**Chapter 1**

**Land Development and Demographic Change in Tamil Nadu from the Late Eighteenth to the Early Twentieth Century[[1]](#footnote-1)\***

Tsukasa Mizushima [[2]](#footnote-2)\*\*

1. **Introduction**

South India was transformed from a sparsely populated to a densely populated region during British colonial rule. Two harsh famines in the late nineteenth century and influenza outbreaks in the late 1910s left the area with many deaths and much illness, but the population more or less continued to increase until 1920, when the region entered an explosive growth period.

Despite climatic and environmental extremes in addition to perennial cycles of excesses and deficiencies, India has been home to one-fifth to one-quarter of the world total population for many centuries (Maddison, 2009). Moreover, the society has always had a large proportion of its population engaged in non-agricultural sectors. An analysis of the *Barnard Records*, or village accounts covering more than 2,000 hamlets[[3]](#endnote-1) of the Jagir (later Chingleput, a district surrounding Madras) in the late 1770s, reveals that the share of the population employed in non-agricultural sectors was nearly half. Nevertheless, the hamlets remained small, as did their numbers of inhabitants. How can we interpret these seemingly contradictory and definitely complex situations in the early modern period?

This paper presents an attempt at disentangling those difficulties by exploring the historical development of agriculture, demographic change, and social transformation in South India from the late 18th century to the early 20th century.

1. **Pre-Colonial System**

How could such a sparsely populated and low-productivity society as South India in the pre-colonial period support a large proportion of non-agriculturists? Two factors must be considered. First is the concentration of agricultural operations in favorable locations, which enabled high productivity. Second is the flexibility of the *mirasi* system, which was able to compensate for highly fluctuating agricultural conditions. We will investigate these two factors first.

Regarding the first point, one must consider the population sizes of the respective hamlets. The average hamlet was as small as 135 inhabitants of 29 houses, according to village records with information covering around 2,300 hamlets in Chingleput prepared at the beginning of the nineteenth century.[[4]](#endnote-2) Given the ever-fluctuating and insufficient quantities of annual rainfall of 300–500 mm (Fig. 1-1), the necessary size of the hamlet for survival is determined fundamentally by water resource availability. Except for those located in deltas such as Tanjavur in Tamil Nadu or Godavari in Andhra Pradesh, most hamlets depended upon tanks constructed for irrigational purposes in the past. The same village records show that 2,381 tanks existed. Most hamlets had one or two. Judging from those records, a tank or two was apparently the necessary condition that enabled people to survive by operating stable agriculture. Although many tanks have immense surface area in rainy seasons, their depths are too shallow to maintain irrigation for more than a few months. People took only those land spots with irrigational facilities by tanks and maintained stable agriculture in these limited spots. The key to maintaining a large population that included a considerable number of non-agriculturists was high productivity on the irrigated land with a small population dependent upon it.

(Insert Fig. 1-1 here)

Regarding the second point, the flexibility of the *mirasi* system, one must recognize fundamental differences between the *mirasi* system and the colonial land system (Kotani et al., 2008). First, it should be described that many contemporary records of the Madras Presidency and some other parts of India include references on the prevalence of the *mirasi* system, although the system was variously referred to as *watan*, *kani*, etc. A detailed description of the *mirasi* system has been presented in the literature (Mizushima, 2006). For that reason, only a very brief description is presented hereinafter.

Under the *mirasi* system, everyone and every institution in the locality was entitled to some proportional share of the local produce in exchange for performing some assigned role in reproducing the local society. *The Barnard Records* of the 1770s and many other colonial records kept from the late 18th century present detailed accounts demonstrating that every hamlet had a sophisticated system of dividing all local produce into many shares. Humans such as government servants, military chiefs, smiths, washermen, barbers, and priests, and institutions such as the state, temples, and mosques were, respectively, allocated proportional shares. The allocation of proportional shares in the *mirasi* system was highly flexible because it was readily adjustable to historical or temporal changes. For example, if some new occupation was created in the locality, then the system might allocate some new share from the total of the produce. As indicated also by the lists of recipients, most people engaged in non-agricultural occupations received shares as well.[[5]](#endnote-3) Regarding the unit of production, it seems possible that a few dozen hamlets constituted a basic unit. If we regard the hamlet population as very small, then it was impossible to sustain the entire reproduction system solely by the efforts of the respective hamlets.[[6]](#endnote-4)

