A photograph of a tea garden worker in Assam, India. The worker is wearing a bright red turban, a white long-sleeved shirt, and a light-colored dhoti with a green and white striped sash. He is leaning over a dense field of tea plants, which are growing in rows. The tea plants have vibrant green leaves. In the background, there is a structure with a thatched roof made of bamboo or similar natural materials, supported by wooden poles. The scene is brightly lit, suggesting a sunny day.

**The Stickiness of Tea
Garden Workers'
Situation in Assam, India**

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Foreword

This research was funded by Arise, an anti-slavery NGO headquartered in London and New York. Arise is working across the world to protect at-risk communities from exploitation. We believe that local groups and their networks hold the key to ending slavery and human trafficking.

This research wouldn't have been possible without the work and coordination of NEWRaN (North East Women Religious and Network against Trafficking).

Arise connected the researchers to NEWRaN in 2020, without which this research wouldn't have been possible. NEWRaN (North East Women Religious and Network against Trafficking) is a network of 3 highly effective local groups, preventing slavery and exploitation in their respective tea garden communities.

Frontline organisations like NEWRaN are better able to protect vulnerable families, raise awareness about the threats of exploitation, and to generate safe and secure incomes for the communities they serve. To find out more about Arise, and anti-slavery efforts in the Assamese tea gardens, visit our website at <https://www.arisefdn.org/>.



The Stickiness of Tea Garden Workers' Situations in Assam, India

Abstract

Tea garden workers in Assam, India continue to face precarious living and working conditions which have led to recent protests by workers' unions and student organizations in Assam. This study examines a survey of over 3,000 tea garden worker respondents in three locations across Assam to understand the material realities of these workers and their families. The authors employ a concept that they term stickiness, drawing on the work of Scott (1976) and Tsing (2006), to describe the theorized interplay between the living and working conditions of plantation life and the vulnerability of the workers. Empirical findings are organized and presented using descriptive statistics around problem areas that provide a broad understanding of the living and working conditions of tea garden workers in Assam. The study also identified a rise in trafficking amongst tea garden families. This study concludes with recommendations from the researchers and the partner organizations, as well as intentions for future inquiry.

Keywords: Assam, Tea Industry, India, Tea Garden, Workers, Poverty, Exploitation, Human Trafficking

The Stickiness of Tea Garden Workers' Situations in Assam, India

Assam, India has been a focus of turmoil and conflict recently (BBC, 2019) due to the marginalization of two million migrant workers by the Indian National Population Register (NPR) (Venkataramanan, 2019). The challenges with migration that the NPR brought to the fore added to unrest among the workers of the vast tea gardens of the region (Dhillon, 2020). Mistreatment and marginalization of tea garden workers has long been known, but the current living and working conditions is actively obscured by political and industry rhetoric (Chynoweth, 2013; Keil, 2020) and supply chain corporate responsibility campaigns (Braga, Strebel, Ionescu-Somers & Seifert, 2012; Copping, 2017; Unilever, n.d.). Despite the discourse on sustainability, visibility, and transparency in the tea industry (Circar, n.d.), limitations remain in terms of the understanding of the scope of the material reality of the contemporary living and working conditions of the tea garden workers (Sodhi & Tang, 2019). As Besky (2008) noted, the notion of *fair trade* in the tea growing regions of India, like Darjeeling and Assam, remains rooted in a neoliberal frame, particularly when oversight of fair-trade schemes come from Western corporate entities, and may actually have detrimental effects on labor organizing and the lived experiences of workers. Workers' potential for collective action are complicated by the diversity of ethnic groups and, ethnicity and linguistic groups represented among the tea garden workers. Many of the 'tea tribes' (Sharma, 2018) are not recognized by the state and considered relative outsiders as their interests are not considered a top concern of the majority Assamese-speaking groups who trace their lineage to the original inhabitants of Assam (Sharma, 2018).

Assam's tea plantation economy began in the early nineteenth century during British colonial rule as immense tracts of forest and jungle were transformed into monocrop farming (Sharma et al., 2011). Colonial development projects, including a railroad system, connected the

comparatively isolated and remote Assam to the greater subcontinent, and facilitated the influx of over one million laborers from across India as contract laborers and indentured workers (Sharma et al., 2011). Most of the workers were members of various tribal minorities considered *Scheduled Tribes*, *Backwards Caste* or *Other Backwards Caste* in official registers while other minorities were not officially recognized groups. Collectively known as Adivasis (or indigenous or aboriginal people), workers from diverse backgrounds were brought into Assam since the beginning of the colonial era (Sharma, 2018). Abuse of workers on plantations was rampant from the start with reports of exploitation from early Indian and British sources alike, and even referred to as ‘thinly veiled slavery’ (Behal, 2010, p. 31). Despite varying improvements over the past two centuries, poor working conditions continue to plague the tea garden workers, and the situation has been at a crisis point for some time.

This study examines empirical data collected by an advocacy and activist organization named NEWRaN, which was founded by a local collective of Catholic nuns in Assam as an extension of their religious ministry work in the region. The purpose of their data collection efforts is to better understand and quantify the living and working conditions of the tea garden workers. The data is organized descriptively, serving as a baseline for longitudinal work. NEWRaN’s advocate and service efforts on behalf of the tea garden workers will continue. Results from the current study will be used to guide future NEWRaN efforts.

The work of NEWRaN is supported by a UK-based partner organization, the Arise Foundation. In collaboration with the authors of this essay, a survey was designed and implemented in two regions of Assam, Upper and Lower Assam, with tea garden workers. The descriptive study presented here is the result of the analysis of this data. The study addresses the context on the tea industry in Assam, workers’ present circumstances, and describes the work of

NEWRaN and the development of this research project. After establishing these contextual features, we connect these specifics to our conceptual tool that we term *stickiness*, which draws on the work of Scott (1976) and Tsing (2005). Although this study is descriptive in nature, we intend these findings to guide recommendations at a variety of levels including both grassroots local, regional, and state wide.

The Tea Industry

India is the second biggest producer of tea in the world (Indian Chamber of Commerce, 2021), and Assam accounts for approximately half of India's tea production (Dhillon, 2020). The East India Company began large plantation-style farming of tea in the colonial era; and in spite of an increase in small land holding tea growers in Assam in recent years, the “[p]roduction of tea in Assam continues to be dominated by large tea estates” (Banerji, Willoughby, & Nandy, 2019, p. 11). Tea in Assam is channeled through a small number of brokers using an auction system. Just seven companies account for 90% of the tea sold to North America and Europe (Larsen, 2016), illustrating the concentrated power of a few key players in the global tea supply chain (Banerji, Willoughby, & Nandy, 2019). As Mishra, Sarma, and Upahdyay (2011) noted, the tea industry has been in crisis since at least the early 1990s, and working and living conditions of tea garden workers have always been at the center of this crisis. Although working conditions have been troubling for some time, tea garden workers have only recently mobilized through strikes and protests (Dutta, 2021).

Workers

The plight of the tea garden workers of Assam has been known for some time (Mishra, Sarma, & Upahdyay, 2011). Biggs, Gupta, Saikia, and Duncan (2018a) found that tea plantations in Assam employed between 160 and over 5000 workers with an average of 1255, 1330, and

1598 in the North Bank, South Bank, and Upper Assam regions respectively (p. 1382). Biggs, Gupta, Saikia, and Duncan (2018b) found that tea garden workers identified human factors (e.g. health, hygiene, nutrition, education) and physical factors (e.g. clean water, electricity, housing) as the most important barriers to advancing their livelihoods in the tea plantation settings in Assam. Despite the 1951 Labour Plantation Act's (PLA), assurances that plantation owners provide permanent workers (and temporary workers after 60 days) with subsidized rations, housing and even land for private farming (Duara & Mallick, 2012), little enforcement of these provisions exists (Mansingh, 2016). Biggs et.al. (2018b) confirmed inconsistency in enforcement of worker protections throughout Assam's tea plantations. Banerji, Willoughby, and Nandy ,(2019) found that on 50 Assam tea estates, workers experienced stagnant below-poverty level wages, with women doing the most labor intensive and lowest paid work on the estates yet having the least representation in labor unions. Banerji, et. al. found "dilapidated or nonexistent" (p. 4) housing and toilets, along with contaminated drinking water, despite legal obligations of tea garden companies to provide these for workers. These issues continue with even recent promises by the government for updated facilities including new high schools in the tea gardens failing to materialize (Kalita, 2021).

