

The Great Famine in the 1870s in South India

Akiko Takahashi & Tsukasa Mizushima

India experienced not only demographic and agricultural changes but also societal changes defined by the economic and environmental developments during the British colonial rule that started in full scale from the beginning of the 19th century. Changes here included, among others, the rapid population growth before the first Census in 1871, the increased extension of cultivation into the formerly untouched area, and the collapse of the social survival system (mirasi system) for lower classes as Mizushima's previous studies indicated.

Under the deepening changes, lower classes of people tried with great difficulty to survive during poor harvest seasons when neither the work opportunities nor income was sufficient. Conspicuous "failure" of monsoon hit India in the late 1870s and 1890s and left millions of victims, especially among the lower classes. It compelled them to seek chances in relief camps/houses or made them depend upon gratuities that were narrowly provided by the colonial government.

It looks to me somewhat easygoing if the reasons of the calamities were simply attributed to the "failure" of monsoon or to the laissez-faire policy of the colonial government. Such approach often overlooks the deeply-rooted causes that lay behind temporal crises. What is needed is to locate them in the long processes of transition of the society and to interpret the features of historical events in them.

Previously I argued that the two famines in the late nineteenth century were the proof of the growing vulnerability of the society against natural disasters after decades of hasty extension of cultivation and steep population increase. More specifically, I interpreted that the great famine in the late 1870s was caused by the decades of excessive land development and rapid population increase in the newly opened area that lacked stable irrigational facilities.

Among the findings, however, some contradictory feature emerged through GIS investigation. That is, the hamlets in the old-established stable area seemed to have decreased more population than the newly-opened unstable area during the famine decade of 1870s. If the colonial development process with an excessive exploitation of agricultural resources and rapid population growth had led to instability of the society, the population in the newly-opened unstable area, with poor irrigational facilities, should have decreased more. How can we interpret this contradictory feature?

My "desperate" hypothesis was that the old established area also had newly developed lands within it and had similar damages by the famine. So, my question here is, was my

hypothesis true?

The presentation in the ANGIS 2021 meeting will have a fresh look into the above “hypothesis” with GIS. By taking up around two thousand hamlets in Chingleput district adjacent to Madras (Chennai), the following attempts will be made:

1. to clarify the spatial pattern of population change and land development from the beginning of the 19th century to the famine years of 1877-78,
2. to clarify the spatial pattern of population change during the famine decade of 1870s,
3. to investigate the causes that brought the different spatial patterns in population movement, and
4. to set the future steps to elaborate the argument.

In the course of investigation, the following features in the studied area will be clarified. They are: the population change of all the hamlets in Chingleput between 1801 and 1871, the annual population increase rates in the different periods between 1801 and 2001, the cultivation in 1801, the road networks and the extent of cultivation in 1801, the location of water tanks and the extent of cultivation in 1801, the location of river courses and the extent of cultivation in 1801, the proportion of irrigated land out of the cultivated extent in 1801, the land development and population increase between 1801 and 1871, the increase of cultivated extent between 1801 and 1871, the annual population increase rate between 1801 and 1871, the location of river courses and the population increase between 1801 and 1871, the annual rates of population change between 1801 and 1871, the increase of cultivated extent between 1801 and 1871, and the population change along river courses between 1871 and 1881.

From these investigation, the following observations will be made.

1. The area along the river courses had been developed to a greater extent than any other areas by 1801.
2. Population increased substantially in all the area. But the population in the southern area (especially Madurantakam sub-district) and along the sea coast increased more between 1801 and 1871.
3. During the famine period in the 1870s the area along the river courses lost more population than other area.
4. The southern area and the area along the sea coast that had increased more population did not decrease it as they were from the beginning not dependent upon irrigational facilities.

A possible conclusion regarding the above-mentioned contradictory feature of the spatial patterns of population change is that the population decrease along the river courses (or

the old-established stable area) more than the newly-opened unstable area can be most probably deduced from the failure of monsoon that deprived the old-established stable area of the irrigational base. The newly-developed unstable area, on the other hand, had developed either as dry area or non-agricultural area without dependence upon irrigational facilities, and was, therefore, not much affected by the failure of monsoon. The somewhat contradictory phenomenon observed in my previous studies can be most probably explained in such a way.

Next steps in future would be to clarify the different features of social structure in old and new areas and to dig out social factors that produced differentiated behaviors among classes. This would explore the true cause of fates of the lower classes of people who perished during the famine.