One important aspect related to the *mirasi* system flexibility was its function as a sort of social security system. Considerable disparity existed in the share proportions allocated to the respective recipients, but one can observe that the system provided a sort of social security to the lowest class of people. Even when scarcity of food occurred in bad years, everyone in the system could at least expect a certain amount of produce from the collective product of the locality. The importance of this aspect becomes quite clear if one considers that it would become impossible if the societal unit maintaining the *mirasi* system were to fracture, with the local populace dissolved into many units. That social fracturing actually occurred during the colonial period, as described below.

Consequently, seemingly contradictory circumstances including the small hamlet populations, sparse distribution of people, considerably large proportion of non-agriculturalists, large total population, and the sustained production in the pre-colonial period can be understood in this context.

What occurred with the *mirasi* system during the colonial period? What were the effects of the colonial land policy, especially the *raiyatwari* settlement introduced into the Madras Presidency at the beginning of the nineteenth century? We investigate those issues next.

**3. From Pre-Colonial System to Colonial System**

In contrast to the pre-colonial period, when the *mirasi* system functioned in reproducing local society as a whole, colonial lands defined each land lot as the basic unit for production. The landholders, called *pattadars*, thereby became exclusive holders of the respective land lots.[[7]](#endnote-5)

Under the *raiyatwari* land administration, those who were initially granted exclusive landholding in the respective villages were often the village landlords. These village landlords, called *mirasidars* in the contemporary practice, were recorded in the colonial records. In the pre-colonial period, each village was controlled exclusively by a certain number of *mirasidars*, mainly comprised for members of one or two castes. Under the *raiyatwari* system, land was often allocated exclusively to these *mirasidars* or to their fellow caste members.

The situation of land allocation to a single caste can be verified based on results of a case study of RM village in Trichinopoly district. An investigation into the percentage of landholding held by the respective castes in RM in 2008 with a study of land registers and field interviews indicates that the landholdings were widely spread across several castes including “the untouchables” (Table 1-1). Calculation from the oldest land registers, by contrast, reveals that the Reddiyar caste, composed of *mirasidars*, occupied almost 80 percent of the land in 1864. Since then, their dominant position was reduced greatly every 30 years until recently, when they accounted for less than a quarter of registered landholdings. If one extends this historical trend back to the early nineteenth century, when the *raiyatwari* system was first introduced, then one might conclude that they were the exclusive landholders at the start of the colonial land system.

(Insert Table 1-1 here)

**4. Progress of Land Reclamation during Early Colonial Rule**

Landlords, or the former *mirasidars*, who secured a dominant share of landholding in the *raiyatwari* system, tried to the greatest possible degree to restrict others from occupying land. In sparsely populated areas, labor was often much more important than land. It was necessary for landlords to exclude others from landholding to secure their labor. In contrast, those who were excluded from landholding in the colonial system also lost their customary rights, i.e., their share in the local produce previously allocated in the *mirasi* system. They now desperately needed land for survival. Consequently, severe conflicts erupted between the landholders and non-landholders. Many court cases followed during the period.

The colonial government had to accelerate cultivation to maximize the land revenue. What prevented government efforts was the claim of the *mirasidars*, who maintained that they had ownership over all village territory. For extension of the cultivated area, it was imperative for the government to break their control over all village resources, especially the uncultivated land, and to compel the non-*mirasidars* to occupy them for cultivation. That was never an easy task. The colonial government withstood decades of resistance from the *mirasidars*.

We next examine the processes of land administration in Chingleput. The actual processes were pursued through trial and error.[[8]](#endnote-6) *Dittam*, *swatantram*, *pangu*,and *darkhast* were the main attempts by the colonial government to seek a solution.

