaemon Hibiya from Tokyo Gas Spinning Company joined Fujibo’s board to restore the company, and in January 1901, Toyoji Wada formerly belonged to Kanebo was appointed managing director. Wada introduced wet-type yarn twisting machines developed by Amagasaki Spinning Company to improve the quality of Fujibo’s medium and high-count yarns, changed raw cottons and yarn sizes according to market prices and expanded the company’s sales channels into the textile-producing areas in the Kanto region, Shizuoka and other areas westward. He also expanded sales of the silk business by appointing an expert technician, Tokutaro Inoue, as well as inviting other professionals, such as Tatsumi Mochida, a specialist in the hydraulic power business, and Shigeto Takahashi, a factory management expert, to ensure that the right positions were assigned to the right people. Wada monitored the factory floor day and night to train

workers directly and won the hearts and minds of Fujibo's engineers through his superior interpersonal skills. He set up a personnel section to deal with labor issues and improved the work environment by raising the employment age, enhancing full bonuses and attendance incentives, introducing performance-based payments to cotton-mill workers, and opening company stores.

As a result of these measures, Fujibo's productivity increased and its business markedly recovered. At the same time, however, because of the labor-intensive work with performance-based pay, summer heat and floods, rising numbers of escapes and departures of factory workers upset about forceful personnel transfers, and arbitrary wage cuts during the prolonged economic crisis, Wada's series of reforms stirred the potential for serious unrest among senior workers. The situation was resolved with the assistance of the company's engineers, with management securing prison labor for some sectors and tightening worksite supervision by forming a "monitoring" unit to prevent factory workers from going out without approval and fleeing. With such measures completely overlooked in the past, it can be said that Wada's reforms faced certain limitations (Chapter 2).

After the Russo-Japanese War, Fujibo launched a ten-year expansion plan to promote mergers and acquisitions and further extend its operations. Through a series of mergers, the company acquired a vast factory site and important water rights of the adjacent Rokugo Village from Onagigawa Cotton Fabrics, along with advanced-skill technicians and cutting-edge silk spinning machinery from Japan Silk Cotton Company, and technologies for fine yarns and gassed yarns and shares from Tokyo Gas Spinning Company. Fujibo also merged with Sagami Hydroelectric Power to expand its electricity business to the Keihin region, including Tokyo and Yokohama. In tandem with these acquisitions, Fujibo concurrently produced cotton fabrics at its Onagigawa Plant, built Oyama No. 3, 4 and 5 Plants as well as Kawasaki Plant, and pursued the development of silk fabric production. To maximize its hydroelectric business, the company constructed two hydropower stations in Urushida and Sugawa in the Oyama area and the Mine Power Station in Kanagawa Prefecture. By 1915 (Taisho 4), almost all of Fujibo's plants were electrified, achieving approximately a 25 percent cost reduction compared with steam engines powered by coal. Furthermore, self-running small electric motors introduced to the new factories after Wada toured Europe in the fall of 1912 helped boost productivity and enhance Fujibo's competitiveness.

With a substantial amount of equipment investment financed by loans, including corporate bonds and foreign capital, Fujibo produced stable profits and secured its net income by reducing operational expenses and labor costs during this development period.

While realizing dividends equivalent to those of major corporations, Fujibo cut its board members' bonuses to one third and distributed the money to its factory and office workers as bonuses and other incentives. Although this payment system reduced its reserve and surplus funds, the company managed to retain a level of capital closely matching its rivals Kanebo and Miebo.

Around this time, experienced managing directors Tatsumi Mochida and Shigeto Takahashi played their roles in the company, and Wada's management efforts were supported by Fujibo's major shareholders, Morimura and Hibiya Groups, and entrepreneurs involved in its business expansion. In addition, as Fujibo received financial support with the help of Mitsubishi's Keio faction network to end its dependence on foreign capital, Mitsubishi Group's executives joined Fujibo's management and leading shareholders in the 1910s (Chapter 3).

Next, an examination of Fujibo's business conditions in each manufacturing sector revealed that the company's cotton spinning business undertook short-time operations, continuously encouraged by the Japan Spinners Association throughout the economic expansion and depression during the pre- to post-Russo-Japanese War periods, along with periods of temporary growth followed by a recession. Wada switched raw cotton according to market prices and shifted yarn counts for rings and mules in response to market changes; he also took advantage of the government's exemption regulation on curtailed operations for medium fine yarns with counts 20 or over to expand Fujibo's market share in this segment.

After severe flooding in the Kanto region in late 1910, Fujibo and other spinning companies in the affected areas accepted short-time operations for yarns with counts 20 or over as a disaster recovery measure. This event led Fujibo into fierce competition with Kanebo and Miebo over yarns of all counts. Consequently, the company not only began to lose its position for medium and high yarn counts but also struggled with low-count yarns. To overcome this adversity, Wada introduced self-running small electric motors to its newly established Kawasaki Plant and regained its competitiveness by achieving an even higher level of productivity.

