

A crisis like no other

Gendered burdens and caste dynamics of debt and food insecurity during the COVID-19 pandemic in Tamil Nadu



Research findings report

Isabelle Guérin, French National Research Institute for Sustainable Development (IRD), associate to IFP (French Institute of Pondicherry), Nithya Joseph (French Institute of Pondicherry), Sébastien Michiel, independent researcher, B. R. Ramesh (French Institute of Pondicherry, G. Venkatasubramanian (French Institute of Pondicherry), Katherine Brickell (King's College London), Vincent Guermond (Queen Mary, University of London), Nithya Natarajan (King's College London). February 2024. This report is published in 2024 by French Institute of Pondicherry, French National Research Institute for Sustainable Development (IRD), and King's College London under a Creative Commons Attribution-Non Commercial 3.0 license.

This report is part of a larger research project (<https://www.debt-climate-health.org>) funded by UK Research and Innovation's Global Challenges Research Fund entitled '*Depleted by Debt? Focusing a gendered lens on climate resilience, credit and nutrition in Cambodia and South India.*' This India-focused report shows how the COVID-19 crisis manifested in Tamil Nadu as one of debt distress and food insecurity. These overlapping issues are disproportionately felt and shouldered by women, Dalits and the landless. A second India-focused report evidences how the microfinance industry and related policies have contributed to rather than mitigated this debt crisis in pandemic times. Together the reports offer new and compelling data on the multiple ways in which development and social policies can reinforce rather than reduce inequalities, especially in times of crises.

Citation information

Guérin, Isabelle, Nithya Joseph, G. Venkatasubramanian, B. R. Ramesh, Sébastien Michiels, Brickell Katherine, Guermond Vincent, and Natarajan Nithya, (2024) *A crisis like no other: Gendered burdens and caste dynamics of debt and food insecurity during the COVID-19 pandemic in Tamil Nadu* French Institute of Pondicherry, French national Research Institute for sustainable Development (IRD), King's College London.

Acknowledgements

We would like to sincerely thank the enumerators for their rigour and ethics in carrying out the questionnaires among the villagers: Arun Prabha A; Chitra V; Parameshwari B; Rajalakshmi S; Vivek Raja; Sowparnika G. Of course, we would also like to thank the villagers for taking the time to answer our questions, and we hope that the findings of our study will make decision-makers aware of the extent of post-COVID village distress.

Photography

Chinar Shah

Report design

Bison Bison www.bisonbison.co.uk

Note

This report, its findings and recommendations, are based on the research and analyses of the authors only. It does not reflect the views of artists who participated in the study.



Contents

Executive summary	4
Introduction	9
Research methods	16
Debt distress	19
Growing reliance on debt	20
Gendered burdens of debt repayment	23
Caste dynamics of debt	24
Over-indebtedness and COVID-19	25
Food insecurity	29
The severity of food insecurity	30
Managing food (in)security	33
The debt distress-food insecurity nexus	35
Conclusion	38
Recommendations	40
References	42
Appendices	44
Endnotes	49



Executive summary

The COVID-19 pandemic worsened the long-standing problems of debt distress and food insecurity already impacting households in rural Tamil Nadu. This report explains the gendered and caste-based dynamics of these crises as they unfolded in one of India's most populous states.

Executive summary

As the COVID-19 pandemic transitions to its later stages, policymakers' attention is shifting, from emergency public health and economic measures, to dealing with the long-term financial consequences. This report delves into the impacts of the COVID-19 pandemic on household finances and everyday life in Tamil Nadu, South India. It reveals how the pandemic is manifesting as a long-running crisis of debt distress and food insecurity. Not only this, but the relationship between the two is complex – our research newly evidences how debt temporarily relieved, but ultimately worsened, food insecurity. This report offers a nuanced understanding of these complexities, their gendered and caste-based dimensions, and their long-term implications in terms of inequality in one of India's most populous states.

Feminist scholarship emphasises the crucial role of women in times of crisis. When men lose their jobs, or when famine threatens, despite the diversity of contexts, women typically sacrifice their well-being for that of the family and act as 'shock absorbers' (Brickell and Chant 2010; Brickell 2020, 8–9). In the Global South, the feminisation of responsibilities to cope with chronic crises is a striking reality of recent decades (Chant 2008). The COVID-19 pandemic has played out no different in Tamil Nadu where women are instrumental in helping families cope with the shock of the pandemic and ensuring what feminists call "social reproduction", i.e. the capacity of households and societies to sustain life.

As this report goes on to show, as societies become increasingly financialised, including in the Global South, debt has become an essential component of social reproduction (Federici 2018; Fraser 2017; Guérin, Kumar, and Venkatasubramanian 2023). With this, and the social inequalities exacerbated by COVID-19 pandemic, the gender of debt can no longer be ignored. At the same time, exploring the diversity of situations and the way in which gender and other forms of domination are articulated and often cumulative is crucial, what feminists call 'intersectionality'. As elsewhere in India, for example, caste still shapes social, economic and political life in rural areas. This applies to matrimonial alliances, the spatial structure of housing, access to the job market, friendship, as well as in electoral behaviour and political affiliation. This report therefore focuses on the gendered burdens and caste dynamics of the COVID-19 pandemic in rural Tamil Nadu.

In the story of debt distress and food insecurity, the research findings point to how crucial it is to account for the diversity of local economies, and in rural areas, the diversity of local ecosystems and associated local economies. Agricultural intensification and climate change are not gender-neutral while varying in degree and intensity, including within small regions. Subsistence farming, more often led by women, is proving more resilient to shocks, without however ensuring sufficient protection, as subsistence farming is often driven by necessity rather than by choice. A micro-scale approach, attentive to the diversity of situations and processes, helps us to better understand the unequal capacity

In the story of debt distress and food insecurity, the research findings point to how crucial it is to account for the diversity of local ecosystems and associated local economies in rural areas.

of families and territories to cope with shocks and to imagine other possible futures. Based on an extensive mixed-method data set, we evidence the study's findings in the context of three villages of rural Tamil Nadu, characterised by both the magnitude of household debt and the diversity of its ecosystems and local economies.

In the context of the COVID-19 crisis, the report shows how, first, social protection was both insufficient and unequally provided; second, how the work of social reproduction intensified; and third, how debt both enabled but also threatened food security. This is in a broader context of increasingly erratic weather patterns due to climate change. Unsustainable household debt and food insecurity are long-term issues that preceded, dominated, and will stretch far beyond, the COVID-19 pandemic. Efforts and measures to support gender, caste, and social equality in the post-pandemic future must tackle these foremost issues, otherwise entrench still further the disproportionate financial and health challenges that women, Dalits, and the landless face in the daily lives.

Social protection was insufficient and did not equally benefit all

Tamil Nadu has relatively strong state infrastructures for social security provisioning. However, the pandemic period has revealed how unequal particular protection measures are in terms of what they offer, and whom they include and whom they exclude. Subsidized food policy increased during the pandemic but was restricted to poor quality rice and limited oil and lentils. These prevented starvations but failed to meet nutritional requirements for the duration of the lockdown. As shown in a companion paper (Joseph et al. 2024; Guérin, Joseph, and Venkatasubramanian 2021), cash transfers, subsidised credit and loan waivers in the year following the onset of the pandemic have all been biased towards land owners, who are more likely to be upper caste. As for cash transfers, not only were they unevenly distributed, but the amounts – INR 2,500 (US\$30) at best – were negligible compared to the debt burden (the average outstanding amount per family at the time of the survey was 217 000 INR (about 2620 US\$).¹¹ Our data (see Appendix 2) confirm the bias of rural development policies in favor of farmers, both before and during the lockdown. Resource provisioning and the benefits of regulation reached those who were least likely to face restricted access to food and health care. The subsidized credit and loan waivers alleviated anxiety and stress, risk of losing assets, prevented taking on more expensive debt for the socio-economically better-off while not offering anything for the poorest households.