In the *dittam* system, *mirasidars*’ lands cultivated by the *payakari* (non-*mirasidar* cultivators working under the *mirasidars*) were to be registered under the chief *mirasidar*’s name. The *payakaris*’ names were not registered in the *patta* (land title). The *payakaris* paid landlord rents (*swatantram*) to the *mirasidar*. *Mirasidars* also had pre-emptive rights to obtain unoccupied land whenever *payakaris* applied for its holding. In short, the government acknowledged *mirasidars* as landlords together with the *mirasidars*’ territorial claim over the entire village. This recognition constituted a deviation from the principle of the *raiyatwari* system based on the premise of the state as the exclusive land owner. Behind this deviation lay the latent power of *mirasidars* in the contemporary period. By sending numerous petitions to the head office of the revenue department in Madras or by deserting to other areas to paralyze revenue collection, *mirasidars* resisted the colonial government attempts to deprive them of their power.

It was nevertheless imperative for the Board of Revenue to increase land revenues by making people take up unoccupied land. In 1834, the Board sent out a circular. It ordered revenue officers to bring *payakaris* into landholdings of unoccupied land on condition it would not infringe on the *mirasidars*’ interests. Despite strong resistance by *mirasidars*, *payakaris* were able to acquire land to an increasing degree. However, when these cases became too frequent, the Board of Revenue sent another circular in 1843. This time it completely banned land grants to *payakaris* against the will of *mirasidars*.

A change of policy occurred again in 1856. The Board of Revenue abolished the *dittam* system and instead introduced the *pangu* system, which divided village lands according to the respective share (*pangu*) of *mirasidars* and registered the divided lands as independent holdings. The new system succeeded in dissolving the base of ties among the *mirasidars* to control entire villages against non-*mirasidars*. Another feature of the *pangu* system was to collect land taxes of all landholdings, even if some lands were not cultivated. Formerly, *mirasidars* registered land ownership to prevent *payakaris* from acquiring land. They later abandoned the land to escape revenue collection. Introduction of the *pangu* system succeeded in preventing such nominal land registration by *mirasidars* and widened the opportunities of *payakaris* to acquire land.

Two additional changes occurred respectively in 1863 and 1869. Throughout the Madras Presidency, a new rule called *darkhast* was introduced in 1863. The rule specified that when someone applied to obtain unoccupied land, a public notice must be posted for 30 days. During that period, anyone claiming a pre-emptive right to the applied land would be able to verify it. In 1869 another *darkhast* rule applicable only to Chingleput was added. Now, those who wanted to nullify the *darkhast* application by others had to make a claim and had to propose acquisition of the land within 30 days. The order of priority was first to *mirasidars* and second to *payakaris* having *patta*. When a *payakari* obtained land, an individual *patta* was to be issued to him. Consequently, the *darkhast* rule imposed many procedures upon *mirasidars* to protect their territorial rights over the entire village against *payakaris*.

After all these government attempts were made, what were left to the *mirasidars* was first to receive landlord rent at the rate of two *annas* per *rupee* of land assessment from the non-*mirasidar* cultivators of their land. In the case of lands for which the landlord rent had never been paid to *mirasidars* and in cases where non-*mirasidars* acquired land, the latter were acknowledged as landholders. In case these lands came to be abandoned and non-*mirasidars* took them up again, they had to pay the landlord rent to *mirasidars*.

In 1870, the *mirasidars* were dealt another blow. The state abolished compensation to the *mirasidars* for the requisition of unoccupied land for public purposes.[[9]](#endnote-7) The state’s land ownership now became absolute and exclusive. It superseded the *mirasidars*’ landlord rights.

In contrast to the decline of *mirasidars*’ power, the opportunities of land acquisition by *payakaris* naturally increased. The value of the landlord’s rent allocated to the *mirasidars* became less and less important because of increasing agricultural prices in the latter half of the nineteenth century.

By 1877, when re-settlement was conducted in Chingleput, the result of the policies in the past decades had become apparent. After the competitive struggles among these three players, the power of the *mirasidars* to control the entire village territory; the interest accrued from that power was greatly reduced.[[10]](#endnote-8) Lands not yet occupied came to be freed from their control and given for development by others. The oligarchical landholding structure created at the beginning of the nineteenth century was broken in many of the villages, too.