After Fujibo's cotton fabric manufacturing division withdrew from the Korean market in 1910, its concurrent woven fabric manufacturing division capitalized on the exemption regulation on curtailed operations for raw yarn and built Oyama No. 5 Plant to promote the production of high-quality cotton fabrics using its specialty medium fine yarns. Supplied raw yarns by Oyama No. 1 Plant, it produced with Toyoda Automatic Loom Works' weaving machines driven by self-running small electric motors. Its raw yarn production included bleaching and degumming processes, and to deal with the

technically difficult back starching process, veteran technicians were invited from Britain to provide training. At the same time, Fujibo developed a bleaching method with electrolytic chlorine to enhance production efficiency. All these efforts enabled the company to achieve a production capacity comparable with the industry's average level even without nighttime operations, to raise wages mainly for male workers, and to expand its sales primarily through exports to China's Qing Dynasty.

In the silk spinning division, Tokutaro Inoue and other engineers successfully improved product quality by developing a new raw refining technique to shorten working hours and save on refining agents. Fujibo took advantage of silk's lower price and higher quality than raw yarn to meet middle and lower class demand, boosting sales with its silk adopted for union cloths, especially silk fabrics made in Isesaki, Gunma Prefecture and Ashikaga, Tochigi Prefecture. The company also expanded its silk exports after improving the packing methods and increased its market share for spun silk yarns and peigné. Furthermore, using better-quality spun silk yarns through raw fining techniques, Fujibo succeeded in developing its own "Fuji Silk" fabrics and extended its sales network into domestic textile-producing areas as well as the United States.

In these ways, Fujibo's constant pursuit of technological innovation, product development and market exploration enabled the company to overcome the recession after the Russo-Japanese War (Chapter 4).

In terms of Fujibo's corporate organization, the sales and research divisions were set up in 1908 and the engineering division, including the textile and electricity sections, was added in 1910. In September 1908, Fujibo established its central office at the Oyama factory site to manage benefits, employment and company dormitories for its employees, in addition to engineering for power and machinery, facilitating communication with each plant through the general affairs section. Thus, Fujibo's head office and its factory's central office administered strategically important functions and established a network system with its plants.

Many factory workers playing a key role in Fujibo's expansion at that time were hired through its newly established system for recruiting workers from rural areas, with female workers hired nationwide, primarily from all prefectures of the Tohoku and Kanto regions, and male workers from prefectures adjacent to the Kanto region. With a rising number of migrant workers moving into areas around Oyama Factory, Fujibo built more worker housing and even provided nurseries for its employees with babies.

Fujibo's wage trends indicate that its male workers in charge of power plants and machine operations received generous benefits surpassing the industry average, while its female workers' wages shifted downward slightly below average. Meanwhile, as the

turnover of female factory workers rose between June and September each year, affected by heat waves, floods, typhoons and epidemics, the company was confronted with the formidable challenges of improving benefits and implementing measures against floods, epidemics, sanitary risks and illnesses to prevent workers from quitting.

In September 1906, members of Japan Socialist Party held a public meeting in Oyama to denounce Fujibo's working conditions. Despite their unrealistic improvement demands that ignored Wada's labor reforms, Fujibo responded to their criticisms by taking advantage of its merger with Tokyo Gas Spinning Company to create an innovative system for dividing executive compensation, then accounting for 15 percent of each term's profits, into three for distribution to its factory and office workers. The workers' bonuses were provided based on their years of service and wage grade, with their working days also taken into account. In fact, Fujibo's officials in charge of product development and office management were paid considerably higher than its factory workers, while bonuses were distributed thinly and widely to regular female factory workers. Furthermore, specialized and distinguished workers as well as senior workers were awarded special bonuses based on the assessment of their job performance (Chapter 5).

After the Russo-Japanese War, Fujibo formulated fire safety rules and guidance and flood protection standards to strengthen its risk management in the event of disasters. The company set up a firefighting headquarters in the central office and plant branches, where managers and workers were responsible for the management of disaster prevention equipment, disaster drills and emergency communication at the time of a disaster, while response measures were adopted for firefighting, flood control, rescue activities and recovery efforts. The company also installed sprinkler systems and encouraged fire insurance programs.

To address hygiene issues and epidemics, Fujibo introduced air conditioning, ventilation and temperature control equipment to its factories and dormitories. Its central hospital on the factory site was expanded and upgraded to provide employees with medical care. The company also established a medical affairs section to manage hygiene in its factories, dormitories and houses, and built reservoirs equipped with private water-supply systems to secure clean drinking water. In the event of an epidemic, the company organized an epidemic prevention committee to conduct preventive disinfections and medical checkups, and in some cases, ordered female factory workers to stay indoors to prevent the infection from spreading. Meanwhile, Fujibo formed a mutual aid association consisting of its factory and office workers to offer support for injuries and illnesses at work, formulated relief policies to assist factory workers and their households living in poverty, and even designed a severance pay program.