Tea garden worker wages (WageIndicator, 2021) continue to be a contentious issue (Banerji & Hussain, 2018) contributing to recent strikes (Dhillon, 2020; Nagaraj, 2020). Nanda (2016) found that despite an agreement by the Indian Government for an increase of the minimum wage to INR 350 per day (\$5.37 USD) in 2016 for unskilled agriculture workers, little enforcement or oversight has occurred. Nanda (2016) estimates that in order for Assam's lowest paid tea workers to reach a livable wage level (INR 400/ \$6.13) their pay would need to more-than-double, which is highly unlikely without enforcement mechanisms in place, and in light of

global supply chain power differentials in the tea industry, volatility of tea prices, and local social structures that date back centuries to the colonial era (Banerji, Willoughby, and Nandy, 2019; Nanda, 2016).

The Work of NEWRaN and Arise Foundation, UK

The initial data collection and survey design for this research project was undertaken by NEWRaN (North East Women Religious and Network against Trafficking) with support from Arise Foundation, UK, as well as in collaboration with the co-authors. NEWRaN is the network of the three women's religious congregations working in North East India, who came together to address tea garden workers issues and to respond to the reports of workers and their families experiencing human trafficking. NEWRaN set out to assess the vulnerability of the tea garden laborers to trafficking and understand the factors that may impact worker's vulnerability. The survey was completed by respondents at three tea gardens in Assam: one tea garden in North Lakhimpur, one tea garden in Sonitpur, and one in Tinsukia. The survey was implemented over a three-month period, from December 2019 to February 2020.

Stickiness as a Conceptual Tool

For theoretical insight we draw on two major works to develop our own theoretical metaphor *stickiness*, Scott's work on the Moral Economy of the Peasant (1976), and Tsing's (2005) work on Friction in Indonesia.

Moral Economy of Peasant

First, we turn to the work of Scott (1976) where he outlined the *moral economy* of rural peasants living at or below subsistence level in Asia (specifically Vietnam and Lower Burma) during and after the colonial eras of those respective regions. This theoretical and historical work is useful in understanding the plight of the tea garden workers today in Assam. Scott illustrates

how subsistence farmers survived through risk-reduction and risk-aversion by hedging resources against drought and famine years to remain at or above subsistence level. Scott employs a powerful metaphor used by Tawney (1969) in his work in China to describe the rural peasant as “a man standing permanently up to the neck in water, so that even a ripple is sufficient to drown him” (in Scott 1979, p. 1), and situates the social arrangements of the peasants as serving to ‘iron out’ those ‘ripples’ (p. 3) negatively impacting the peasant family. Scott contrasts the peasant perspective with the colonial and post-colonial global capitalist moral worldview encouraging risk-taking through investment in large-scale extractive approaches to agriculture and trade to maximize profit.

Peasants expect lean years of drought or famine and survival in these difficult times is done through family/kinship networks. As well, communal safety nets of food and land sharing, and patronage to local elites provide support. Lands held as commons (accessible and usable to any villager based on locally developed, acknowledged, accepted and culturally situated rules) played a significant role in families’ ability to plant diverse garden crops when cash-crop prices fluctuated, or disease or pest infestation destroyed a particular crop. Scott also outlines risk-reduction strategies such as self-help which include ‘petty trade, small crafts, casual wage labor, or even migration’ (p. 27).

Colonial control shifted the use of the commons to bureaucratically administered property rights, in part to generate various taxes to support urban bureaucracies and infrastructure projects (Scott, 1979). Over time and through a mixture of corruption by government officials, social advantages of local elite, and the growth of large-scale cash-crop endeavors funded by colonial investment, subsistence farming shifted to tenant farming, and then to wage laborers. The trajectory for large numbers of subsistence farmers in the colonial era was

from independent farming families with informal but stable local social security networks and approaches that helped families weather difficult years, to wage laborers. These laborers are vulnerable to global price fluctuations and exploitative labor practices, and lack the informal supports facilitated via previous social relations. Once more we see a people stand precariously, with the water up to their necks.

In Assam, we see large numbers of tea garden workers, who are at the latter end of the aforementioned trajectory, with none of the social support found in independent village-based subsistence farming. Instead, tea garden workers and their families face all of the precariousness of global market price fluctuations, exploitative labor practices and exposure to negative consequences, yet reap none of the benefits of global capitalism. The disadvantages of extractive plantation-based agribusiness trickle down to the garden workers, without any of the advantages.

Scott (1979) is particularly useful in understanding why tea garden workers are only recently pushed to protest and strike with his notion of subsistence rights. Subsistence and tenant farmers across colonial Southeast Asia tolerated a variety of colonial taxes and other burdens up to a perceived line of subsistence, past the point of which, their survival was hampered. Metaphorically, when the state or local elites created ripples that were too great, peasant revolts in the colonial era, or worker strikes in the present day, are inevitable.

Friction

Next, we turn to Anna Tsing's (2005) concept of *friction* employed to describe the complex interconnectedness between global capitalism and the realities of local forest-dwelling subsistence farmers in Indonesia. Tsing's friction explains the ways in which the jungles and forests of Indonesian regions of Kalimantan were transformed over time. Beginning with use of traditional swidden-based approaches employed by forest dwelling subsistence farmers, a

transformation moved to the use of large-scale agribusiness approaches to timber extraction and cultivation, and finally oil palm and other cash crop plantation-based approaches. In Indonesia, friction manifests across contexts in the interactions between various actors (e.g. forest dwellers, corporations, prospectors, tourists, government officials). This friction between actors makes for differential types and levels of: environmental degradation, exploitation of laborers, assumptions about land and resource use, displacement of subsistence farmers, governmental interference, NGO advocacy, alliances between interest groups, and amounts of foreign investment. Friction provides insight into the continuously emergent nature of material encounters between actors as diverse as hedge fund managers, forest dwellers, and environmental activists.

In the context of the tea garden workers of Assam, the notion of friction helps us to better recognize the differential nature across tea garden worker experiences, variably influenced by location, specific tea garden management approaches, the tea industry in general, activists and NGOs, the Indian government, the media, and other emergent groups. Friction also illuminates how unique alliances form in emergent ways to provide circumstances ripe for change. In Assam that alliance is between tea garden workers and university students, both of whom have organized protests and advocacy events to pressure officials to improve wages, working conditions, and status (Chakraborty, 2021; Sentinel Digital Desk 2021).

Stickiness

Scott (1979) and Tsing (2005) led us to theorize the varying and compounding issues, barriers, and systems connected to the tea garden workers in Assam as *sticky*, or how those *sticky* elements keep tea garden workers *stuck* in their problematic situations. While no one layer that we unpack in this study applies equally to each individual tea garden worker or their family, each sticky element compounds in increasing yet differing ways to hold these workers in place,

reducing their abilities to leave their circumstances, to improve their situation or that of their families and children. Based on the data examined, stickiness perpetuates the circumstances that lead to further exploitation and mistreatment in contingent and emergent ways, and transcends typical neoliberal frames of development and policy. While our data does not permit causal inference, our data does illuminate the poverty that can theoretically be linked to stickiness.

We theorize stickiness as both formal and informal, although we acknowledge overlap between the two. Formal stickiness, in our conception, comes from the concrete ways in which tea garden workers are stuck in their situations. Examples might be indebtedness to tea garden companies that is documented by tea garden management on some sort of ledger or accounting system. Although these accounting systems may not even be seen by the worker themselves and workers may be unclear as to how much they are actually indebted to the company, they still symbolize concrete debt. Often this debt is incurred due to purchasing provisions through the company, or through the costs for housing, water, and other basic necessities paid to the company in difficult-to-trace ways. Another formal example of stickiness may be tea garden management's withholding of travel documentation, ID cards, or passports of workers. Worker contracts may be a form of formal stickiness, and some contracts of tea garden workers may include several members of a family, or even an entire family. Contracts may also concretely specify provision by the company of housing, healthcare, education, or other benefits.

Informal stickiness, which we conceptualize as social, cultural, or normative aspects of tea garden workers' situations, may also have intertwined impacts on tea garden workers' ability to change their situation, move jobs, or improve their social mobility. Examples of informal stickiness may be religious or cultural beliefs that undergird workers' acceptance of their *lot in life*. Informal stickiness might arise in the form of indebtedness as well, but in the form of in-

kind or financial support through kinship networks, or tea garden worker community collective support. Finally, informal stickiness may be purely attitudinal, as exemplified in Scott's (1979) moral economy of the peasant.

While we acknowledge the negative connotation with stickiness as described above, we also remain open to the potential benefits of stickiness, as well, which may include community solidarity as well as common frames for alliances and social movements (Chakraborty, 2021; Sentinel Digital Desk 2021). We acknowledge the need first to gain a broader understanding of the tea worker context through a quantitative approach.