On the employers' side, the vast majority of work arrangements are made without any social protection (no job guarantee, no unemployment, maternity, illness or retirement benefits). This is true at the Indian level (with estimates of more than 80%) (Harriss-White 2020) and our three villages are no exception. As might be expected, the role of the employers was therefore marginal.¹²

The case of Krishna Veni (Box 1) is typical of many cases we have encountered. At the time of the quantitative survey, women had an average of 2.3 jobs, compared to 1.7 for men. We should also note that our survey probably missed some activities that are rarely considered a "job" even though they are highly productive, such as planting vegetables or collecting wild edible plants. With the lockdown, the jobs most easily available were female, related to subsistence farming, degrading because strictly manual, and poorly paid, especially since they had to share with their neighbors. For most of the men, already emasculated by a crisis that hit them hardest because of their specialization in urban jobs involving migration, it was hardly thinkable to engage in this type of typically female task.

Box 1. Krishna Veni's story

Krishna Veni openly complains that the men in the family were completely useless during the lockdown. "I fed them for six months," she said. Her husband was a labour recruiter for brick kilns in other parts of Tamil Nadu. He had fallen ill before the pandemic and was no longer working. His son had taken up the same activity. The pandemic forced him to return home. He tried several jobs, but without success. Krishna Veni, like many other women, combined several small jobs a day to feed the family and pay debts, now a crucial component of local livelihoods: transplanting rice or groundnut at a landowner's house in the early morning hours, before the sun got too high; weeding in the early afternoon, often for another landowner, sometimes several kilometers away on foot, which involved taking back roads and facing police checks; and then planting vegetables in the late afternoon on her own field if she had one or at a neighbour's house.

The work of social reproduction intensified

Well beyond productive activities, the tasks of social reproduction also intensified, while remaining predominantly female. At the time of our survey, the care of dependent persons (children, the sick and the elderly) and cooking and cleaning remained a largely female activity, often shared between mothers, daughters-in-law, daughters and grandmothers. In 70% of families, care involved both women and men (compared to 30% where it was only women and 13% where it was only men). The weight of domestic work was even clearer for cooking and cleaning, which was done only by women in 32% of households. 68% of caring family members were women, and this reached 93% for cooking and cleaning.¹³ As we will see later, cooking also involves finding food. For some families, this is a constant source of stress, and it was even more so during lockdown.

In addition to this, domestic and care tasks remained unchanged during the lockdown. Out of 1,989 respondents, only 30, or 2.2%, reported a change in the distribution of domestic and care tasks. "There are male jobs and female jobs," the women often said to justify this state of affairs, and indeed the rigidity of the sexual division of labour is remarkable. As observed elsewhere and in other periods of crisis, women have played a role of shock absorber, taking on multiple precarious jobs in order to make ends meet while continuing to assume the bulk of care, cooking and cleaning tasks.

Debt enables and threatens food security

In Tamil Nadu, debt has become a pillar of social reproduction, whether it is for daily expenses and food (50.9% of debts incurred at the time of the survey were used to pay for daily expenses), health (28.9%) and debt repayment. A remarkable fact is that almost half (45.1%) of the loans pay off past debts. Managing and repaying debt is a female task, and this is partly the result of financial inclusion policies that target women as a priority. While women accounted on average for about 25% of household income, they accounted for 44% of debts and 58% of repayments.

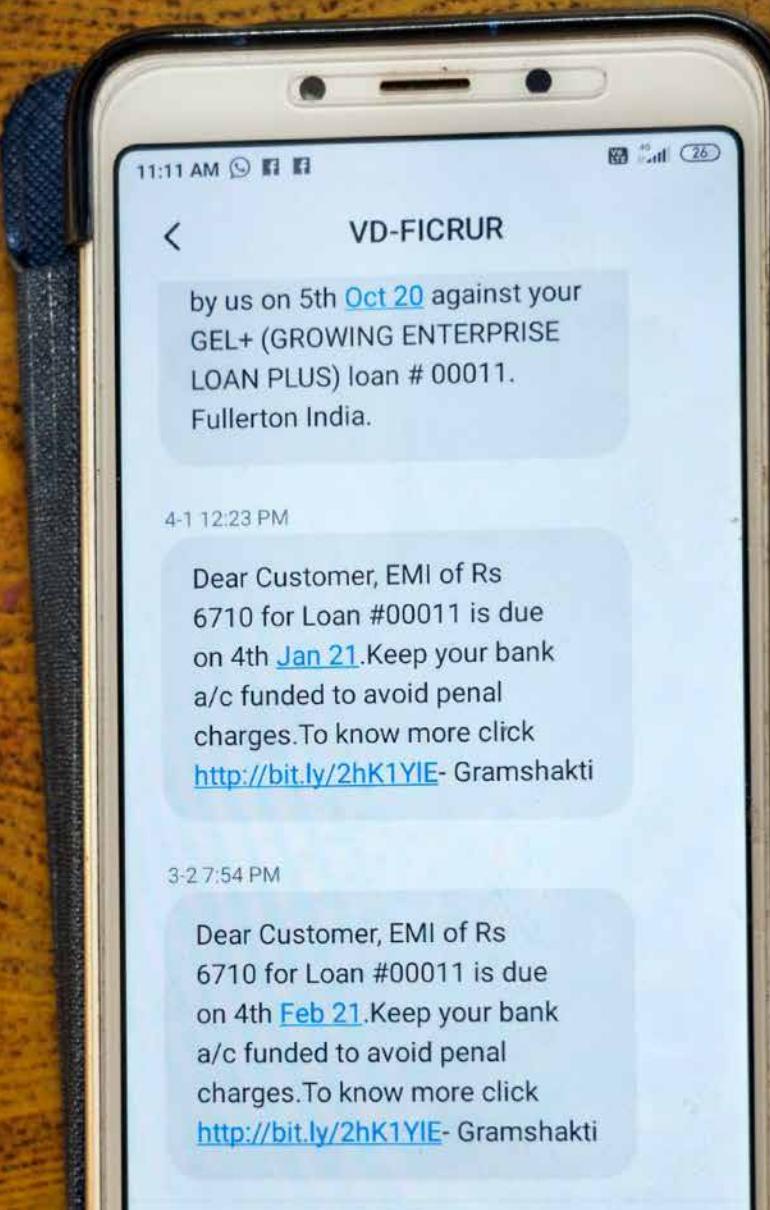
Women have played a role of shock absorber, taking on multiple precarious jobs in order to make ends meet while continuing to assume the bulk of care, cooking and cleaning tasks.

The study found that debt both enables and threatens the social reproduction of households. At the time of our survey, nearly a quarter of households said they were food insecure (Household Food Insecurity Access indicator). The analysis of food practices shows that 15% of households faced a severe level of food insecurity. The low incomes meant that they are forced to incur debt to pay for food and health and then they struggled to repay the debt. The fall in income, but also the pressure to repay debt, explained the degree of food insecurity. Faced with pressure from lenders, households spend their meager incomes on debt repayment rather than on food or other essential expenditures such as health.

These general trends then show strong disparities between social groups (class and caste) and local ecosystems. In our three villages, housing remain deeply segmented according to caste; while the 'colony' is reserved for Dalits (former untouchables) and located at a distance from the main village called the 'Ur'. The Ur is internally segmented by *jati*, mainly Vanniyars, who can be considered as "middle" caste, and Naidu and Reddiyars, who are part of the "upper" castes.¹⁴ In the semi-wet villages, the Dalits converted to Christianity several decades ago, thereby gaining easier access to education and skilled jobs. In the local caste hierarchy, however, they are still considered Dalits. Caste discrimination is often – albeit not always – combined with landlessness, and yet land remains a major crisis buffer in rural areas. Unsurprisingly, the landless and Dalits were the most indebted compared to their income and the most vulnerable to food insecurity. Self-help and subsistence through food production were uneven and stronger among non-Dalits. Government support has reinforced rather than mitigated these inequalities by targeting at non-Dalits and the wealthier.

Another key finding is the highly unequal degree of food insecurity across villages (Figure 9). Households in the dry village (referring to a village with poor groundwater access) proved to be the most resilient. Farmers, especially women, remained specialized in subsistence agriculture, while men migrated to town for off-farm employment. Households in the wet village (referring to a village with relatively easy groundwater access) which was characterised by intensive commercial agriculture are the most vulnerable to food insecurity. This is even more the case for the landless and Dalits for whom the situation proved to be dramatic.

Households in the wet village are the most vulnerable to food insecurity. This is even more the case for the landless and Dalits for whom the situation proved to be dramatic.