During the post-Russo-Japanese War period, many Fujibo employees were victims of crimes, such as assaults and thefts, committed by outsiders pouring into Oyama's downtown areas, and a growing number of female factory workers fled, were kidnapped, or committed suicide. In response, Fujibo adopted safety measures by increasing the number of guards to monitor, rescue and protect them (Chapter 6).

In 1910, Fujibo established a boarding school where young in-resident and non-resident female workers studied basic subjects (reading, writing and arithmetic), sewing and moral training for about two hours every day. The school also offered manners classes, school trips and moral lectures to foster ethical principles, such as manners, independence, honesty and diligence. For lectures the school invited not only elementary school teachers but also prominent figures, including Chikuro Hiroike, the founder of "moralogy," and Sazanami Iwaya, a notable author of children's stories. Various Tenrikyo, Buddhist and Christian priests also participated in lectures and other events to promote mental training. Through the efforts of Christians, the Oyama Branch of Yuai-kai (Workers' Fraternal Society), based on the principle of labor-management cooperation, was founded in July 1913, organizing various events over the following year, such as lectures by its president, Bunji Suzuki, and club activities, including book readings, sports, and entertainment.

At Fujibo's plants and dormitories, all workers celebrated seasonal events, participating in the New Year's Day party and summer trips as well as enjoying national holidays, including National Foundation Day and the Emperor's Birthday. On those occasions, Fujibo championed its national mission as part of the spinning industry, and at the same time, held social events like sports day and performing arts festivals for its employees to forget about their daily routines and engross themselves in sports competitions and entertainment. In addition, Fujibo organized hairdressing parties, billiard tournaments, Igo competitions and haiku workshops, featured in its company newsletter "Fuji no Homare (Glory of Fuji)." These social events helped nurture young factory workers who suffered physically and mentally under harsh labor conditions after leaving their homes, hometown villages and schools. In the new communities and schools of the factory town, workers were educated with a moral sense, a sense of public morality, and even a sense of nationhood; they also enjoyed entertainment, moral training and cultural activities, and obtained basic skills as a means of livelihood and literacy to survive in society if ever leaving the company. Fujibo tried to teach its factory workers firsthand about the meaning and benefits of factory work and the pride in contributing to their country's prosperity. To secure steady profits, Fujibo actively cultivated human resources committed to the company.

During the period from 1914 to 1917, the number of incidents involving Fujibo's

employees, such as assaults, suicides, kidnaps and escapes, began to decline. The company's human resources management undeniably played an important part in enhancing its business performance at the time through its successes in innovation and product development in both the spinning and weaving divisions (Chapter 7).

The second part of this study deals with the multiple influences of Fujibo's factory establishment on the surrounding communities.

At first, local landowners were strongly opposed to Fujibo's advance and land purchases. But village mayor and prefectural assembly member Jusuke Yuyama, who also participated in the People's Rights Movement, and other liberal elites, shifted their support for the company's construction of factories. With local communities changing significantly after the opening of the Tokaido Line, they aimed to break away from their prefectural and village assemblies' conservative position on alleviating the tax burden on citizens to one promoting regional development that would increase the benefits of local communities. Having witnessed the surrounding communities prospering after Fuji Paper Company's factory was built by Suiryoku Gumi, this elite group sought to achieve community development by inviting Fujibo (Chapter 8 and 12).

Eventually, Fujibo's factory establishment rapidly changed the local communities. The once-isolated Oyama area saw its population surge, attracting merchants and proprietors who created downtown areas, and evolved into a small urban town functioning as a regional hub for commerce, industry, finance, and transportation (Chapter 8). The surrounding farm villages also experienced development with commercial vegetable farming to meet the demands of the new downtown and factory areas, and combined with cash earnings from silk farming they were able to buy more new products available in the downtown stores. Electric lamps provided by Fujibo helped improve people's livelihoods in their local communities (Chapter 10).

However, rapid urbanization coupled with the growing demand for building materials and fuel led to overexploitation of the local field and mountain resources, resulting in more floods and epidemics and frequent outbreaks of fires on narrow properties crowded with haphazardly-built houses. The mass influx of people from other areas also brought more crimes, incidents and disturbances to the downtown communities each year (Chapter 9). The construction of factories and power plants damaged irrigation systems and farmland, while the development of commercial agriculture reduced the production of traditional subsistence crops, including millets and soybeans, and farm rent once paid by soybean was replaced with cash payment (Chapter 10).