Method

Research Questions

The current study focuses on two primary research questions. Research Question 1: What are the problem factors and sources of vulnerability of the tea garden workers? Research Question 2: What is the extent of trafficking given tea garden workers and who tends to be victimized? Though RQ 1 & RQ 2 appear to stand alone, we are using the conceptual tool, stickiness, to bridge the problem factors and sources of vulnerability to the recent rise in trafficking that has been observed. While the data does not permit causal inferencing, the researchers combine data analysis and theoretic logic to point toward a “better and deeper understanding of the circumstances under which a person is forced to migrate and then vulnerable to trafficking, kidnapping, missing, forced to organ extraction etc” (NEWRaN, 2020. p. 20).

Description of Data Collection Methods

A baseline survey was created by NEWRaN in order to understand the living and working conditions of the tea garden workers. NEWRaN developed Computerized Assisted

Personal Inventory (CAPI) to structure the survey which was then collected via KoBoCollect (a mobile application) beginning December 2019 through February 2020. Led by a team coordinator, three supervisors and 15 enumerators collected data across three tea estates in the state of Assam India: North Lakhimpur, Sonitpur, and Tinsukia. In each of the three gardens, the goal was to survey approximately 1000 households across a total of 30 villages or worker housing areas known as *garden lines* (10 from each tea garden). A total of 3217 households were accessed and surveyed. In each case, the head of the household responded to the survey. NEWRaN's objective for choosing the survey approach was to move beyond anecdotal understanding of the issues and gain a broader perspective on the scope of the issues within the gardens in which they work. IRB approval was also obtained through a co-author's educational institution.

The survey employed both quantitative and qualitative items; however, only the quantitative responses will be addressed in the current study. As taken from the initial report produced by NEWRaN (2020), the survey "...was expected to give accurate and authentic information on the situation and the problem factors" (p. 20). By examining both the push factors (what the current paper addresses as *stickiness*) and the pull factors (the desire for a better life), the survey was intended "to identify the causes of vulnerability of the people in tea gardens to trafficking" (NEWRaN, 2020, p. 21) including assessment of working conditions, living conditions, and wages. The researchers acknowledge the limitation of the quantitative approach in terms of providing individual lived experiences of the tea garden workers, however, this study was conceptualized as a foundational examination of the broader issues, with the intention of further exploration. With the onset of the COVID-19 pandemic, this further exploration was

delayed. The findings of this study present serve as a practical baseline given the problem factors and causes of vulnerability.

Description of Households/Participants

A total of 3,217 households were surveyed as part of the study. Typically, the head of the household responded to survey questions. Of the total number of households, 99.7% (3207) belonged to *Other Backward Castes/Backward Castes* (OBC/BC). Of the total surveyed, 81.0% (2,605) were married, 12.6% (405) widowed, 5.6% (179) single with the remaining < 1% (28) separated or divorced.

The households sampled represented a multilinguistic population accounting for more than 18 different languages spoken. Sadri was frequently recognized as the primary language spoken (72.2%, 2,324), followed by Assamese (63.2%, 2,033), Hindi (46.0%, 1,478), Odia (26.5%, 853) and Mundari (16.6%, 532). Other languages reported include Santhali, English, Oraon, Kharia, Bengali, Telugu, Ho, Bodo, Khasmiri, Sambalpuri, Kannada, and Tamil.

The economic status of the households revealed dramatic consistency across those surveyed. With the exception of 9 households, all respondents indicated a monthly income of less than Rs. 10,000 (equivalent to approximately \$134 USD as of August, 2021). The authors of the survey note that “for all the expenses of the house, such as food, medicine, education of the children... The meagre amount of Rs. 10,000 in a household is a matter of concern” (NEWRaN, 2020, p. 66).

One important issue in the data is generational tea garden employment. Respondents were asked if their grandparents lived and worked on the tea estates. Of the total 3,217 households, 85.3% (2,734) indicated “Yes”, 13.9% (446) indicated “No”, with the remaining (37) not knowing. When asked roughly how long they had lived in their present tea garden

(taking into consideration that employment in the tea gardens is generational), the respondents indicated an average of 72.8 years ($SD = 55.0$) with responses ranging as high as 200 years. Regarding migration, roughly one third (35.5%, 1,143 households) reported family migration in the past with the remainder not being aware of any past migration. Reasons for migration included employment (46.3%, 1,067), marriage (5.1%, 165), and shifting of the family (4.7%, 150).

NEWRaN (2020) reported “Majority of the households lived in the gardens as labourers for 100 and more years. The labourers currently engaged in the garden works are almost all born and brought up in the same garden” (NEWRaN, 2020, p. 67).

Having a written job contract is an essential legal requirement in tea garden employment. Of households surveyed, 65.1% (2,093) reported having a written contract with 1,033 respondents (32.1%) indicated having an oral contract. In some cases, the contract covered only the head of the household (57%, 1,833) while other family members (along with the head of household) were covered for 1,293 (40%) respondents. A total of 91 respondents (2.85%) indicated that they did not have a contract.

Description of Data Analysis Methods

The analysis strategy for Research Question 1: (What are the problem factors and sources of vulnerability of the tea garden workers?) is descriptive in nature. Our goal is to enumerate the problem factors by providing the percentages (accompanied by raw numbers) of tea garden workers that report having (or lacking) resources that can be linked to vulnerability.

The analysis strategy for Research Question 2 (What is the extent of trafficking given tea garden workers and who tends to be victimized?) is also descriptive. Our goal is to provide a clear, quantified picture of trends in human trafficking in the tea gardens.

Results

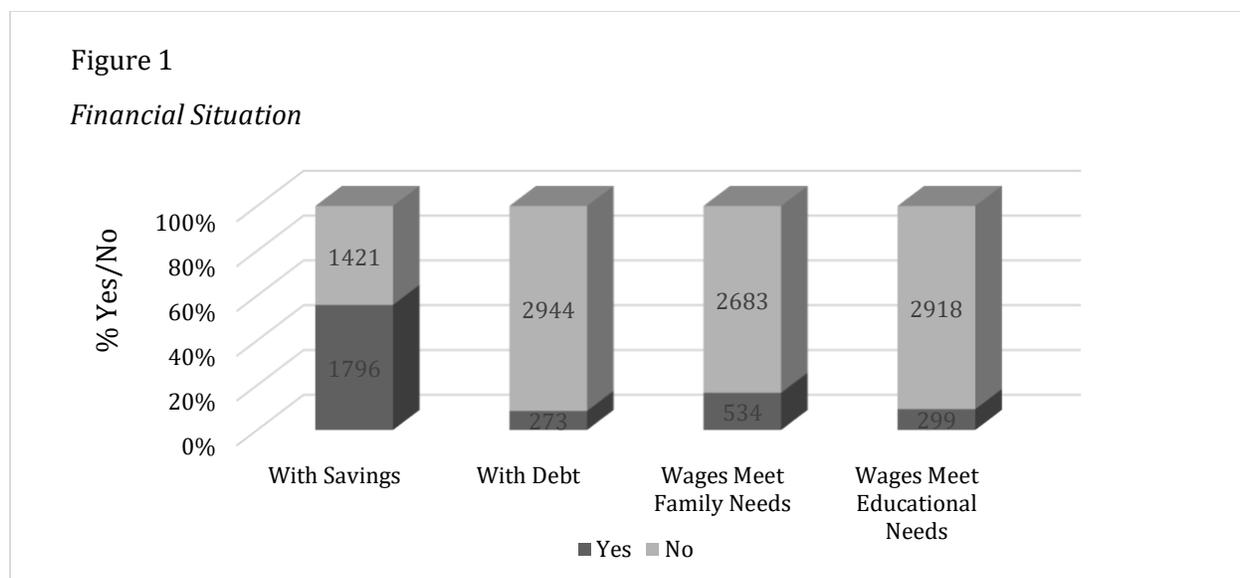
RQ 1: What are the Problem Factors and Sources of Vulnerability of the Tea Garden Workers?

The results for the first research question come from the tea garden head of household/worker responses to survey items targeting problem factors. In keeping with the stickiness metaphor, we suggest that these problem factors facilitate vulnerability, thus resulting in *stickiness*. Five problem areas identified given then household survey. These five areas pertain to: finances, education, documentation, organizational structure, and health related.

I. Financial Problem Factors

In order to describe the financial situation of the respondents (see Figure 1), we have organized the data around four items, whether the respondents have savings (yes/no), whether the respondents have debt (yes/no), whether the respondent's wage is enough to cover the basic needs of their family (yes/no), and whether the wages are enough to pay for their children's education (yes/no). Results suggest obvious challenges to financial stability. While some respondents carry savings, generally we see that their income is insufficient to meet overall needs.