Introduction

The COVID-19 crisis hit already struggling rural Tamil households hard. But the challenges of meeting basic household needs were in motion before the pandemic. A chronic crisis was being felt because of globalization and neoliberalisation, the persistence of social inequalities (class, caste and gender), and the climate crisis.

The COVID-19 pandemic

A crisis on top of all others

The COVID-19 crisis in India

On March 24, 2020, the Indian prime minister announced that people had four hours to return home. Four hours later a complete lockdown was imposed, with people being mandated to stay in their homes and barriers in place to prevent them from leaving their immediate vicinity. This meant that migrant workers from across the country to large cities, were stranded thousands of kilometres from their home villages and families.¹ The lockdown was imposed with great severity for 3 months, with all movement being banned, and some restrictions remained in place for six months. The first phase of the lockdown involved the closure of inter-state borders, the shutting down of intra-state transports, markets and schools and the halt of most economic activities, with some exemptions for essential services and commodities. In an economy driven by internal (mostly male) migration, which fluctuates with the labour needs of construction, transportation, and agribusiness, the lockdown was an unprecedented shock. Estimated at several tens of millions, the flows of migrants are believed to be greater than those generated by the partition of 1947 (Harriss 2020).

The shutdown of the economy caused an unparalleled economic recession, one of the strongest in the world. The gross domestic product contracted by a quarter in the first half of 2020 and by 8 percent for the entire year. In the early days of lockdown, hundreds of people died by suicide, hunger and thirst, police brutality, and lack of treatment for other diseases. Employment fell drastically. According to the most optimistic estimates, only 15 percent of workers were able to work from home (Chatterjee, Dey, and Jain 2020).

The rural areas of Tamil Nadu have been partially spared from the health impact of the pandemic. In July 2022, around 38,000 deaths were attributed to the pandemic, for a total population of around 68 million. Although the data are certainly underestimated, the fact remains that the villagers have never mentioned a massive over-mortality. It is not the pandemic that kills, as we were told repeatedly, but it is the lockdown that does.

In addition, the lockdown was experienced “as a crisis like any other”, as we were told several times. Of course, the initial shock was severe. Over time, however, the villagers consider that the pandemic was simply added to a chronic crisis context that they experience on a daily basis. Three major aspects should be noted here: a broader context of globalization and neoliberalization, the persistence of social inequalities (class, caste and gender) and the climate crisis.

Globalisation and neoliberalisation in India

Globalisation and neoliberalisation have accelerated sharply since the early 1990s. This has led to the privatization of state-owned assets and government services, the withdrawal of quantitative restrictions on the import of agricultural products and the emergence of global value chains controlled by multinational corporations (Kennedy 2014; Harriss-White

2010; Ramachandran and Rawal 2010). Repeated studies and official statistics show that non-farm employment in India is unable to absorb the rural labour force, and that the imbalance between the supply of and demand for employment results in precarious, underpaid and unprotected jobs (Shah et al. 2018). At the same time, the increasing privatization of basic services is a growing reality. Hospitals, clinics, schools and universities are supposed to be free, but their poor quality leads people, including the poor, to turn to private providers, even if it means going into debt. For instance, in the field of health, out-of-pocket expenses represent 55% of health expenses in India, just above the level of "least developed countries" (UN classification), whose average out-of-pocket expenses are 51%. The quality of public health care is better in Tamil Nadu but does not prevent families from spending important amounts money on health.

We shall also note that brutal government decisions like severe lockdown are not new. In November 2016, the demonetisation of high value currency notes, again with only a few hours notice, had dramatic consequences.² A wide range of social protection measures aim to compensate for the harsh consequences of neoliberalisation on the poorest, but they remain unevenly distributed and insufficient (Kannan 2019). Tamil Nadu, despite having stronger and better implemented social policies than the country average, does not escape this global trend. Human development indicators are above the country average, but severe pockets of poverty persist, combined with persistent caste and gender discrimination (Kalaiyaran and Vijayabaskar 2021).

Persistent social inequalities

Like all crises, the COVID-19 pandemic is not gender neutral. UN Women and UNDP's joint 2022 assessment warns of the severe effects of the pandemic on gender inequalities in terms of job loss, domestic work overload, food insecurity and domestic violence (UN Women and UNDP 2022)³.

In the Indian case, several empirical studies at the federal and national levels support this evidence (Agarwal 2021). According to the study by the Center for Sustainable Employment at Azim Premji University, which is probably the most comprehensive study available today, 61% of men's jobs were not affected by the pandemic, compared to 19% of women (Azim Premji University 2021, 19). Only 7% of men lost their jobs during the lockdown compared to 47% of women, who lost their jobs and did not regain them by the end of the year. In other words, women "were much more likely to lose their jobs and much less likely to recover them" (Azim Premji University 2021, 62). Other surveys confirm the female disadvantage to employment in COVID times (Deshpande 2020).

Meanwhile, with the cessation of schools, the return of migrants, and the challenges of food security, domestic chores increased sharply, with some studies giving an estimated 30% increase (UN 2021). Domestic lockdown, the permanent cohabitation with men who were otherwise outside the house during the workday or for the migration season and the general situation of stress have exacerbated domestic violence. A report by the National Human Right Commission estimates a 2.5-fold increase in domestic violence cases between March 27 and May 31, 2020 (National Human Rights Commission 2020). The lockdown has also resulted in increased food insecurity. While food insecurity was already severe prior to COVID, several studies have measured a worsening of hunger and its appearance among normally food secure households (Drèze and Somanchi 2021;

Like all crises, the COVID-19 pandemic is not gender neutral.

Choudhuri, Desai, and Pramanik 2022). Again, women, who are accustomed to eating last, were probably the most affected (Agarwal 2021).

This overview of the gender effects of the pandemic is extremely instructive and useful. One aspect however, that has not received sufficient attention in relation to the COVID-19 pandemic is debt. International organizations either ignore this issue or focus on the lack of access to credit for women, overlooking the fact that many of them are in fact already heavily indebted.⁴ The Center for Sustainable Employment study measured debt and found problematic debt for the poorest, but did not draw any lessons from it and did not focus on the gender of debt (Azim Premji University 2021, 124–25; see also Drèze and Somanchi 2021, 9; Agarwal 2021, 2). Yet, as in many countries, debt is now a pillar of what feminists refer to as “social reproduction,” the various means deployed to sustain life (Federici 2018; Fraser 2017; Guérin, Kumar, and Venkatasubramanian 2023). Faced with insufficient income and increasing expenses and needs, households are increasingly indebted (UN 2020). This is even more true for poor and vulnerable households and very often, it is the women who manage debt as an extension of their domestic tasks.

This is clearly the case in rural Tamil Nadu, where women bear the main burden of debt. Women’s debt for social reproduction was already a reality before the pandemic. With the crisis, women’s debt has assumed dramatic proportions, and this is the first salient finding of this report. Not only does repayment absorb a large share of income, but almost half of new debt is used to repay old debt, sending households into an uncontrollable spiral of debt overload. This in turn severely threatens social reproduction as households can no longer eat and care properly. The burden of debt and over-indebtedness directly threatens households’ food security and health. We will focus primarily on food, for which our survey provides quantified results.

A second under-explored aspect of the gender effects of the COVID-19 pandemic in rural areas concerns the diversity of ecosystems and associated local economies. A comprehensive study conducted in Asia, including India, during the second half of 2020 shows the uneven resilience of farming systems to pandemic shock and food insecurity. Supply chain disruption and food insecurity was more severe in irrigated areas, while hill areas, more diversified and less dependent on external inputs and long market chains, showed more resilience (Dixon et al. 2021). The small region studied in this report is characterized by contrasting ecosystems and here too, resilience proves to be contrasted. Our report shows that food insecurity was rampant, and even more so for Dalits (former untouchables) and landless people. It was much higher in wetland villages now specialized in commercial agriculture and dependent on agribusiness markets. The dry villages, which remain specialized in subsistence agriculture, mainly carried out by women, were more resilient to food insecurity. Food security does not exclude poverty, and dryland villages face multiple challenges exacerbated by climate change, whether in terms of soil erosion or groundwater depletion. Our study highlights the need to design and support alternative development trajectories that focus on local food sovereignty and independence from intensive agricultural practices that threaten both food insecurity and women’s value.

Our study highlights the need to design and support alternative development trajectories that focus on local food sovereignty and independence from intensive agricultural practices that threaten both food insecurity and women’s value.

