

30. Work supporting livelihood

30.1 Traditional life in Fussa

The Fussa City area includes the Tama River terrace in the south of the Musashino region. Farming has continued since ancient times in this area.

Records from the middle Edo Period, 1734 (Kyoho 19) indicate no rice paddies in the Fussa Village, barley being the main cereal crop. Males produced wood fuels as a part-time occupation, transporting those goods to Edo in exchange for manure (rice bran, ash, dried sardines, etc.), while females wove clothes for sale. Other village occupations supplementing agriculture included: horse doctor, blacksmith, horse dealer, dyer and *ayu* (sweet fish) fisherman. In 1760 (Horeki 10), Kumagawa Village, no cultivated fields were irrigated, however the evidence of paddy fields exists for *mizucho* (distribution record) in 1676 (Enpo 4), Nagashio fiefdom, Kumagawa Village. Some crops grown were; barley, wheat, millet, Japanese millet, turnip, yam and mulberry.

The development of new paddies was done at the Tama River bank. But the progress was seemed to be few for running up expenses and repeated flood. In Kansei era (1789-1800), new paddy development was progressed by large scale at Fussa Village. In Tenmpo era (1830-1843), Kumagawa Village used the flow of the paddies at Fussa Village. So the crop of Kumagawa went up than ever.

As time passed, more cultivated items appeared. In 1888 (Meiji 21) both villages record rice, barley, wheat, rye, millet, beans, buckwheat, peas, Japanese indigo, sweet potato, Chinese radish, tea and cocoons as cultivated items. Particularly cocoons and raw silk, delivered to raw silk traders of Hachioji and other neighboring towns, earned large profits for villagers. In those days, as sericulture developed nationwide,



Fig. 179 Sweet potato harvest (Kumagawa, 1925(Taisho 14)).

silk mills arose in both villages. Sericulture came to farmers' main cash source. Wasteland bordering the Tama River, cleared for mulberry fields, approached tens of *chobu* (hundreds of hectares). But the late Taisho Period's raw silk price decline; the 1923 Great Kanto Earthquake; Global Financial Panic and growing demand for food production caused a rapid decline in sericulture, mulberry plantings being replaced by food cropping fields.

Non-residential land usage of Fussa and Kumagawa villages, 1937 (Showa 12) was categorized: paddy fields 4.4%; dry fields 58.4%; miscellaneous land 37.2%. Households of the two villages totaled 1,056, with 481 households (almost half of all) engaged in agriculture; 60 households engaged in manufacturing and 170 households engaged in commerce. The industry and commerce of Fussa Village developed with the 1894 (Meiji 27) construction of Ome Railway Station (present JR Ome Line). In 1940 (Showa 15), northern Musashino Plateau forest lands were cleared for construction of Tama Air Field (present USAF Yokota Air Base). Accordingly military facility and munition factory workers moved into Fussa and Kumagawa villages.

The working population of Fussa Village reached 6,105 at the post Pacific War, 1950 (Showa 25), including 15% in agriculture (primary production); 28% in secondary industries, i.e. construction and manufacturing and 56% in tertiary industries, i.e. retail, service (private and public) and others. Later, agricultural lands were transferred for expansions of Yokota Air Base, residential areas and public facilities. Along with the sudden decrease in available land, the number of primary producers quickly decreased. By 1974 (Showa 49), no full-time farmer remained in Fussa City. This section introduces traditional events and occupations performed in Fussa City through the Taisho and early Showa periods.



Fig.181 Wood cut for fuel (Kumagawa, neighborhood of present Fussa No.1 Middle School, 1924 (Taisho 13)). A man wearing farm-style clothes cuts fuel wood in a thicket.



Fig.180 Farmer's garden (Kumagawa, 1922 (Taisho 11)). A tomi thresher (rice husk separator) is running on mushiro (straw matting).