It might be added that the process was advanced by the declining power of the *mirasidars*, and also by colonial economic development. Compared to opportunities in local agriculture, better opportunities in Madras and other urban areas lured village landlords into out-migration. First moved the Brahmins. They were followed by non-Brahmin landlords. Their lands in the native villages were eventually passed to the remainder of the villagers, including non-landholders.

Although one important result from these changes was the extension of cultivation in the old established area, we also found rapid progress of land reclamation in peripheral areas that had never been inhabited previously. By fixing lower tax rates in these untouched peripheral areas, the government also anticipated land reclamation. During the nineteenth century, waves of land reclamation did occur. The extent of land development both in the old and new areas is readily apparent when comparing Map 1-1 and Map 1-2, respectively showing cultivated areas of respective hamlets in 1801 and 1871. The respective ratios of *mirasidar* and non-*mirasidar* landholdings in 1877 are also portrayed in Map 1-3. In the old villages where *mirasidars* did exist, their share had become only 41 percent. If the newly developed peripheral areas that did not have *mirasidars* previously are included, then the total percentage owned by the *mirasidars* was as low as 28 percent of all landholdings. These maps reflect the transformation of society.

(Insert Map 1-1 and Map 1-2 in parallel here)

(Insert Map 1-3 here)

These newly opened lands, however, did not promise stable agriculture. They remained untouched because of their harsh conditions for agricultural production. As described above, the scarcity of irrigation water in the tanks did not allow many hamlets to sustain a large population during the pre-colonial period. The same condition continued into the colonial period. The newly opened land both in the old established area and in the newly opened virgin area presented the same difficulty. Even so, the desperate need of many people for land acquisition had already pushed cultivation to the periphery during the nineteenth century. The progress of such land development coupled with rapid population growth deepened the vulnerability of agricultural production and of society at large. We examine that process and its effects next.

**5. Population Increase in the Pre-Census Period**

Land development from the beginning of the nineteenth century progressed concomitantly with high population growth. In fact, India has no reliable information related to population change before 1871 or the pre-Census period. Important resources to ascertain the situation of population at the beginning of the nineteenth century are village accounts prepared at the time of the Permanent Settlement in 1801 in Chingleput. Comparison of hamlet populations with village-level statistics of 1871 Census shows the overall population change in around 2,300 hamlets. An analysis of them leads us to infer that rapid population growth occurred during 1801–1871. The number of households increased from 52,785 to 135,985 (258 percent increase), whereas the population increased from 244,845 to 941,047 (384 percent increase). A comparison of Map 1-4 and Map 1-5 clarifies the change.

(Insert Map 1-4 and Map 1-5 here in parallel)

The unexpectedly high rate of population increase in Chingleput might lead one to suspect that Chingleput was exceptional because of its proximity to Madras, the capital of the Madras Presidency. However, an investigation into the decadal demographic changes of all the districts in Tamil Nadu between 1801 and 1901 demonstrates that such was not the case, as indicated in Fig. 1-2. Many districts of South India showed a similar trend of increase. Rapid population growth took place in the pre-Census period in South India.

(Insert Fig. 1-2 here)

Although the difference of regional population growth rates summarized by Guha is described as a “guesstimate” (Guha, 2001), the implications of that difference might be examined (Table1- 2). South India had a much higher rate of population increase than other parts of India, especially higher than North India, during the pre-Census period. As indicated by Map 1-6, which presents the rate of population increase between 1881 and 1901 by region, the early Census period in the late nineteenth century also shows a higher rate of increase. In short, land and population seemed to develop along similar lines in South India.

(Insert Table 1-2 here)

(Insert Map 1-6 here)

**6. Famine and Recovery**

As discussed up to this point, South India experienced not only demographic and agricultural changes, but also societal changes defined by social and environmental development starting from the early nineteenth century. Related changes included the collapse of the *mirasi* system, the rapid population growth in the pre-Census period, and increasing instability caused by the extension of cultivation into the periphery. This section presents a specific examination of the growing insecurity of lower classes of people who were unable to afford to acquire land under the colonial land system.

Cut from the security system formerly maintained using the *mirasi* system, people of the lower classes tried with great difficulty to survive, but failed to do so, especially during times of severe climatic conditions. Violent climatic fluctuations that struck South India in the late 1870s and 1890s left millions of victims. Without support under the *mirasi* system, however meager it was, they were compelled to leave their villages to seek opportunities that were provided only narrowly by the government. The two famines of the late nineteenth century were actual proof of the growing vulnerability of society against calamities after decades of hasty extension of cultivation and steep demographic change.