Climate change and village economies

Related to issues of food security and ecosystems is climate change. The three villages studied here are located in the central eastern part of the state in the districts of Villupuram, Cuddalore, Kallurichi. This region faces recurrent cyclones, along with other deep climatic disruptions that durably affect local natural resources and in turn local livelihoods. This region, formerly known as South-Arcot, exhibits several features typical of the diversity of Tamil rural economies. Non-agricultural employment is growing steadily due to a port, a regional market and an industrial cluster and the proximity to Chennai where many (male) villagers come and go depending on job opportunities. The mix of fertile plains and semi-arid areas have historically and still today been associated with diverse local economies. The three villages were chosen to illustrate the diversity of ecotype systems and associated local economies, namely a wet, semi-wet and dry village. The wet village shows relatively favorable environmental conditions, with fertile soil and high ground water availability, allowing year-round cultivation of water-intensive crops such as sugarcane and some varieties of rice. The semi-wet village has intermediate environmental conditions, soil is less fertile and ground water is lower than in the wet village. However open wells, bore wells and community ponds allow year-round cultivation of dry crops such as peanut, sesame, and millets. The third is a typical dry village, with poor soil quality and very low ground water levels. Most of the land owners can only cultivate one rain fed crop of paddy per year and even this is susceptible to damage either as a result of drought or unseasonal heavy rain.

Note that the social structure is partly shaped by the type of ecosystem: inequalities in land ownership are much stronger in the wet village, while active affirmation policies have distributed land to Dalits in the dry village. It should also be noted that our sample is not intended to be representative in a statistical sense: it aims to illustrate a diversity of development patterns and to test their resilience to the shock caused by the pandemic. Over time, the wet village has specialized in commercial agriculture, which implies a strong dependence on agro-industry, whether for access to inputs or for sales. Conversely, the dry village remains specialized in subsistence crops, which are less costly and less risky, and agriculture remains driven by a logic of subsistence. The semi-wet village combines commercial agriculture with a greater presence of skilled urban employment due to better access to education.

Climate and environmental change reinforces these trends. In November 2020, barely two months after the first lockdown ended, Cyclone Nivar ravaged the region, causing massive crop losses.⁵ With winds of over 130 km per hour and very heavy rainfall, Cyclone Nivar was declared a “severe cyclonic storm”. If cyclones are nothing new in the Coromandel coast and have been occurring regularly since at least the beginning of the 20th century, their intensity is increasing since the 1990s.⁶ Data collected during the research detail the shifts in rainfall, temperature, land use and groundwater over the last century detail (Ramesh 2022). These in turn explain in part both the agricultural decline, the growing dependence on agribusiness (wet village), the persistence of poor subsistence agriculture (dry village) and the emergence of severe public health issues. The effects of climate and environmental change can be summarized as follows:

- Soils are drying out, a symptom of increasingly severe droughts, both in frequency and intensity,⁷ coupled with increasingly erratic rainfall⁸ and rising temperatures – temperature data indicate a significant increase in average temperature since the mid-1980s;

- The cultivated land decreases, either at the expense of construction, or it is left uncultivated; in two of the three villages, settlement areas have increased by 160% between 1976 and 2019;
- The groundwater level drops, both in quality and quantity, due to meteorological shocks, free power supply schemes for farmers by the government and overexploitation of water for agriculture, urbanization, and mining activities. The strong and continuous growth of the construction sector for several decades implies a massive sand mining and the region is a target. The nearby lignite mine pumps huge amounts of water. The rate of decline is more in the borewells and much steeper in the sedimentary zone encompassing the wet and semi-wet villages.
- Most common water bodies such as tanks, ponds and canals are abandoned, infested by weeds and covered by silts due to lack of maintenance, in favor of individual wells, accessible only to the wealthiest (albeit financed mostly by subsidies or soft loans provided by the government). Over the last decades, the number of borewells have exponentially increased and went deeper as government funding for tank and canal maintenance have dried up, further widening inequalities between farmers with and without access to irrigated land. In the dry village, around half of the wells are dry. Some farmers have dug one, two, three and sometimes up to six wells to find water. Some enjoy government subsidies or cheap bank loans, others go into debt at high prices with no certainty of access to water in the long term. Conversely, farmers who are well endowed with water sell it, without paying for the electricity provided free by the government. Water as a common good has become a rent for the richest, whose distribution is paid for by public funds.
- Water quality is another major concern, particularly in the dry village with excessive carbonate content, to the point that some wells are now unusable for both drinking and cultivation, and causing severe kidney problems. In the two other villages, the proximity of the sea causes the water to be saline.
- Intensive agriculture, not so much in terms of cultivated surfaces, which remain modest even for the wealthiest, but in terms of chemical inputs, is both a response to and an aggravating factor of climatic disruptions.

At the same time, mechanization, conversion to less labour-intensive crops, urbanization of farmland, and reduction in land size are resulting, both India-wide and in our three villages, in a downward trend in both farming and agricultural employment. Erratic rainfall – two or three days of intense rainfall instead of 30 days of continuous rainfall – not only may cause flooding and damage crops but may also force a concentration of labour over limited periods. The multiple challenges faced by farmers also prompted conversion to commercial crops, although unequally across ecotype systems. This has resulted in a massive conversion to sugarcane from the early 1970s, with the hope of price security and financing thanks to agricultural policies and contractualization with the sugarmills. Highly water-intensive, sugarcane is mainly grown in the wet and semi-wet villages, but also by few wealthier landowners from the dry village who have good access to water. Guava was the next step, adopted following the Thane cyclone of (Dec 2011/Jan 2012) since guava is more resistant to storms. The challenges of managing a more demanding (male) workforce in terms of wages and working conditions also motivated the conversion to cash crops which are less labour intensive. Finally, erratic rainfall and cyclones have led the adoption of more robust hybrid varieties, especially for rice and sugar cane,

which in turn require regular use of pesticides and fertilisers. Apart from a few vegetables, all current crops require chemicals and most are hybrid varieties. Natural manure (dung, banana and cocoa leaves) and agroforestry, a practice that was still common two decades ago, mainly done by women, have almost disappeared. At the same time, the challenges faced by small farmers and the economic and symbolic decline of agriculture resulted in a “feminization” of the agricultural workforce, which has become increasingly female (Pattnaik et al. 2018).⁹

The consequences of climate change and agricultural intensification are also being felt in on soil, groundwater and product quality, including cow rearing, and thus on food and health. “Even milk is now a poison,” Saravanan, a small farmer, told us, to reflect the extent of the damage. Again, there are wide disparities. The poorest have no choice but to drink the local, untreated, frothy water or to buy expensive plastic bottles of water, while the richest buy water filters. In wet or semi-wet villages, dependence on markets for the purchase of inputs and the sale of produce is almost total. This goes along with the decline of food sovereignty, particularly for Dalits and landless people. As we will see later, this had dramatic consequences during the pandemic. In the dry village, by contrast, the preservation of subsistence agriculture, less by choice than by necessity, has had the merit of offering protection from food insecurity.



RECOVERY DETAILS / வகுவிப்பு விவரங்கள்

Financial Services

வனத்திற்கு
மூலம் செலவுகள்
நிலைகளைக் குறிப்பிடுகின்ற
ஒரு பாதுகாப்பு
நிலை நிலைகளை
நிறுத்தி விவரங்களை
பொறுப்பாகவும்
பொறுப்பாகவும்

BOOK
நுப் புத்தகம்

5726

E LTD
an Street
ess
07 302

1st Installment	11th Installment
2nd Installment	12th Installment
3rd Installment	13th Installment
4th Installment	14th Installment
5th Installment	15th Installment
6th Installment	16th Installment
7th Installment	17th Installment
8th Installment	18th Installment
	19th Installment

Research methods

This report draws from field research carried out between April 2020 and July 2022 in three villages in Tamil Nadu state.

Research methods

This report draws from field research carried out between April 2020 and July 2022 in three villages in Tamil Nadu state. Geographically, the villages belong to the districts of Cuddalore, Villipuram and Kallakurichi and fall in the hinterland of the south Coromandel Coast along the Bay of Bengal and lie between 15 and 53 km west of Cuddalore coastline. Each village is typical of one type of ecosystem found in the region with a dry village (referred as D hereafter), a wet village (W) and semi-wet village (SW). We employed multiple methods, sites, and sources, adapting to the health constraints of the COVID-19 pandemic. To ensure anonymity for respondents, all names have been changed and each village is referred to as Village D, W and SW.