MONTH	CULTIVATION CALENDAR					ANNUAL EVENTS
	Barley	Rice paddy	Sweet potato	Millet	Sericulture	
1	Treading of sown barley					1 Oshogatsu 15 Koshogatsu (first plowing, Abohicho, event etc.) 20 Ebisu-ko
2						3 Setsubun (the lunar calendar's spring event) Hatsuuma Inari-ko
3	Ichibango (fertilizer application, ridge work, weeding, etc.)		Seed bed preparation			3 Sekku Spring equinox
4	Nibango (same as March)				Spring silkworm	3 Fussashinmeisha Shrine spring festival 8 The Buddha's Birthday 10 Kumagawajinja Shrine spring festival
5		Rice seed bed preparation Seeding	Satsumasashi		Hakitate (silkworm moved to bed)	5 Sekku
6	Barley reaping	Plowing Flooding paddies		Seeding	Jozoku (Mounting) Shipment	
7		Weeding	Weeding Ridge work		Early autumn silkworm Weeding Hakitate	13 to 16 Bon festival
8		Weeding	Weeding	Ridge work	Jozoku Shipment Late autumn silkworm	1 Yagumojinja Shrine festival
9		Additional flooding Rice ear appearance			Hakitate Jozoku	1 Kumagawajinja Shrine autumn festival 15 Jugoyanight (The 15th night) 19 Fussashinmeisha Shrine autumn festival Autumn equinox
10		Harvest	Harvest		Shipment	9 Inokono-botamochi 13 Jusanya (The 13th night) 20 Ebisu-ko
11	Barley sowing			Harvest		Dojo-gayu (Barley seeding celebration) 15 Obitoki-no-iwai
12	Treading of sown barley					1 Kawahitari-no-tuitachi 8 Kabu-dango Winter solstice

Fig.182 Cultivation calendar and annual events.

30.2 From planting to harvest

During sweet potato and dry field rice harvest, in autumn around October, barley bed plowing and wheat sowing were also underway. All family members and sometimes neighborhood help had to avail themselves for wheat and barley duties. It was the younger siblings' role to trample the sown barley and stimulate root growth. Soon the rice beds and ridges were prepared for seedlings. Weeding was done twice and manure was added. Barley harvest, from early June and wheat harvest, from late June employed all family members on the few sunny days of the rainy season.

Ears of barley were reaped by *mugikoki* (sickle), dried on *mushiro* (straw matting) then threshed by *bochi* (rod). The *bochi* work was heavy labor employing neighborhood help on the sunnier, hotter days. Bochi songs were sung to ease the heavy duty of swinging the bochi rod. Bochi duties continued until the early Taisho Period (1910s). Later, treadle-powered threshing machines became popular, being replaced by motorized versions in the early Showa Period (1920s).

After threshing, the barley grain was passed through a *mugiburui* (sieve), sorted by a *tomi* (sorter), then dried in the sun again. Grain was polished by wooden mallet and mortar, *jingara* (treadle powered mallet) or water mill by the middle Taisho Period (1910s). Later, it became popular to take grain for mechanical processing at a central grain mill or agricultural cooperative facility. The wheat straw was used to reroof houses, whereas the barley straw was scattered as field mulch or burned in ceremonial torches at the *Bon* festival (the Buddhist All Souls' Day at summer), etc.



Fig.183 Bochi .Kumagawa, 1925 (Taisho 14).



1. Barley reaping (mugikari) by sickle.



2. Barley bundled into sheaves for drying.



3. Using a kururibo rod (also called bochi) to beat barley ears to release grain.



4. Separating the threshed grains from their husks with the mugiburui (barley sieve).



5. Carrying the barley in a mi basket, to supply a toumi hopper.



6. Turning the toumi's handle to fan air and separate waste from barley grain.

Fig.184 Barley harvest operations from reaping to threshing and grading. 1. 2. at Kami area, June 1981 (Showa 56). 3. to 6. at Shimo area, August 1983 (Showa 58). These pictures show reenactments of traditional operations.

30.3 Rice cropping

In early May, a seed bed was prepared for seed rice sowing. Meanwhile the rice paddy was prepared for planting. Dry fields were plowed by horse or cow traction until the middle Showa Period. Immediately before planting in late June, the rice field was plowed again (*shirokaki* work for planting rice). Skilled rice planters helped in rice planting through the Taisho and Showa periods. Farmers weeded through the hot months of July and August. In early September the rice flowered then in late September all water was drained from the paddy field.