South Indian society, however, started recovery from the late nineteenth century. After seeing the limits of further extension of land development around the turn of the century, they sought alternatives and found more reliable resources: underground water. The society moved to its full utilization since then. For instance, Chingleput had only 1,835 wells in around 2,300 hamlets at the beginning of the nineteenth century. Wells in those days were intended solely for drinking purposes. Well irrigation was definitely not widespread in South India at the start of the colonial period. Since then, the number of wells has increased steadily. As presented in Fig. 1-3, the acreage irrigated by wells increased greatly and came to nearly half of that by tanks and reservoirs by the early 1920s. Although temporary stagnation of its development occurred after World War I and after the Great Depression, well irrigation was already emerging as the most promising resource in the late colonial period. It goes without saying that well irrigation has been the most important engine of agricultural expansion since the Green Revolution in the post-independence period.

(Insert Fig. 1-3 here)

The societal reason underlying the development and use of well irrigation must be described because it has become the most important wellspring for agricultural development in South India. Unlike tanks, the maintenance of which necessitates people’s unity and collaboration on a grand scale, well irrigation enables individual usage of water. Reservoirs used to be maintained in the *mirasi* system in the pre-colonial period; the communal practice of their maintenance remained for some time as *kudimarammat* in the colonial period. However, with the decline of unity among the villagers, the tanks played ever less important roles. We know that many tanks have been abandoned already.

After sustaining numerous deaths and debilitating illness from influenza in 1918–19, South India has maintained a high population growth rate until recently. The stability of agriculture maintained through groundwater resources has contributed greatly to growth from the 1920s. Agricultural development, especially after the Green Revolution, has supported a huge population in India. Actually, India has emerged as an important grain exporting country during the past few decades. Under such circumstances, both agriculture and population seem to have entered a new stage with a low total fertility rate (TFR) and abandonment of agriculture on a large scale. These issues will be addressed in other chapters of this book.

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1. \* The original version of this paper was read at the workshop held on 16 December, 2016. [↑](#footnote-ref-1)
2. \*\* Professor of the Graduate School of Humanities and Sociology, The University of Tokyo. [↑](#footnote-ref-2)
3. Some village records have been torn. For that reason, accurate total numbers of hamlets are not available. Most probably, the Jagir had around 2,300 villages in the late 18th century. [↑](#endnote-ref-1)
4. Zamindari Statement, Statement relating to Permanent Settlement of Jagir forwarded as Enclosures to Mr. Greenway’s Letter, 29 March, 1801 *(Permanent Settlement Records*,Vols. 20–22*)*. [↑](#endnote-ref-2)
5. The exceptions were merchants and weavers who were deeply involved in the emerging market economy of the period. [↑](#endnote-ref-3)
6. Although the so-called caste system is usually understood without any reference to the *mirasi* system, the caste system was indeed another expression of the *mirasi* system. Studies of the caste system in the modern period should be linked to the operation of the caste system with the pre-colonial production system in the localities. [↑](#endnote-ref-4)
7. Definitions of land ownership and landholding must be clarified here. The basic principle of the *raiyatwari* system was the *raiyats’* landholding under the state ownership. As discussed later in this chapter, severe resistance arose from the *mirasidars*, who claimed territorial ownership as landlords. When colonial power was not sufficiently strong to subdue the *mirasidar* claims, there existed a sort of double land ownership by the state and by the *mirasidars*. See the discussion presented below. [↑](#endnote-ref-5)
8. Regarding change of colonial land policies in Chingleput during the 19th century described below, see Mizushima (2002) and Crole (1879) for more details. [↑](#endnote-ref-6)
9. Public purposes here included railway construction. [↑](#endnote-ref-7)
10. A calculation from the *1877 Settlement Registers* of Ponneri villages, covering 52 villages having 696 mirasidars in all, indicates that the average landlord rent (swatantram) received by a mirasidar was as little as Rs. 7. [↑](#endnote-ref-8)