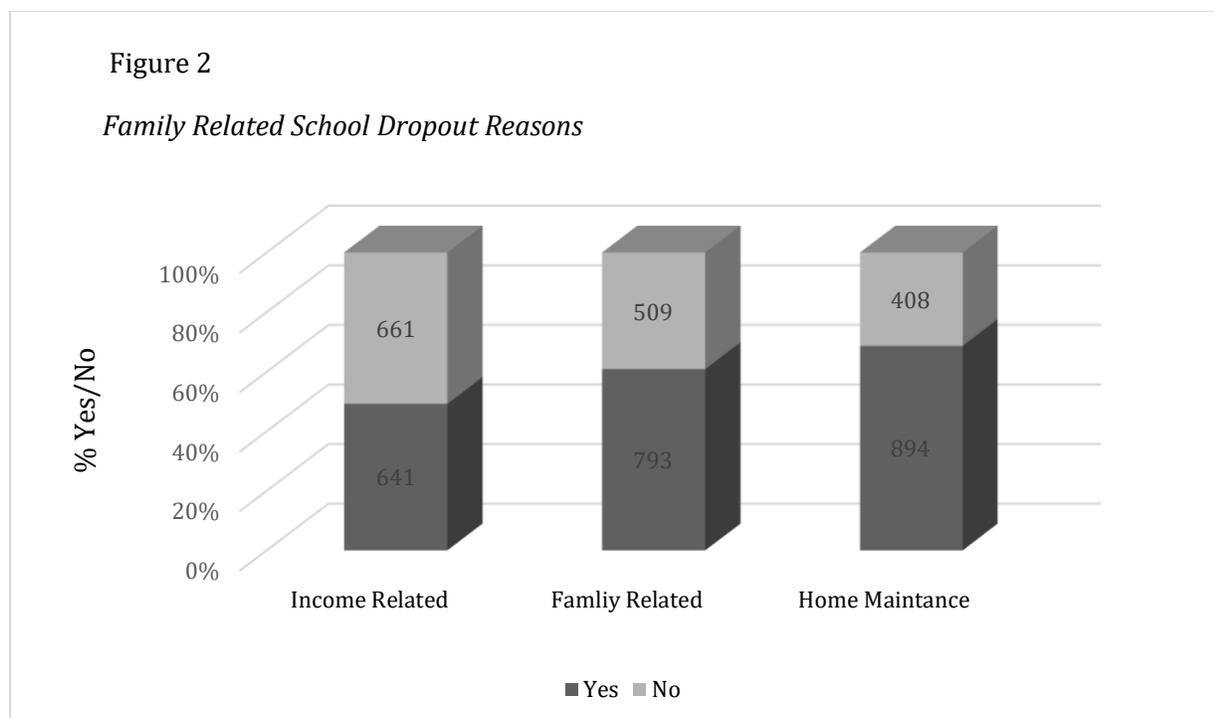
Past research has identified dual effects of poverty. The obvious, primary effect is that a lack of financial resources limits access to food, medicine, and resources in general. Secondary effects, psychological in nature, recognize that our mental resources can be overwhelmed thus further exacerbating the situation (Mehra, 2015). Respondents face numerous challenges given their financial situation.



II. Educational Problem Factors

In order to describe the level of education of the respondents, we have organized the data around two items, whether the respondents (in this case the head of the household) attended school (no school at all/some school/matriculated) and whether they would like to continue studying. Results suggest that the majority of respondents lack educational experience (1,450, 45.1% no schooling at all and 1,281, 39.8% reporting some schooling), with only 486 (15.1%) completing matriculation. For tea garden workers that responded to the item asking whether they would like to continue studying, 23.2% (746) reported “Yes” with 16.6% (535) reporting “No”.

When examining the reasons that respondents noted for discontinuing their education, the largest percentage (47.7%, 1,302) reported family pressure. Other reasons include being unable to pay fees (21.6%, 591) and not considering education necessary (26.5%, 724). When asked about the reasons for family pressure (See Figure 2), responses continue to reflect income related reasons (alongside other variables) as a limiting factor.



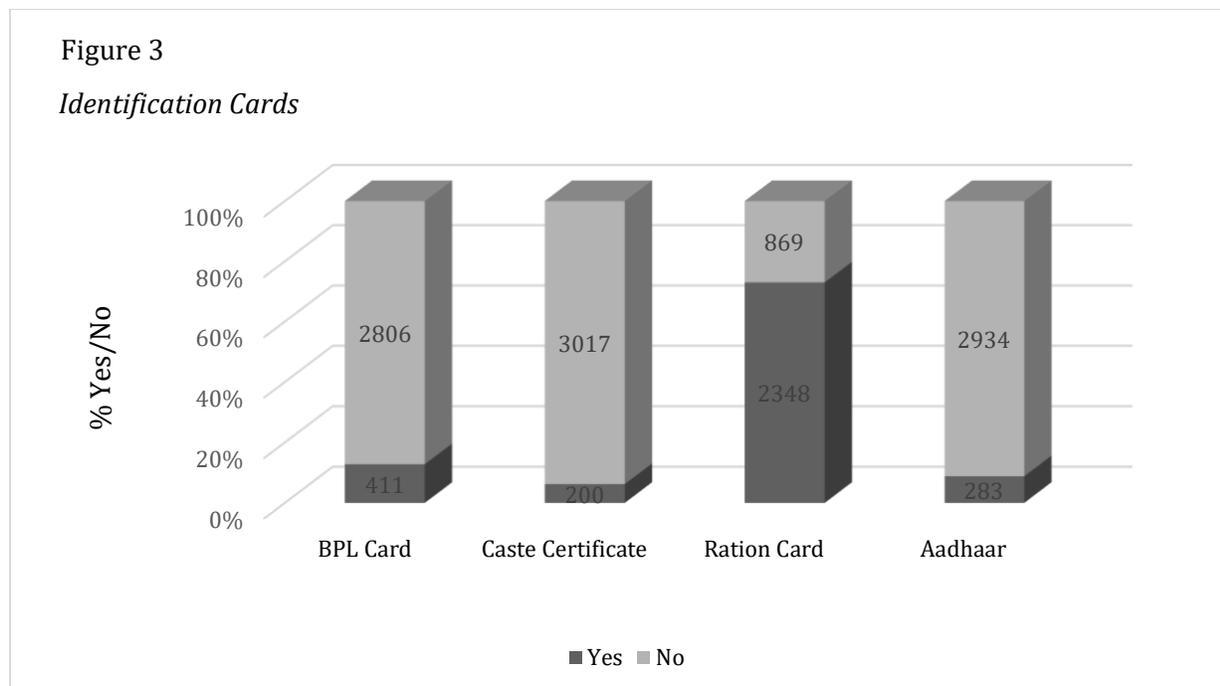
III. Documentation Problem Factors

To assess the extent to which respondents could access welfare schemes from the government and educational opportunities, the survey included 16 items regarding identity cards. As basic documentation is required in order to access government welfare programs in specific Indian states, not having such documents can further perpetuate poverty and amplify vulnerability leading to *stickiness*. Figure 3, highlights four specific documents - Below Poverty Line (BPL) Card, Caste Certificate, and Ration Card that are considered necessary to access governmental welfare. Aadhaar (or one's Aadhaar number) is a 12-digit unique number issued by the Unique Identification Authority of India (UIDAI). This Aadhaar card is also needed to be eligible for admissions to educational institutions.

Respondents, when asked about having access to either social/employee welfare schemes or government schemes, reported "Yes" in 1,824 households (56.7%) and "No" in 1,393 (43.3%) households. Lastly, 81.0% (2,605) reported that they had never had their documents confiscated.

The 19.0% (612) that reported having their documents confiscated at some point, in some instances, reported having their documents taken as many as 2-3 times.

Results pertaining to documentation reflect issues with possession of the proper paperwork which then can exacerbate other areas, particularly when it comes to accessing government schemas and mobility throughout the country.