Rice reaping spans middle October to early November. Harvested rice was bundled and hung on stands to dry. In ancient times, the *inekoki* (having a narrower tooth width than that of the *senba* thresher) had been used for threshing but machine threshing, as for wheat, arrived in early Showa Period. Un-hulled rice was ground in the *karausa* (mortar), rice hulls were removed by the *tomi* (sorter), then grain size was graded by the *mangoku*. Rice polishing was achieved by *usu* (mortar) or by *suisha* (water mill). From the early Showa Period onward, rice millers and agricultural cooperative associations completely took over the processes from grinding un-hulled rice to polishing rice.

Few rice paddies existed in the Fussa City area, giving *okabu* (dry field rice) secondary foodstuff status, after paddy rice. Dry field rice seeds are sown between barley ridges from late April to late May. From June farmers weeded, spread additional manure and planted *nashiuri* (new melons) and *makuwauri* (oriental melons) to shade the rice root and prevent the ground drying. In early October the rice was harvested by sickle then rice bundles were hung on *hazakake* (racks) to dry.



Fig. 185 Rice paddy that made offering rice for Niinamesai (Harvest Festival) (Kumagawa 1907 (Meiji 40)).



1. Preparing rice seedlings for transfer from the nawashiro (seed bed).



2. Scarifying the rice paddy using a shirokaki tool before planting the rice seedlings.



3. The rice seedlings are transplanted by all family members.



4. A fine crop of rice will grow by autumn.



5. Harvested stalks of rice are bundled and hung to dry from a stand (hazakake).



6. Dried ears of rice are threshed by a motorized threshing machine.

Fig.186 Rice paddy procedure, preparing for planting through to threshing. 1.to5.at Kitaden'en area, 1979 (Showa 54). 6.at Nagata area, 1979 (Showa 54).

30.4 Silkworm breeding

Through Taisho to early Showa periods, sericulture began in April to early May by washing sericulture equipment in the river then drying it. Meanwhile, sericulture farmers raised silkworms in their homes, swept fireplace soot (*susuharai*) out of the silkworm feeding room, prepared silkworm shelves (*kaikodana*), disinfected the room and sealed wall crevices. Newly-hatched silkworms, falling onto paper sheets from the egg were delicately wiped onto growing papers (*sanzashi*) by feather brush (*haneboki*). This work is called *Hakitate*. Finely chopped mulberry leaves (*kuwa*) were fed (*kuwakure*). After that feces and leftover leaves were cleaned away (*shiriage*). The silkworm sheds its skin four times before the cocoon stage. Just after shedding its skin, it ceases moving and eating. (This is called *tomari*.) The fourth *tomari*, known as *odomari* (big *tomari*), is when a silkworm feasts on mulberry until its body becomes transparent (*hikiru*). The transparent ones (*hikirihiroi*) are collected and transferred to an artificial nest (*mabushi*) to form a cocoon in each nest partition. (This procedure is called *jozoku* or *yato*.) Seven to eight days after the nest placement, the cocoons are picked out of the nest (*mayukaki*).

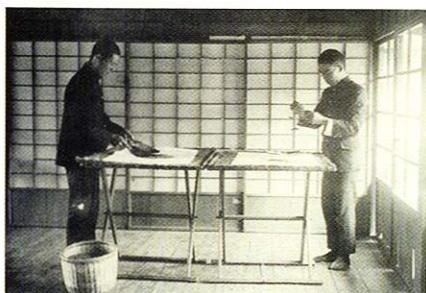
Hikirihiroi and mayukaki work was done exclusively by children and women. Because, all at once many hands were needed, there were many requests to neighbors and relatives. Better cocoons were selected and their fiber unraveled to be packed in cotton sacks for shipment to the silk mill. Inferior cocoons were sold to cocoon brokers or wound for home use. Many sericulture farmers raised three generations of silkworms per year, in spring, early autumn and late autumn. The spring silkworm hatched from about May 8 taking 30 days to reach nest setting stage.



Fig.187 Mulberry leaf and silkworm.