Qualitative interviews with villagers

Field work started during the lockdown with phone interviews conducted repeatedly for a period of 9 months with the same households during and after the first lockdown, from April to December 2020. Across the three villages, 55 households were interviewed between one and eight times for a total of 155 interviews. The last interviews were conducted face to face (Feb-April 2021 and August-Sept 2021), and complemented with informal discussions with local key players. With our prior knowledge of the village, we were able to remotely select a diversity of respondents in terms of gender, caste and religion, class, occupation, degree of vulnerability. Interviews with participants explored the lived experienced of the lockdown, the main challenges encountered and the coping strategies deployed. Following the end of the lockdown, we made numerous visits to the villages, both to follow up with the families surveyed by telephone, and to explore certain issues in more detail. Informal discussions, focus groups, and observations were key here.

Box 2. The challenges of phone interviews

The method involved mutual learning, since neither the enumerators nor the interviewees were used to long telephone conversations. From our initial contacts, we extended our sample on a voluntary basis: people interested in sharing their lockdown experience could call us directly. A face-to-face discussion relies heavily on bodily and emotional language, and this is much more difficult to capture over the telephone. At the slightest feeling of discomfort, we suggested calling back later. To gain and maintain trust, two techniques were key. First, while all interviews were structured around issues of livelihood, debt, savings and food security, we adapted the content of the questions to the particular profile of the respondent. Second, we conducted repeated interviews and followed people over time, repeating the thread of the previous discussion each time. As soon as people understood that we were taking a close interest in their daily problems, they spoke without hesitation.

Quantitative household survey

We conducted a quantitative survey from March 2021 to January 2022, while scrupulously observing the health precautions. The survey included 406 households and 1989 individuals in the same three villages with differentiated ecotypes systems (wet, semi-wet and dry) and distinctive reliance upon migration and non-farm income. The survey examined demography, household occupations, migratory histories, household assets, and liabilities, saving, borrowing, and lending practices, food insecurity, coping strategies to face the lockdown as well as experiences of and capacity to adapt to the impacts of climate change. We stratified the sample by caste, land ownership, and migration, based on rough estimates of the village population profile developed with local authorities.

Environmental profiling of the study villages

We used primary and secondary GIS data collection, secondary environmental, climate, and agricultural data collection, as well as landscape observation and documentary photography to document and quantify annual and seasonal socio-ecological changes in all three villages, comparing primary data from the present with trend over the last century. These included changes in rainfall patterns and intensity, temperatures, agricultural practices, land use, water usage, and irrigation systems at the village level. We supplemented this data with semi-structured interviews with villagers and local stakeholders to capture the lived experience of climate disruptions.

Feedback to villagers (July – August 2022)

In July 2022, we organized feedback meetings with villagers. These meetings were an opportunity to share some of our key findings and to gather additional testimonies. They were attended by 30 to 40 people, mainly women, of various caste and background.





Debt distress

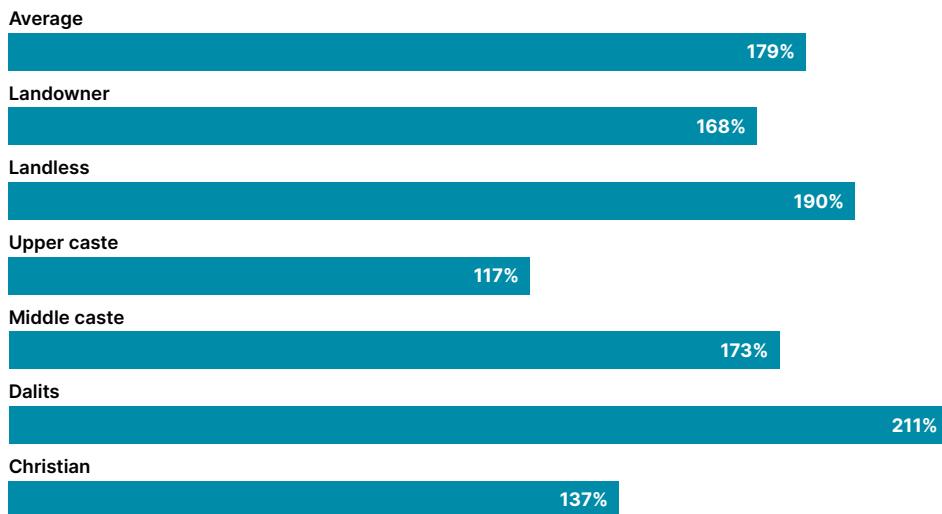
Even before the COVID-19 pandemic took hold, rural households in Tamil Nadu were increasingly reliant on debt to meet basic needs. The pandemic has resulted in an over-indebtedness crisis which women and Dalits are disproportionately impacted by.

Households' growing reliance on debt for social reproduction

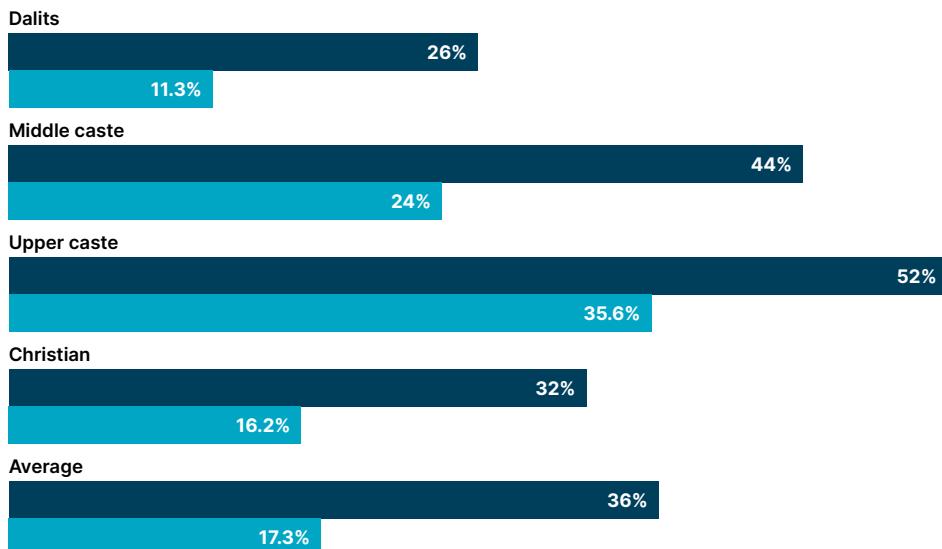
Debt is nothing new in the Tamil countryside. With the explosion of rural credit markets (Nair 2020; Kar 2018; Karunakaran 2017), however, it is clear that it is growing in its dominance over everyday life and in the processes involved in sustaining life even before the COVID-19 pandemic. Most families are continuously in debt and juggling debts as a result of rising expenditures from:

- Increased food expenditures, both because of the decline or even disappearance of subsistence (albeit unequal across villages) and the continuous increase in food prices (partly compensated by subsidized food policies);
- Increased health expenditures, both because of the (partial) privatisation of health services and the emergence of new health issues related to climate change;
- Increase in spending on education but also on marriage, considered a more secure protection strategy than employment or education (Neve 2016);
- Increase in spending on durable consumer goods; this includes smart phones, now unavoidable for finding a job, socializing and attending school since the lockdown; this also includes vehicles, mainly two-wheelers, here again crucial for finding a (male) job, and even more so since the lockdown and the fear of public transportation.

The debt itself is not necessarily a problem. What matters in terms of avoiding debt distress is the terms of the debt (price and repayment terms), the uses of the debt, and the burden of repayment. The quantitative survey measured the outstanding debt of families on the day of the survey itself. Some of this debt was incurred before the COVID-19 lockdown, some during it, and it is difficult to disentangle the two. The average amount of outstanding debt was 217 000 INR (about 2620 US\$). A more revealing indicator is the debt to income ratio (Figure 1). On average, families were indebted to the tune of 179% of their annual income, and this ratio was significantly higher for Dalits (211% against 117 to 173% for non-Dalits) and landless households (190% against 168% for landowners).