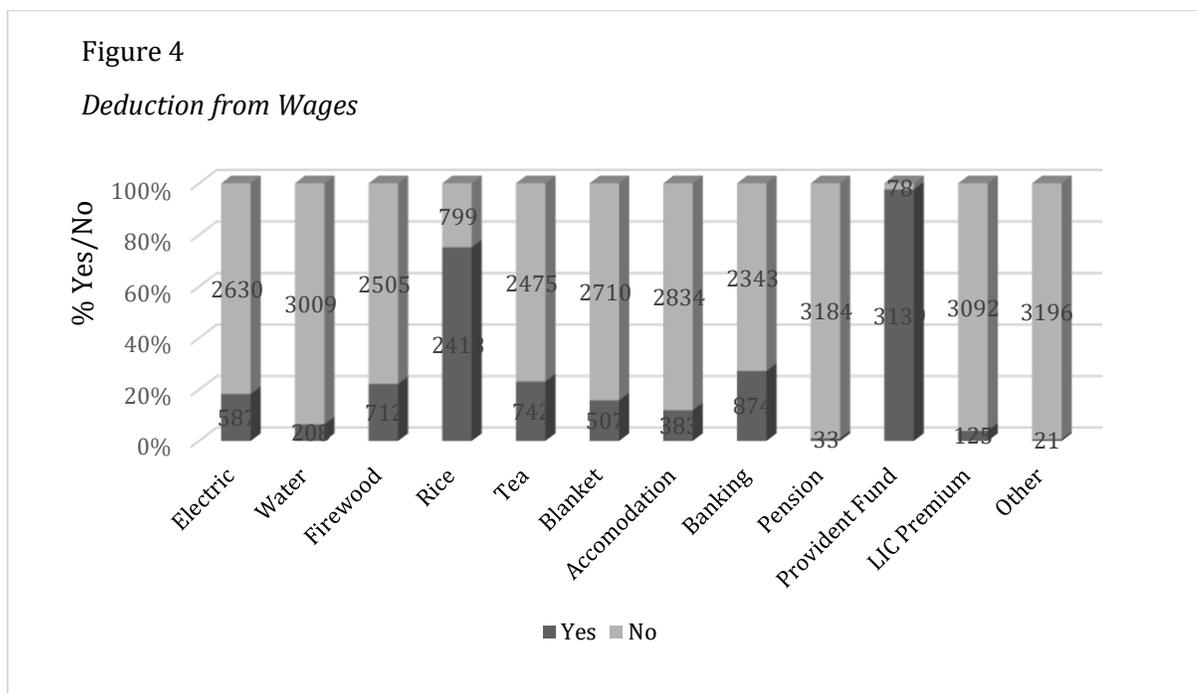


IV. Organizational Problem Factors

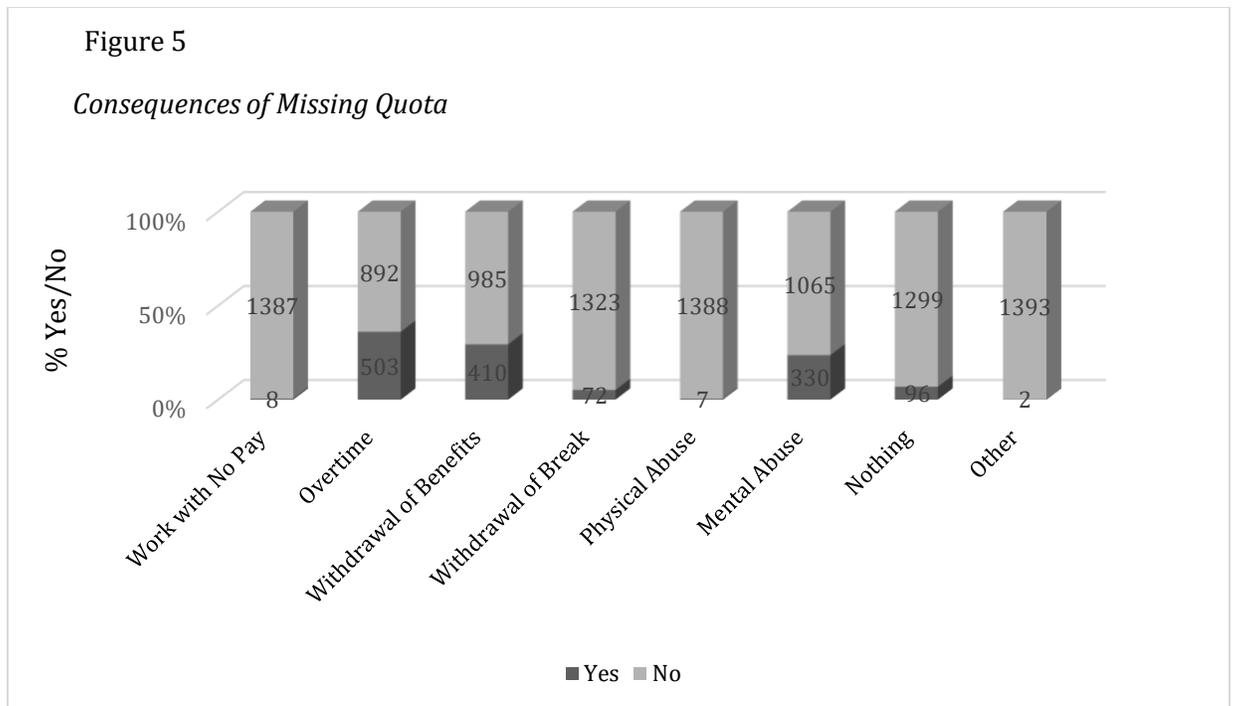
One of the less visible layers of stickiness is that of the organizational structure the tea garden workers find themselves forced to navigate. In this section, we address deductions from payment, consequences of not meeting quota, and management attitude/relations.

Tea garden workers receive payment every two weeks, with the majority of respondents indicating cash payment (98.5%, 3,170). The cash a worker receives has already had deductions (by the garden estate) made. Figure 4 highlights said deductions. While deductions for rice and Provident Fund tend to occur with the greatest frequency, it is to be noted that there are at least a

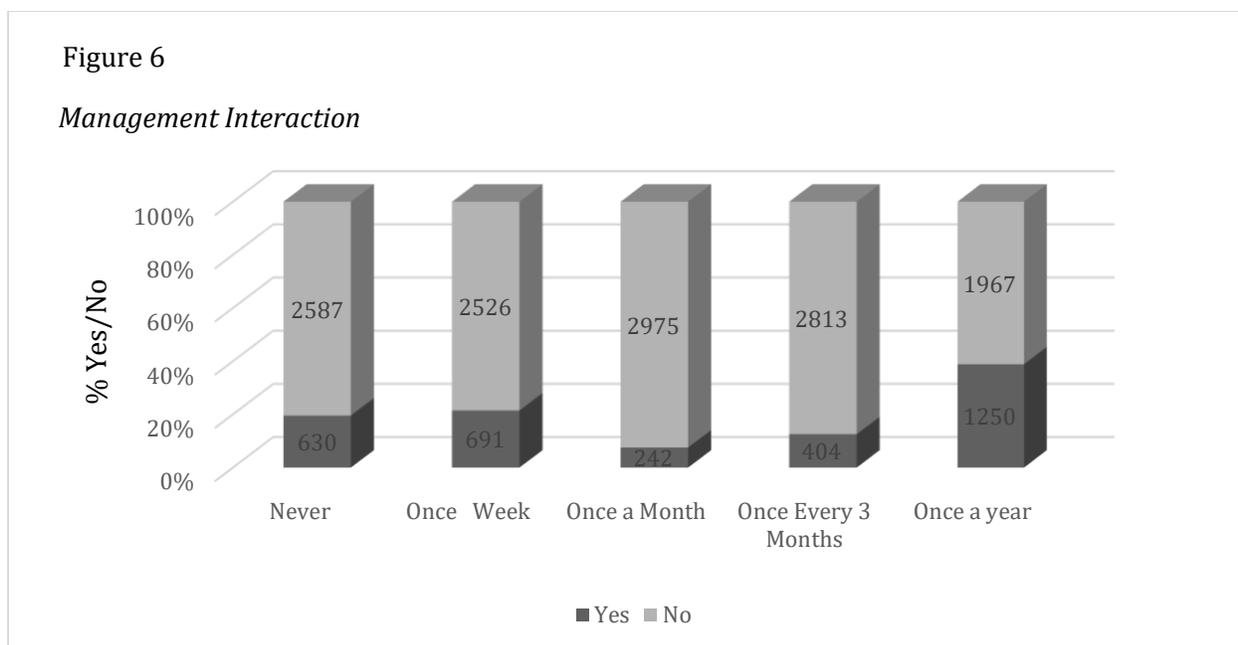
dozen possible deductions that could be made. These deductions are controlled by the tea garden estate with little documentation provided to the workers.



