THE TEA INDUSTRY, NEPAL¹

The current study was conducted in one of the tea gardens located in Bhadrapur Municipality at Jhapa District in Eastern Nepal. Tea is primarily grown in five districts in Eastern Nepal and Jhapa accounts for more than 75% of Nepal's tea produced followed by Ilam with produces around one-sixth of Nepal's total tea production (Nepal Trade Information Portal, 2018). The major difference between Ilam and Jhapa is the landscape. Ilam is the hills and Jhapa is the foothills or commonly called as the Terai region of Nepal. Spreading roughly around 500 acres of land the selected tea estate used to be one of the biggest in Nepal. Its space would spread around till the Mechi River, the river that borders India and Nepal.

The selected tea estate involved both indoor factory and outdoor garden (bagaan) work. Research methods comprised questionnaires, participant observation, interviews, medicine mapping and stool sampling. A total of 118 Survey Questionnaires were completed, stool sampling of 112 participants, and interviews were conducted with healthcare providers such as pharmacist, doctors, and ayurvedic practitioners. Adjacent to ethnographic data collection, stool samples were sent to a lab in Kathmandu for microbiological analysis and whole-genome sequencing. Audio-visual data of factories and bagaan have been collected for multimodal analysis.

Given below are some of the preliminary findings of the study:

Profile of the participants:

- Gender Ratio: 75% of participants were female.
- Education: Approximately 90% of females and 50% of males interviewed were uneducated.
- Housing: Approximately 41% of participants are provided housing by their employer; this provision could be followed by precarious housing conditions after retirement.
- Hygiene: There was very limited access to shower facilities and clean drinking water, if any.

Health Care:

- Access: In case of any health problem, the first stop for healthcare is nearby pharmacies and ayurvedic practitioners.
- Injuries: Cuts, wounds, fractures were the general complaints of the tea workers.
- Medicines: Antibiotics and other medicines are usually obtained from the nearby pharmacies.
- AMR: Though the participants do not routinely take antibiotics for their workplace injuries, the analysis of stool samples showed high antimicrobial resistance among them.









Photos: (From Top to Bottom): Map of Nepal where tea are grown; tea being packed indoors; women plucking tea leaves; cupboard of medicines in the sister's health

¹ This sub-study is part of the project "Antimicrobial Resistance and Labour Migration across Healthcare Boundaries in Northern South Asia (AMR@LAB)" funded by Novo Nordisk Foundation (Grant no. NNF21OC0063359)