Figure 1. Debt-to-income ratio

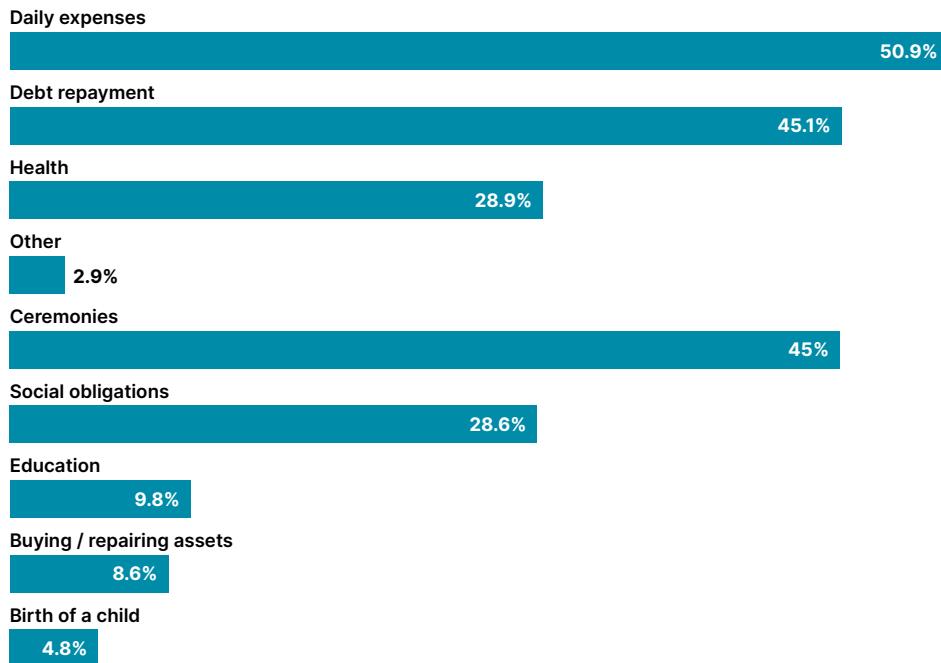
Most of the debt reported was for social reproduction uses rather than investment in production, i.e. generating short-term income (Figure 2). This was even more the case for Dalit households. At the time of our survey, 26% of Dalit household were indebted for a productive purpose, against 44% for middle castes, 52% for upper castes and 32% for Christians. Looking at the share of loans dedicated at least partly to productive use (most loans are used for various purposes) gave similar trends.

Figure 2. Productive use of debt (% households)

- Productive use (% HH)
- Productive use (% loans)

Most of the debts were dedicated to non-productive uses, aimed at ensuring the social reproduction of families. Each debt was commonly used for several purposes. Some of these uses were short-term, and aimed simply to ensure the survival of the household (75.8% – first half of figure 3). Short-term social reproduction uses included daily expenses (50.9%), mainly food, health (28.9%) and debt repayment. A remarkable fact is that almost half (45.1%) of the loans paid off past debts. Almost 80% (78.6%) of Dalit households (and Christian) have at least one loan that has been used to repay a previous loan. We return to this point later, since it directly threatens the social reproduction of families.

Figure 3. Debt uses for social reproduction purposes (% households)



The debts also served medium or long-term social reproduction needs (64.4% of the loans, second half of figure 3), mainly organizing or contributing to ceremonies (45%), fulfilling other social obligations (receiving guests, helping relatives) (28.6%), education (9.8%), buying assets (8.6%). Often considered wasteful or “unsustainable” expenditures, ceremonial expenditures are in fact part of the long-term social reproduction of families, as they allow for the maintenance of social networks that will later be crucial for protecting families, accessing employment, etc. (Neve 2016).

Gendered burdens of debt repayment

The gender of debt was clear when it comes to repayment. Most debts have short maturities that rarely exceed one or two years. This means that to service debt, the amount households have to repay monthly, is often high in relation to their income. And very often, as we have seen above, going back into debt is the only way to pay off old debts. "Everything is rotation only", as we were often told. Yet the burden of repayment is very unevenly distributed between men and women. Financial responsibilities within households are partly mixed, and male income is commonly used to repay female debts. A common scenario is that one family member, usually a male husband or son, migrates to the city and dedicates his entire salary to paying off the debt. With the pandemic, however, this tactic was stopped.

We also observed that the mental burden of repayment, including the repayment of male debts, falls much more heavily on women's shoulders. Repaying means negotiating, facing humiliation and sometimes insults from the lenders, running around begging for help. This is deeply emasculating and explains why it is a female task (Guérin, Kumar, and Venkatasubramanian 2023). According to our survey, while women provided on average 25% of household income, they were in charge of 44% of debts and 58% of repayments.¹⁰ If we look at debt service, i.e. the share of income dedicated to repayment, the differences are even more striking given the low incomes of women. Given the disparity in situations, the median amounts make more sense. The median debt service is 13 for men which means that out of every 100 rupees earned, they have to repay 13 rupees. This reaches 115 for women. When women earn 100, they have to pay back 115. Of course, women frequently ask male family members to help them with the repayment. However, there is no guarantee that the men will agree to contribute to the repayment, forcing women to go deeper into debt. Many women are trapped in a vicious cycle of over-indebtedness. This has been made clear and exacerbated by the pandemic. Debt is essential to ensure the social reproduction of families while threatening the very capacity of families and women to ensure this same social reproduction.

While women provided on average 25% of household income, they were in charge of 44% of debts and 58% of repayments.

Caste dynamics of debt

The key difference in terms of caste dynamics is less the use of debt, and more the terms of the debt. As shown in a companion report from the *Depleted by Debt?* study, Dalits and the poor have to make do with expensive and degrading credit (microcredit, informal moneylenders) while non-Dalits more often have access to self-help-groups (women's savings and credit groups that circulate savings and access cheap bank credit) and bank credit (mainly for men) (Joseph et al. 2024).

At the time of the survey 47% of households were indebted to a bank, with wide disparities by caste: non-Dalit are about twice as likely to have access to bank loans (68% versus 28% for Dalits and 35% for Christians).

Land ownership is also a discriminating factor. 56% of households with land had at least one bank loan compared to 21% of landless households. However, beyond land ownership, access to bank loans remains a caste privilege: only 30% of Dalit households with land had a bank loan, compared to more than 70% for middle and upper caste households. This in turn reinforces inequalities: bank loans are the cheapest (between 0.5 and 1% per month) and are regularly cancelled. This was the case during the pandemic.

55% of households were indebted to a microcredit company at the time of the survey, but again with strong disparities: taking microcredit was a widespread practice among Dalits (67%) and Christians (71%). Only 42% of the middle castes and 16% of the high castes used it. Microcredit remains expensive (2% per month) and above all more rigid, with zero tolerance for repayment and considerable penalties for late repayment (see Joseph et al. 2024). For the middle and upper castes, having land strongly limits the use of microcredit: 58% of landless middle castes had a microcredit against 36% of landowners. For the upper castes, the share was 33% against 10%. Gender disparities were also striking: banking remained a male privilege, while women have to make do with microcredit, especially poor and Dalit women. 4.4% of Dalit women were indebted to the bank at the time of the survey, compared to about 30% of non-Dalit men. Note however that non-Dalit women are more likely to borrow from banks (between 12 and 18%) than Dalit men (less than 10%).

47% of households were indebted to a bank, with wide disparities by caste: non-Dalit are about twice as likely to have access to bank loans (68% versus 28% for Dalits and 35% for Christians).