Tea garden workers are expected to meet a daily quota for picking the tea leaves. If an amount of tea leaves greater than the quota is picked, they may be paid more. Roughly two-thirds (63.66%, 2,048) of respondents reported having missed their quota at least once per year. Given the total number of respondents, 42.0% (1351) missed their quote just once a year, 17.1% (550) missed once a quarter, 3.3% (105) missed once a month, 1.1% (36) missed once a week, and 0.2% (6) missed daily. Figure 5 illustrates the consequences of missing one's quota with frequency of consequences reported given the responses from 1395 workers. Not included in the table is a deduction from their wage comparable to the amount falling short. Beyond having a pay deduction, we see that a variety of disciplinary techniques are utilized by tea garden management including mental and physical abuse, although on an unclear scale.



The frequency with which the tea garden workers interact with management (see Figure 6) and the quality of those interactions illustrate a general disconnection between laborers and management. The majority of tea garden workers (58%, 1,880) interact with management, at most, once a year.

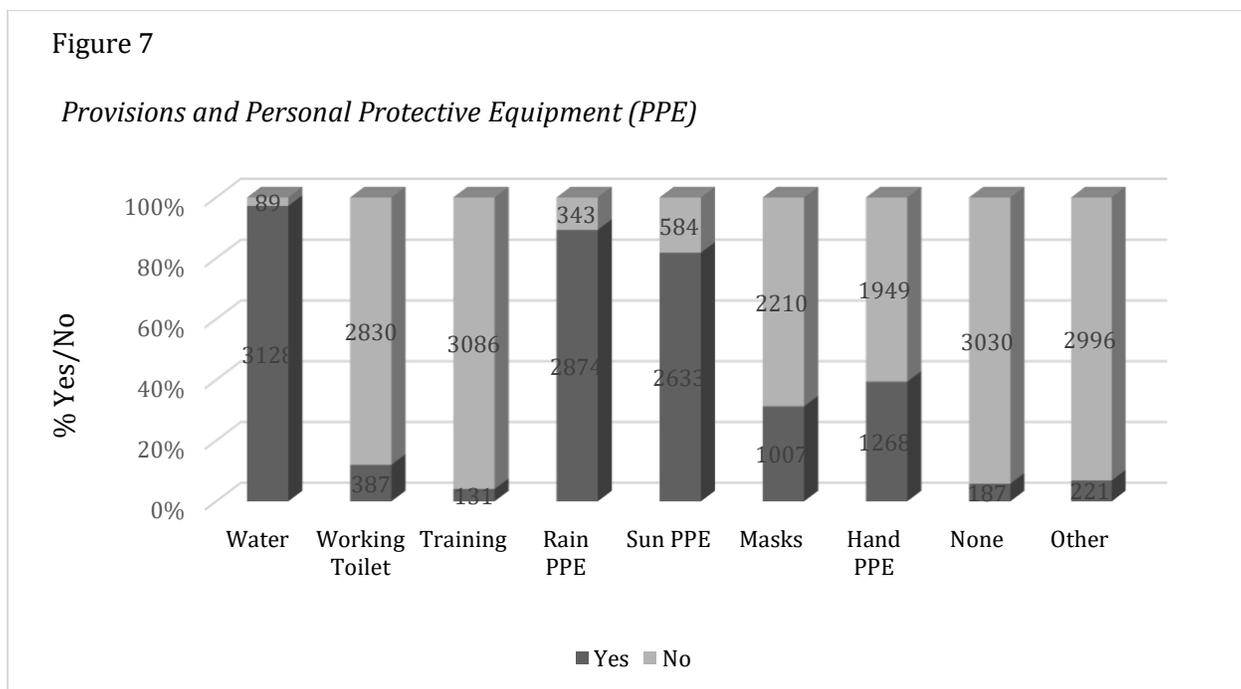


While interactions with the management tends to be infrequent, the tea garden workers have a generally favorable attitude toward management. The majority of responses (87%, 2,811) tended to report favorable attributes, agreeing with the use of terms like “caring”, “respectful”, “friendly”, and “helpful”. Only a small minority of respondents indicated that terms such as “indifferent” (.5%, 165) or “threatening” (.1%, 3) were apt descriptors.

V. Health-Related Problem Factors

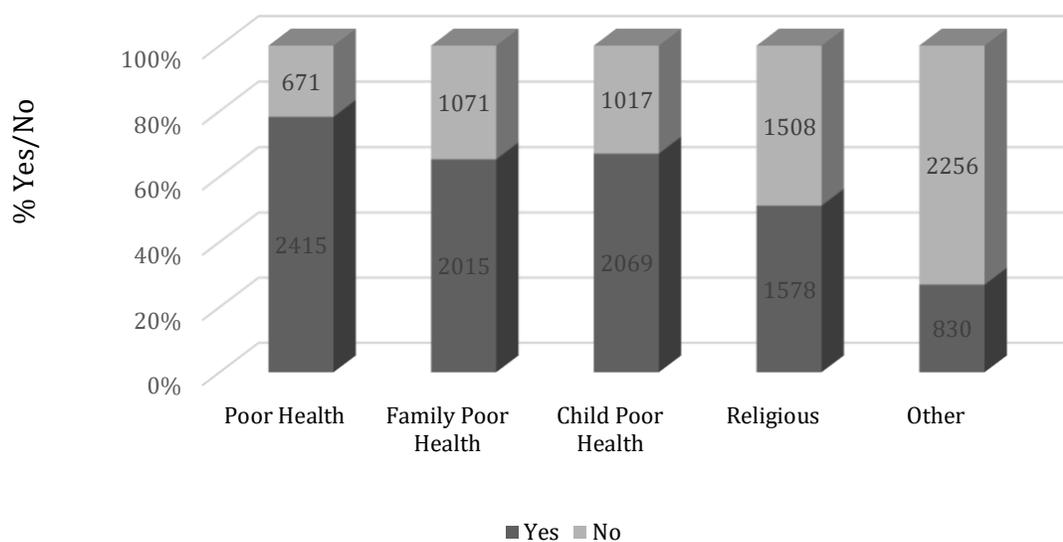
Tea garden workers are expected to labor in the tea garden, plucking tea leaves, as part of their described work duty. Sickness and injury constitute a major threat to one’s ability to work and level of productivity. Of importance is that the vast majority of tea garden workers are without training (95.9%, 3,086) for their job. As NEWRaN stated, “...it was presumed that the family members knew the job as they had some exposure with their elders to the job” (2020, p. 37). Figure 7 illustrates a variety of provisions, as provided by the tea estate to workers, that can be considered relevant to the workers’ overall physical health including Personal Protective Equipment (PPE). The results indicate varying levels of PPE provided. NEWRaN noted that a

majority of workers reported management only providing PPE “...when there was an inspection in the garden by the auditors” (2020, p. 39).



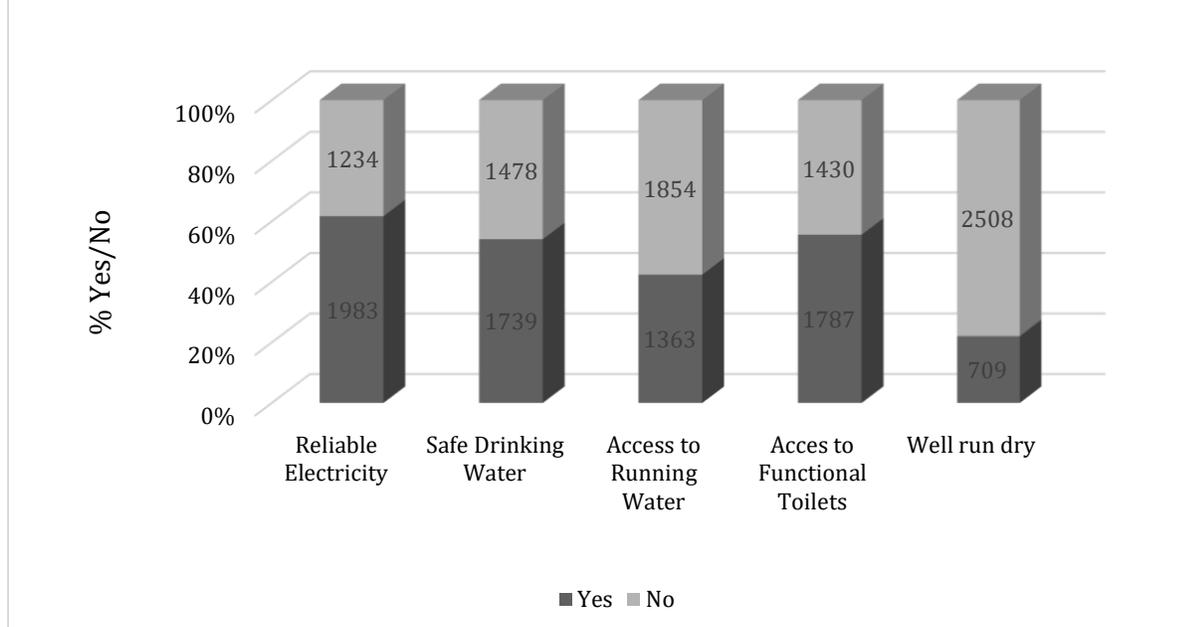
Approximately 96% (3,086) of respondents indicated being absent from work at least once during the past year, and the survey included an item assessing reasons for workplace absence. In this case, respondents could nominate more than one possible reason for missing work (see Figure 8). Missing work for problematic reasons (the respondent, their family, or their child) was common. Given the nature of the tea garden work and the quota requirement, we can envision tension between the need to work and the need to care for one’s own health and the health of loved ones.