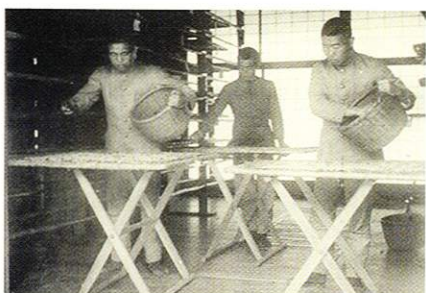
Fig.188 Silkworm raising (Haragayato, 1930s (Showa 10s)). Many silkworms were raised on shelves (*kaikodana*). A thermometer hung on a nearby pillar.



1. Hakitate . Brushing newly-hatched silk worms onto a sheet of paper (sanzashi) with feather brush (haneboki).



2. Mulberry leaf preparation. Finely chopping mulberry leaves for passing through a sieve (kuwaburui) as the silk worm feed.



3. Mulberry leaf feeding. Silk worms placed on a feed stand (konome) are fed mulberry leaf feed.



4. Jozoku. Picking out silk worms for cocoon making and placing them in a compartmented artificial nests made of rice straw, etc. (mabushi).



5. Mayukaki. Painstaking hand removal of cocoons from the artificial nest.



Cocoons in a basket.

30.5 River fishing in the Tama River

The Fussa City area surrounds the mid reaches of the Tama River where river fishing has taken place since ancient times. Ayu was a fish especially well-regarded by the Tokugawa Shogunate during the Edo Period, and also a major item of shipment to the many consumers of Edo. Before the Pacific War, twenty fishermen working during the summer months in Fussa City shipped mainly ayu to restaurants. *Masu* (trout), *koi* (carp), *huna* (crucian carp), *haya* (minnow), *yamabe*, *yamame* (brook trout), *namazu* (catfish), *dojo* (loach) and other local fish were likewise marketed.

The *yoseami* net fishing process involves a partially submerged net in the upper reaches of the river. Fishermen drive ayu and other small fish from downstream into the net. The *seami* process involves a vertical net spanning the river, a *moji* (catch net) on the river bed and rice straw bundles thrown into the river to startle ayu into entering the moji. The *nagabashiri* method involves a river-spanning rope bearing numerous baited fishhooks. Further methods include: the *pechanko* and *anazuri* fishing rod methods; the *kuibari*, *sezuri* and *dobuzuri* artificial fly methods; the *tomozuri* method employing ayu as bait; the *uke* basket (also known as the *do*) with bamboo slats woven into a blind tube and an open end for fish to enter and the *yana*, a slatted bamboo fishing tool.

After the 1957 (Showa 32) completion of the Ogochi dam, under construction before and after the Pacific War, the Tama River flow rate decreased, bringing a sharp decline to the fish population still evident to the present.



Fig.190 Moji fishing (Taisho Period, drawing by SAITO Takiji). Saito, an artist living in Kumagawa, depicted a fishing scene of his time. Fish were driven toward a catch net set in a river.

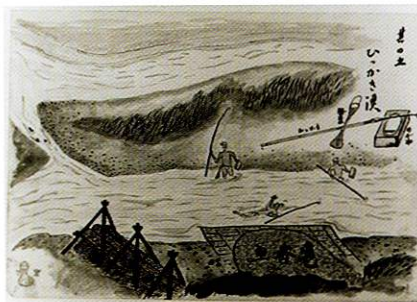


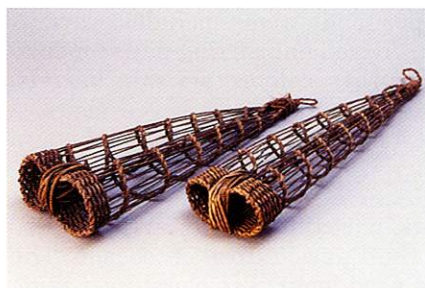
Fig.191 Hikkake (Hikkake) fishing (Taisho Period, drawing by SAITO Takiji). Catching a swimming fish with a hook while peering through a glass-bottomed optical box.



Hakomegane (glass-bottomed box) and mori (harpoons). The fishermen peer into a river while gripping the side of the box by hand or mouth.



Butte. Thin bamboo slats are woven into a scoop-like basket with handle. The device is weighted to sit on the bottom and fish are driven in by foot stamping.