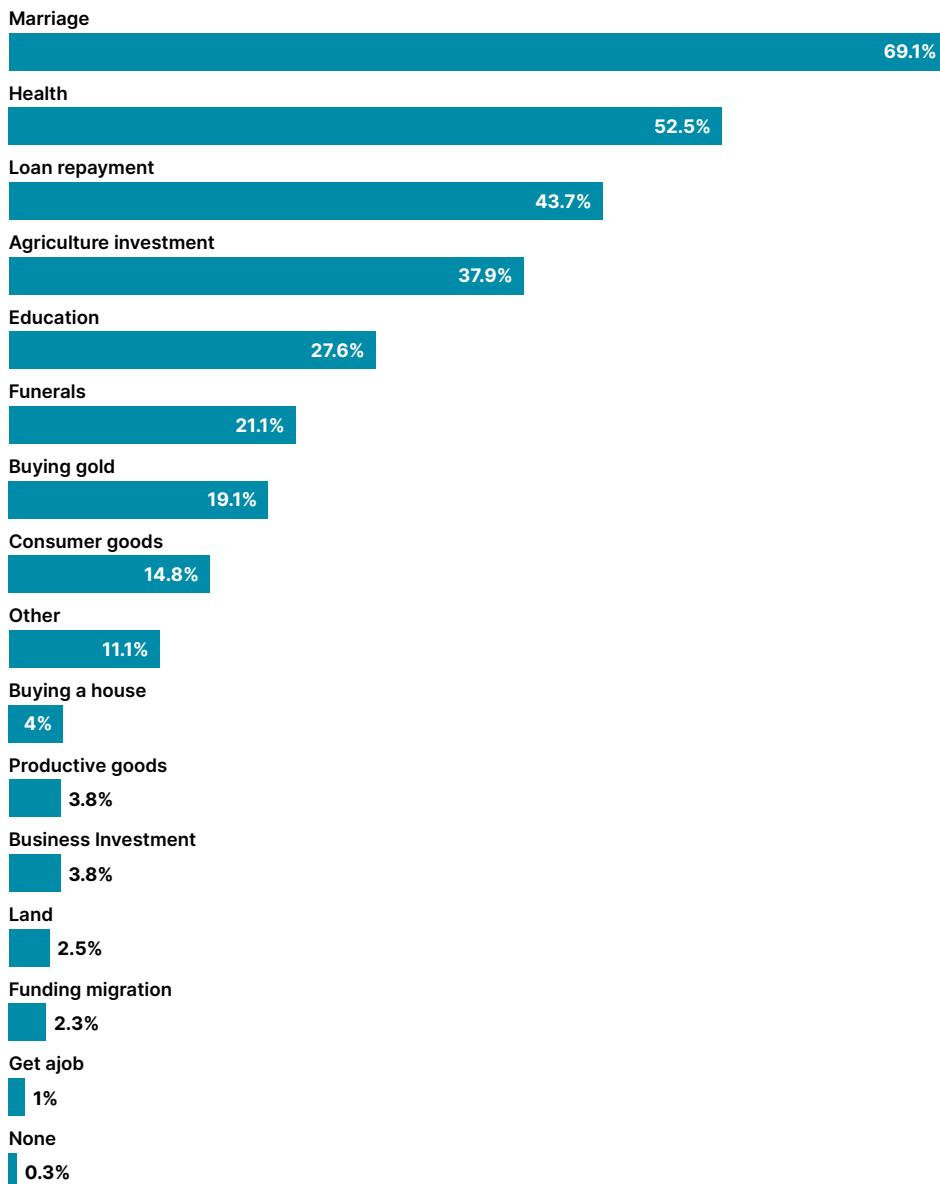
Over-indebtedness has worsened with the COVID-19 pandemic

In the early days of the lockdown, our team was in contact with the villagers by phone. Beyond the stress of the virus and the loss of jobs, the pressure to repay debts was one of the villagers' primary concerns. How are we going to pay the "finance" (local term for microcredit debts, those that do not tolerate any delay in repayment) or the "EMI" (equated monthly instalment, the financial jargon that people use to talk about their repayment bills)? The degree of anxiety of villagers, and of women in particular, regarding their repayments revealed the weight of debt in livelihoods and the degree of pressure exerted by lenders. The latter has been described in detail in the companion report (Joseph et al. 2024). We focus here on the consequences in terms of social reproduction: the burden of repayments, by forcing families to make numerous sacrifices (Schicks 2013), including in terms of food, threatens their social reproduction and trap them in a process of pauperization (Guérin, Morvant-Roux, and Villarreal 2013). Note that similar results were found in Cambodia from the *Depleted by Debt* study, where the debt crisis is akin to a public health crisis (Iskander et al. 2022).

In the quantitative survey, people were asked to list the three most important expenses they had faced over the last 10 years. As Figure 4 shows, the most frequent responses included marriage (61,9% of households list it as one of the three greatest expenses), followed by health care (52,7%), and then debt repayment (43,7%). Agricultural investment comes 4th (37,9%) followed by education (27,6%). Also listed were education, funerals, the purchase of gold (which remains the main instrument of payment for marriages and the main store of value) and the purchase of consumer goods.

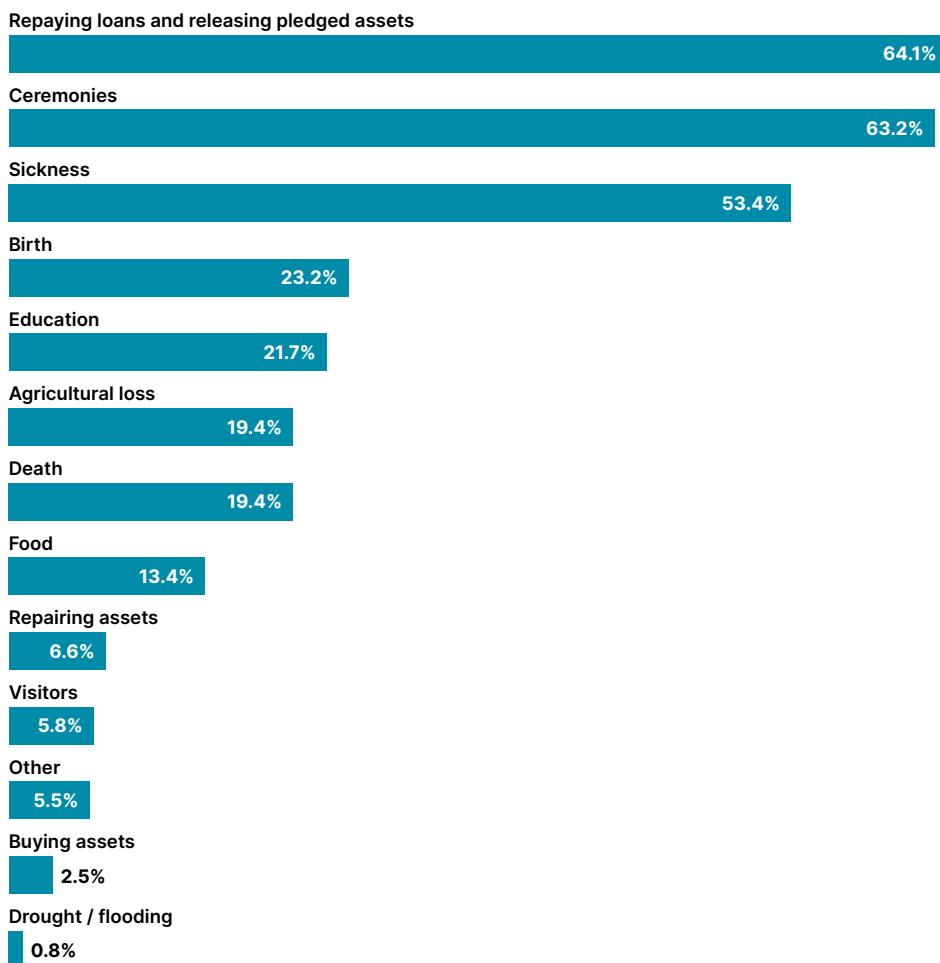


Figure 4. Largest expenses in the last 10 years (% of households)



When families were asked to list the 3 most severe financial stresses of the past three years, debt repayment came first (64.1%), just followed by ceremonies (63.2%), and health expenses (53.4%) (Figure 5). Around one fifth of households mentioned agriculture loss, birth, death, and education as a primary stress.

Figure 5. Financial stresses in the last 3 years (% of households)



This data makes it clear that debt repayment is an ongoing concern. In both cases (largest expenditures of the decade and financial stress in the last three years), the debt burden is more often cited by Dalits and Christians and the poorest. More than two-thirds of Dalits and Christians see debt as a major financial stress, compared with 55% for middle castes and 40% for upper castes. The gaps are similar between landowners and landless, and here again, class and caste are cumulative. For landed households, 66% of Dalit households consider debt as a major financial stress compared to 'only' 31% of upper caste households.