Figure 8

Reasons for Workplace Absence

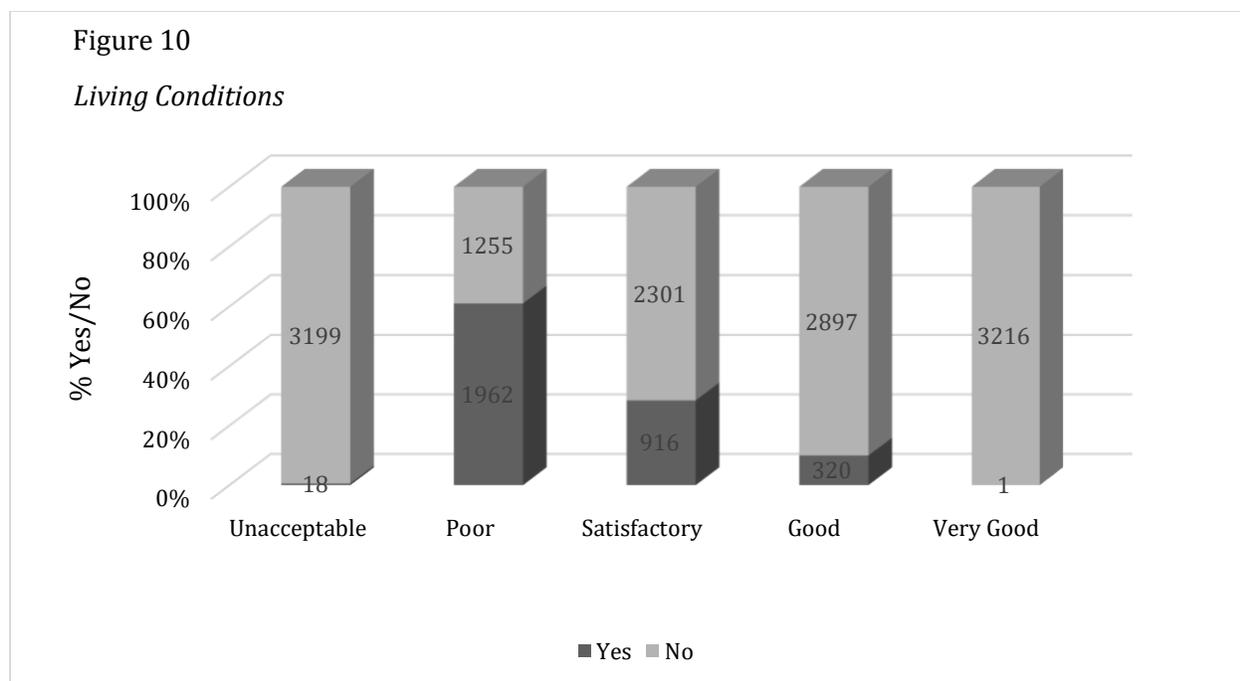
Roughly two-thirds of respondents indicated having housing linked to their employment (65.8%, 2,188). Figure 9 highlights the extent to which basic household services are operational given the workers housing, regardless of whether housing is provided by the tea estate. These results indicate less than ideal circumstances for the tea garden workers. One can imagine the difficulties and negative health consequences that accompany lacking access to safe water and functional toilets.

Figure 9

Household Services

Lastly, we include one final item summarizing the tea garden workers' response to an item asking, "how would you describe your living conditions?" (see Figure 10). Again, it is clear that the living conditions accessible to the tea garden workers (whether provided by the tea garden estate or otherwise) are not meeting the needs of the tea garden workers. According to the NEWRaN report,

Studies elsewhere had shown that the accommodation facilities provided by the management are often very poor. The two room houses would not have ventilation, floor would be of mud, and they cooked food and slept in the same room which posed hazards to health. The present study corroborates with the findings of earlier ones. (2020, p. 45).

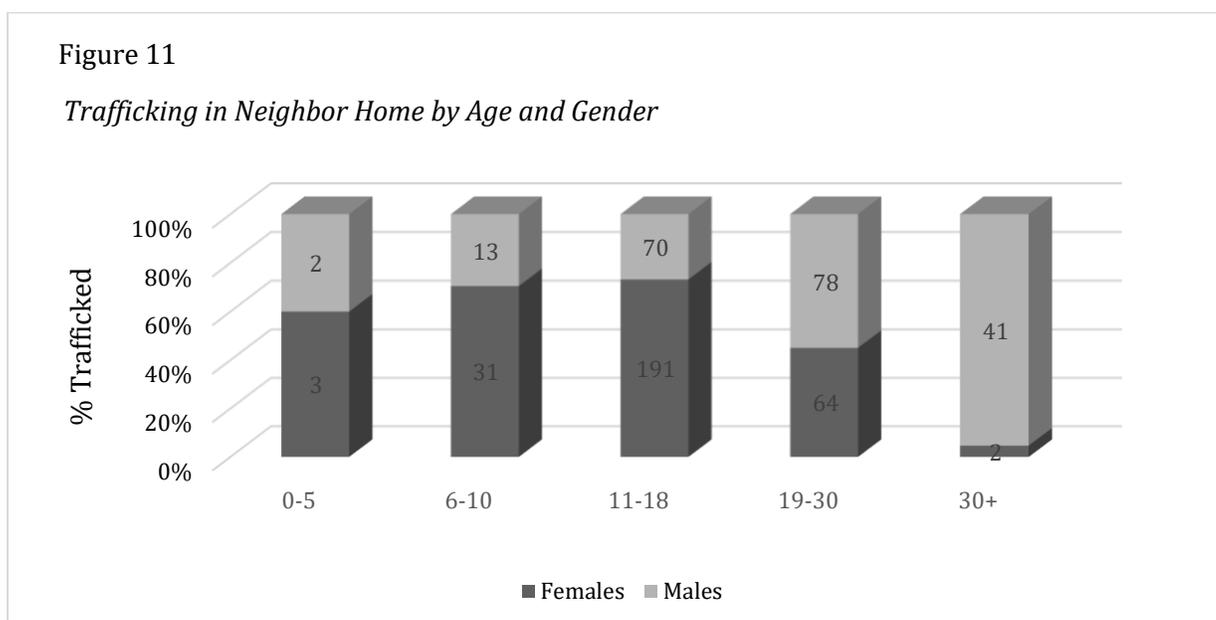


RQ 2: What is the Extent of Trafficking Given Tea Garden Workers and Who Tends to be Victimized?

The results for the second research question highlight a marked increase in trafficking beginning roughly 2016/2017. While this results section will use the term “trafficking”, the actual question posed to respondents was “Has this event (trafficking, kidnapping, sale, missing) ever happened in this household?”.

Of the 3,217 households assessed, 144 (4.48%) reported incidents of trafficking with roughly 74% of those instances (107) having occurred in the past three years. The total number of victims reported trafficked across households indicated was 175 persons. Instances of trafficking occurring between 4 years ago and 20 years ago constitute only 37 of the total incidents. Comparing by gender, females account for 62.3% (109) of trafficking cases with males accounting for 37.7% (66). The majority of respondents recognize that trafficking is a crime (97.1%, 3,123).

A follow-up question asked “Do you know of a person trafficked from the neighboring household?”. Of the households surveyed, 495 (15.4%) indicated that they were aware of trafficking occurring in neighboring households. While this data is less clear than the item assessing trafficking in the household (it could be the case that two or more neighbors report about the same trafficking instance), it was through this item that the age of the person trafficked was linked. Data for age (see Figure 11) reveals that, for trafficking taking place in a neighbor’s household, those aged 6-10 and ages 11-18 constitute the greatest percentage of trafficking, with females being trafficked more than males, by a roughly 2:1 ratio when examining the teenage population.



When asked about reasons for trafficking given the neighborhood victim, the majority indicated domestic work (59.2%, 293), don’t know (27.3%, 135), non-agricultural labor (12.3%, 61), with single digit responses for agricultural labor (2) and forced marriage (1).