To alleviate the friction between the industry and the local community, both sides discussed how to resolve the various problems. For damage inflicted by the factory's use



of rivers and land, requirements for the shared use of rivers and dams were established on the assumption that Fujibo would pay pecuniary compensation. In the downtown area, the local community and Fujibo developed a profit-sharing system involving freight transportation between the train station and the factory (Chapter 8 and 10). Human excreta and cotton waste discharged by the factory were sold cheaply to the local community for use as manure in commercial farming. In the case of a disaster, the factory and the village office worked together to engage in relief activities and restoration work, and to deal with the escape and kidnapping of female factory workers, local residents united to take preventive and protective measures for the women.

On the other hand, the village office was tied up in handling an enormous amount of administrative work for temporary residence permits and approval and license requests related to the factory's operations. The village also saw a huge increase in education costs because of the construction of school buildings to accommodate an increasing number of elementary school children and the recruitment of more teachers. Furthermore, the village's fiscal expenditures mounted up for maintaining roads and bridges and strengthening countermeasures against frequent floods, fires and epidemics. However, with tax revenues from Fujibo collected by the local government in the area where the company's headquarters was located, the local farm villages received very few income and suffered under the burden of extremely tight budgets, resulting in repeatedly borrowing from local banks and raising village taxes on each household. But the villages continued to manage their budgets for a while with huge donations for education and construction projects from Fujibo (Chapter 11).

Fujibo's advance also created serious regional imbalances. Suganuma Village, where Fujibo's Oyama No. 1 and 2 Plants were located, experienced a marked increase in its population and the development of a downtown area, while neighboring Ashigara Village, a former post town, stagnated with its roads deserted. This disparity provoked conflicts between the two sides of the village union over their share of the tax burden. In 1907, when the Primary School Order was revised, Suganuma Village built an extension to its primary school and dissolved its partnership with Ashigara Village to run the school separately (Chapter 11).

Suganuma Village became independent, but it was not long before the village advanced a merger proposal with Rokugo Village, the location of Fujibo's Oyama No. 3 and 4 Plants. This merger, endorsed by the county office as a remedy for the two villages' financial struggles, was actively supported by Fujibo's managing director, Toyoji Wada. He interacted with local residents on a daily basis through waterworks and factory construction, brought engineers and employees serving as village assembly members over

to the merger side, and shuttled back and forth between the two village communities to promote the merger. Wada recognized the extreme inefficiency and complications for Fujibo's factory workers living in each village with different local village tax rates and different qualities of administrative services, with workers even having to submit approval and license requests to both village offices (Chapter 12).

In fact, it was the local elite community leaders who played the most important role in mediating between the company and the local communities to develop solutions that equally benefited both sides, including this merger process. They served as local mayors or held high positions in various organizations, corporations and political parties, and gained political power to bring various benefits to their local communities by pursuing careers on the national and prefectural government level. These elites consisted of two groups: major elites (major landowners) such as Jusuke Yuyama, who had a strong connection with Fujibo as its auditor; and community-based elites, including farming landowners, upper-strata landed farmers and middle-class merchants, who dedicated themselves to dealing with local affairs, such as industry, hygiene, firefighting and crime prevention, while communicating with village, town and ward residents. Based on the elites' initiatives, the groups strived to balance the interests between the communities and the corporation as well as between the communities themselves.

On August 1, 1912 the villages of Suganuma and Rokugo merged into Oyama Town. The town assembly was joined by each ward representative and company representative directors committed to solving various problems by mediating between the local communities and Fujibo to reflect the benefits of each other. Under the most prominent elite, Jusuke Yuyama as mayor of Oyama, the town government commenced with a view to balancing the interests between the former two villages and Fujibo (Chapter 12). In the past, the villages had been unable to collect fiscal resources from Fujibo's plants, but in 1911, the Imperial Edict No. 241 issued alongside the Municipal Systems Amendment Act allowed taxes from corporations and business offices to be divided and paid to the towns and villages where the headquarters or offices (factories) were located. Thus, after the establishment of Oyama Town in 1912, an enormous sum of Fujibo tax money – additional national income and business taxes – was distributed to each factory town and village after adjustment, while also leading to a substantial reduction in the local tax rates, including additional taxes per household. This revenue was used for the development of both Fujibo and the local community (Chapter 11).

The establishment of Oyama Town followed by the promulgation of the Imperial Edict No. 241 issued in line with the Municipal Systems Amendment Act in 1911 was the creation of a self-governing body that integrated a giant corporation like Fujibo into the

community. It is one of the classic cases during the period from Japan's industrial revolution to modernization in which a regional economic community formed by a company's expansion became the foundation of a merger of local governments, promoting regional development with the interests between the company and the local community balanced through integrated administrative, financial and political systems.