Moji. A kind of uke (capture basket), it is formed by weaving thin bamboo slats with vines and has been used in the middle reaches since ancient times. This tool appears in the Edo Period depictions of ayu fishing and travel writings.



Do. Bamboo slats are woven into a tube. One end is narrowed by binding with rope, the other end remaining open. It is weighted to sit on the river bed like the moji.



Ayu kago basket. This basket was used for transporting ayu fish in the Edo Period. Bamboo leaves were laid on the basket, ayu fish being placed on the leaves. Five ayu kago baskets were placed in a larger basket then two large baskets were bundled as one consignment (100 fishes) for shipping to Edo.



Fish net weaving tool. Net materials included silk, cotton or hemp depending on the fishing method. The tools at the side of the picture are fish net repair needles made of bamboo. This bamboo hook is called abari.

Fig.192 River fishing tools (Fussa City Museum of Local History).

30.6 Artisans' work

Artisans with various tool-making skills lived in the village. *Kagoya* (bamboo craftspeople) made baskets and sieves for agriculture, sericulture and kitchen uses. To fulfill an order, the *kagoya* made the items in their home workroom or on the customer's premises, often in the customer's garden. During the sericulture boom, the *kagoya* were busy weaving silkworm breeding trays (*konome*). Additional bamboo-ware items were; *ayukago* (ayu transporting baskets), *butakago* (pig transporting baskets), *karuko* (soil transporters for well digging, etc.), *noboridama* (post-top ornaments for carp streamers, *koinobori*).

Wooden buckets and barrels were also indispensable items. Through Taisho and early Showa periods, cooper-made items included; various buckets for agricultural and home use, ingredient-mixing pails for sake and soy sauce brewers, bathtubs, sushi trays, celebratory sake barrels, etc. The training period for coopers of those days was seven years. A trainee needed skills enough to make a bathtub or a pair of buckets in a day, to become an independent cooper.

Apart from basket makers and coopers, part-time farmer-artisans also existed. Farmers made items during their agricultural off-season. The *mikinokuchi*, (mascot believed to bring good luck), was worshiped aside the household Shinto altar in a customary welcoming of the New Year. *Mikinokuchi* artisans through Taisho to early Showa periods made those items during the farmers' idle winter season, selling *mikinokuchi* to wholesalers or by peddling. Various styles of *mikinokuchi* existed such as; *tachibana* (citrus style), *myoga* (Japanese ginger), *fukujuso* (adonis), *takarabune* (treasure ship) and *omoto* (Japanese rohdea). *Mikinokuchi* are less common nowadays but can still be seen at year end fairs.

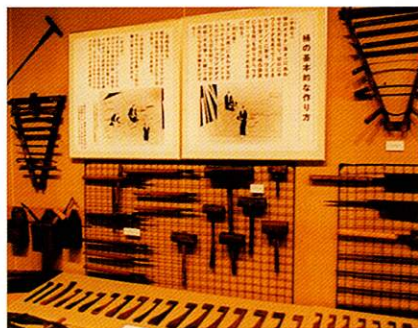


Fig.193 Coopers' tools (Fussa City Museum of Local History).



1. A hatchet is used to cut bamboo to the required length then split it lengthwise.



2. Bamboo is finely split into basket or net making strips (hene).



3. The bamboo strips (hene) are braided outward to form a basket base then upward to form its wall.



4. Braiding the basket's wall.



5. Winding softened bamboo strips (hene) around the basket's lip.



6. The greens-carrying basket is completed.



1. Making the libation bottle (Kami area, 1992 (Heisei 4)). Bamboo is cut by hatchet, slits are made by knife, then further smaller slits help form the pattern.



2. The bamboo patterning is painstakingly tightened by hamper thread gripped in the worker's mouth.



Mikinokuchi is sold at year's end. (Itsukaichi, Akiruno City, 1991 (Heisei 3)).



Mikinokuchi: Three balls on a ring.



Mikinokuchi: Seven balls on a takarabune boat.



Mikinokuchi: tachibana fruits.

Fig.195 The manufacturing process for mikinokuchi (ornamented sake bottle) and several types of mikinokuchi.