Overall, the results for trafficking recognize that (a) trafficking has increased and (b) the targeted group is 6-18-year-old females.

Discussion and Conclusion

As illustrated in the empirical evidence provided, the living and working conditions of tea garden workers in Assam India are difficult. The problematic factors linked to poverty, education, and legal status impact their lives profoundly. While improving working conditions in the tea gardens is needed, we also recognize the mistreatment that accompanies migration and plantation life in general. It is not unreasonable to see trafficking as a downstream effect of these vulnerabilities alongside other, as of yet, unidentified causes.

Policy makers need to acknowledge that the issues of marginalization and vulnerability are entangled, not only due to the workers' low wages and substandard living situations, but also due to their social status within the broader society in Assam and across India. It is ironic that efforts continue to be made to clean up the estate's public relations image, yet improvements to the working conditions of tea garden workers remain minimal. The opaque tea supply chain effectively diffuses responsibility of the major firms to address working conditions of the lowest paid link in the multinational chain.

Stickiness Summarized and Trafficking

Five different problem factor areas were examined in the preceding results. These areas include: financial, educational, documentation, organizational structure, and health related. These areas reveal systematic mechanisms, whether intentional or unintentional, that engender tea worker vulnerability. Lacking finances prevents mobility, both in a literal and figurative social sense. Lacking education limits accessibility to work that may uplift a family from an impoverished environment. Lacking proper documentation prevents individuals from accessing governmental welfare schemes and further ostracizes members of these castes. An organizational structure that favors the tea garden estate (akin to a casino that favors the house) limits the ability of workers to challenge a status quo that is engineered against them. Lastly, health related

limitations exacerbate one's struggle to stay afloat by pitting the need to work against one's health.

While the data does not enable a causal connection between problem factors and trafficking, it is reasonable to theoretically link the two. When life circumstances become unbearable and individuals become desperate, combined with the allure of a better life, one can easily envision how trickery and chicanery can be used to persuade a young male or female to leave the tea garden in hopes of finding a better life as a domestic worker or agricultural laborer. With increased levels of distress, individuals are forced to seek livelihood and resources in a greater variety of ways, increasing the opportunity of trafficking and otherwise dangerous work.

The increase in trafficking over the past three years calls for an explanation. However, an explanation that addresses the varied factors implies the need for qualitative, possibly phenomenological and ethnographic, inquiry to get at the individual lived experiences of tea garden workers and their families. While it would be irresponsible and foolhardy to ignore the structural link between poverty and trafficking, we also should not ignore the role of individual experience and agency.

How does Stickiness Help us Understand the Data?

Tea garden workers have few alternatives to their difficult working and living conditions, yet the causes are easily blurred and ignored due to the condition's differential and contingent impact on individuals and families. If one cause could be pin-pointed, the issues may be easy to address, but the various sticky elements impact the tea garden workers differently. The stickiness that arises from vulnerability are further entangled with corporate greed, unfettered capitalism, colonialism, racism, religious oppression, and climate change in difficult-to-discern ways. The compounding effects of these forces on workers and their families result in a perfect storm of

precarity, oppression and marginalization. The risk of further (or even worse) exploitation if a member of the tea garden workers' family migrates for work looms large. This study illustrates the complexity of the exploitation of human labor in the contemporary global capitalist mode of extraction and the need for more in-depth inquiry into the experiences of tea garden workers.

The global tea industry is engaged in what Dukelow and Kennett (2018) calls *coercive commodification*, which through marketing campaigns, devalues the lives of the millions of tea garden workers that live and die on the grounds of plantations in order to provide the consumer with inexpensive cups of tea. Mass exploitation is enabled through the process of dehumanizing the laborers at the lowest level of the tea agribusiness process. Such exploitation forces tea garden workers into a frame not dramatically different from other capital inputs such as land, fertilizer, pesticides and farm equipment in much the same way in which Scott (2011) describes fair trade discourse obscuring structural inequality and creating a *commodification of otherness*.

We use the term *stickiness* to reflect a reality that might be distant to our audience, yet many can easily imagine an insect stuck in a web from all sides, or being stuck in mud, where the more one struggles to escape, the more one gets stuck. Even after escaping the specific circumstance, significant intervention is needed to remove the stickiness. This metaphor is intended to make more understandable the many formal, informal, systematic, and person-specific ways in which power players and social factors have come together to exploit the Assam tea garden workers, whose estimated numbers range from 1.2 million (Caro, 2020) to 3.4 million (Nagaraj, 2020). The concept of stickiness is palpable and tangible, presenting an understanding of tea garden workers' broad realities that are simultaneously complex and relatable. The data highlights how the combination of formal sources of vulnerability (i.e. low pay, low educational attainment) and informal kinds of vulnerability (i.e. generational work commitments,

multilingual diversity) further facilitates stickiness. However, how these issues manifest in individual lived experience needs further, ongoing exploration.

Future Research Directions and Solutions

As we look to the future and reflect on the findings, we make several assertions. First, any work that is going to be effective needs to avoid blaming the victims, or centering the issues in individual tea garden worker attributes and personal shortcomings. Therefore, our future individual-level inquiry will expressly avoid this kind of analysis. The voices of individual tea garden worker's experiences are needed to add depth to the findings of this study. Despite the differential way stickiness impacts these workers, the structural commonalities of poverty and marginalization continue to be consistently dire across the population, even prior to the COVID-19 pandemic, and likely conditions have worsened since. Without significant changes in rights and agency among the groups that make up tea garden workers, and of course improved wages and living conditions, solutions will continue to be ineffective in changing their material reality and remain merely superficial.

While more nuanced data may assist in understanding complex issues like trafficking among tea garden workers, without associated material changes in policy and practice in Assam, in the tea industry specifically, we may well expect a study of the same region and population a decade from now to find much the same situation, and be thus inconsequential.

What specific solutions may improve the situation? Asked differently, how can the problem factors noted in the results be modified to lessen the vulnerability of the tea workers and thus reduce stickiness? Certainly, the increase in wages argued for by worker and student groups is a start. Structures and policies that encourage labor organizing will also likely help. Improved efficiency of government officials providing these groups with proper documentation and

consistent implementation of the benefits guaranteed by the law will also have a positive impact. Providing more and better education to the children of tea garden workers, and the tea garden workers themselves, is important, but must be done with fidelity, by providing significant investment in educational infrastructure, incentive for quality teachers to work in the region, and widely recognized educational credentials provided through the educational process. Finally, inquiry into individual lived experience and the individual agency among tea garden workers needs to be examined in terms of how the workers and their families work within the powerful constraints of their lives to carve out livability. Future research of qualitative and ethnographic nature is needed to better understand these issues. Engaged theoretical explorations are also needed to strengthen or refute the merit of the notion of stickiness presented in this study, and determine if it has multidirectional import as both a trapping of tea garden workers in entangled negative forces, but also as a tool for collective support and solidarity.

Recommendations from NEWRaN

A multi-dimensional collaborative approach needs to be formulated that involves stakeholders such as government, NGOs, tea garden management, civil society, educational institutions, labor unions and students' unions. Targeted capacity building of the laborers and their family members in ways that reduce stickiness and encourage agency. For those below 14 years of age, the Right to Free and Compulsory Education ACT (RTE) (RightToEducation.In, 2009) must be enforced ensuring that children ages 6 to 14 are in school. The educational system must be equipped to handle the students from the tea garden by providing additional resources, infrastructure and expertise. Education awareness campaigns are needed to build the educational empowerment of tea garden workers and their families. Many school-age children have dropped out of the schools, and they are most vulnerable to being trafficked. Awareness campaigns on the

issues of human trafficking, on the importance of safe and informed migration and about government projects and programs such as social security schemes are needed. People in the tea garden generally remain vulnerable to manipulation without knowledge of their rights and available services.

Entrepreneurship development among the tea garden youth is another area of intervention whereby the youngsters can utilize their capabilities to improve their social mobility. Educational research institutions may be involved in grass root level evaluation, analyzing the plight of the laborers, assessing the impact of various interventions and the delivering of objective data to the stakeholders would strengthen collaborative work.

Universal human and civil rights across India for the diverse tribes and ethnic groups is much needed, and in an era of growing Hindu nationalism in India, the chance of these rights materializing in concrete ways are unlikely in the short term. NGOs can play a crucial role simultaneously advocating for tea garden workers in the halls of power while also providing stop-gap measures like food and improved living conditions. However, NGOs should not be seen as a permanent solution, and the government should be doing more to transition into providing these services over the long-term.

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