While most households were already heavily indebted before the lockdown, nearly a third (32%) had no choice but to go further into debt and/or pledge assets (41%) to cope with falling incomes and repayment pressures. Other coping mechanisms included using ration shops, which most households used (82%), saving (66%), reducing non-food expenses (32%), asking neighbors for help (25%), eating less (22%), collecting wild vegetables (17%), receiving remittances (13%), or sharing food or employment (7%). Here again, the answers varied across caste and class groups. Cutting expenses and food, borrowing

While most households were already heavily indebted before the lockdown, nearly a third (32%) had no choice but to go further into debt and/or pledge assets (41%) to cope with falling incomes and repayment pressures.

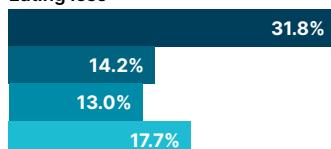
and pledging were more common among Dalits and landless, while the use of subsidized food was widespread. Figure 6 gives an example of caste disparities.

Figure 6. Inequalities in coping mechanisms (% of households)

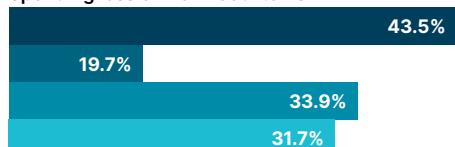
Collecting free vegetables



Eating less



Spending less on non-food items



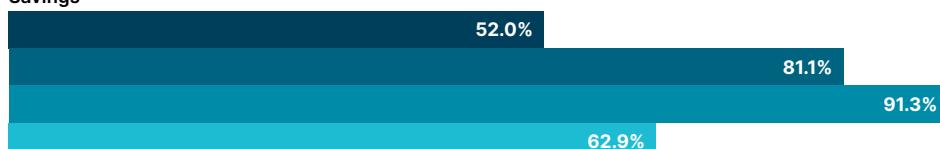
Borrowing



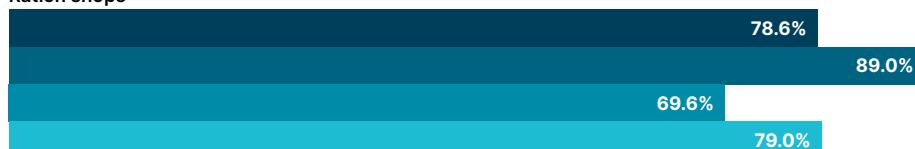
Pledging assets (gold, land)



Savings



Ration shops



- Dalits
- Middle caste
- Upper caste
- Christian

விவரம் எண்	தேதி	வரவு குபாய்	பாக்கி குபாய்	கை யெழுத்து
1.	20/8/21	450		④
2.	21/8/21	50		①
3.	31/8/21	100		③
4.	8-9/9/21	180		②
5.	9/9/21	100		②
6.	14/9/21	200		✓
7.	15/9/21	100		①
8.	15/9/21	100+100		③
9.				
10.				

விவரம் எண்	தேதி	வரவு குபாய்	பாக்கி குபாய்	கை யெழுத்து
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

Food insecurity

The COVID-19 pandemic contributed to greater food insecurity for Tamil Nadu's rural communities. Debt distress and food insecurity are daily and inter-linked problems which are entrenching gendered and caste inequalities.

The severity of food insecurity

The quantitative surveys undertaken several months after the end of the first lockdown (June 2020), shows that a significant number of households were facing food insecurity. In addition to the loss of income, free mid-May meals were cut with the closing of schools (although they were later added to the subsidized food distributed at the ration shops). The subsidized food program, an ancient pillar of Indian welfare policies strengthened during the lockdown, prevented starvation. Yet it was not able to prevent food insecurity.

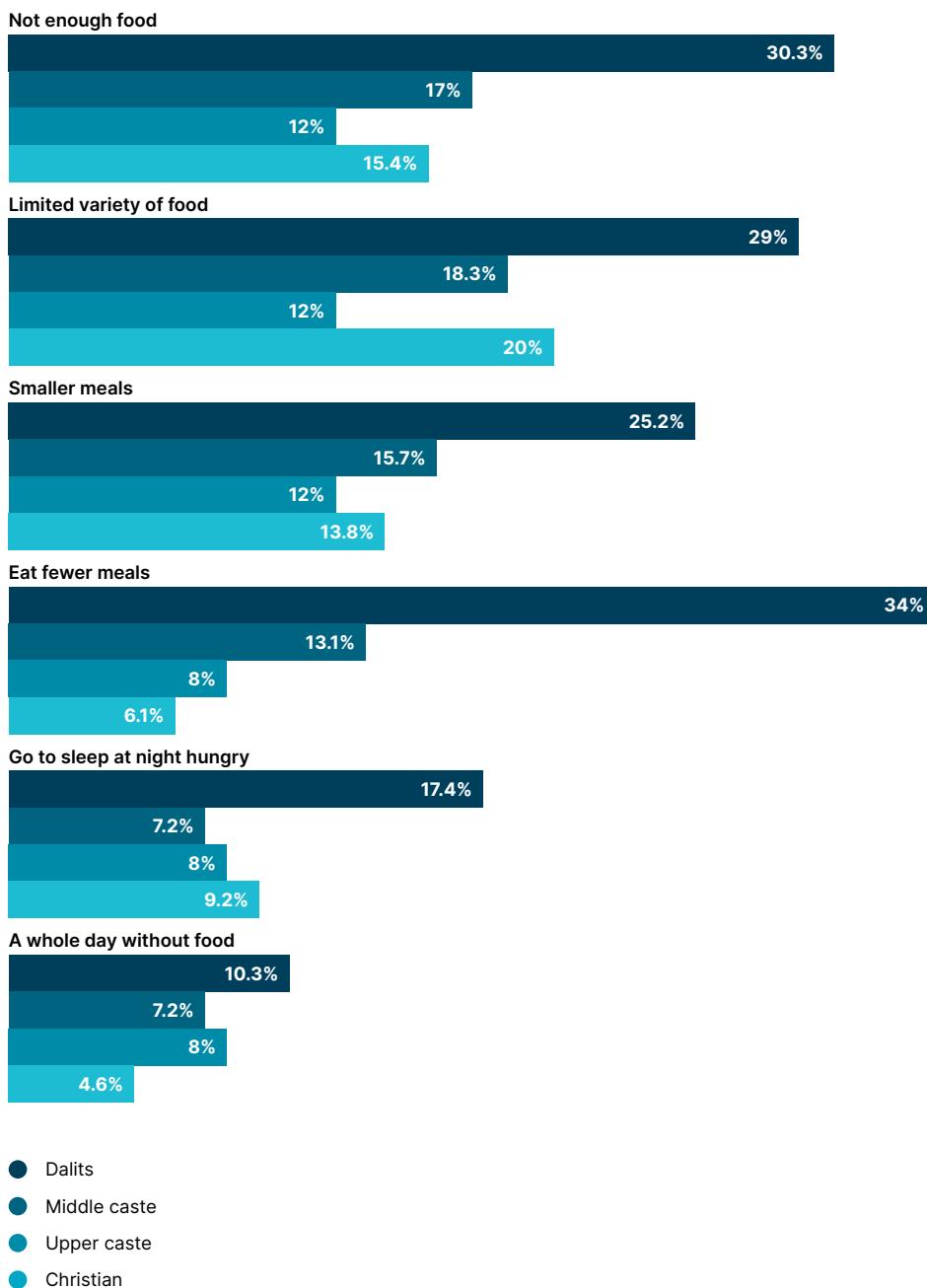
One-fifth (21,6%) of the sample had worried in the last four weeks about not having enough food. Food insecurity was both a question of quantity (smaller meal (18,8%), fewer meals (15,1%) and lack of variety (22,4%). 11,6% reported that they sometimes had to sleep at night hungry and 8% that sometimes they had a whole day and night without eating anything (Figure 7).

Figure 7. Food perception findings



Here again, Dalits were more severely affected. 30,3% of Dalits reported insufficient food. For 36.2% of them, the concern occurred from 3 to 10 times (during the 4-week period). 17.4% of Dalits had gone to sleep at night hungry and 10.3% went a whole day and night without eating anything. In both cases, this occurred from 3 to 10 times for around 30% of them. Figure 8 shows how Dalits are disproportionately impacted by food insecurity across all indicators.

Figure 8. Inequalities in food insecurity

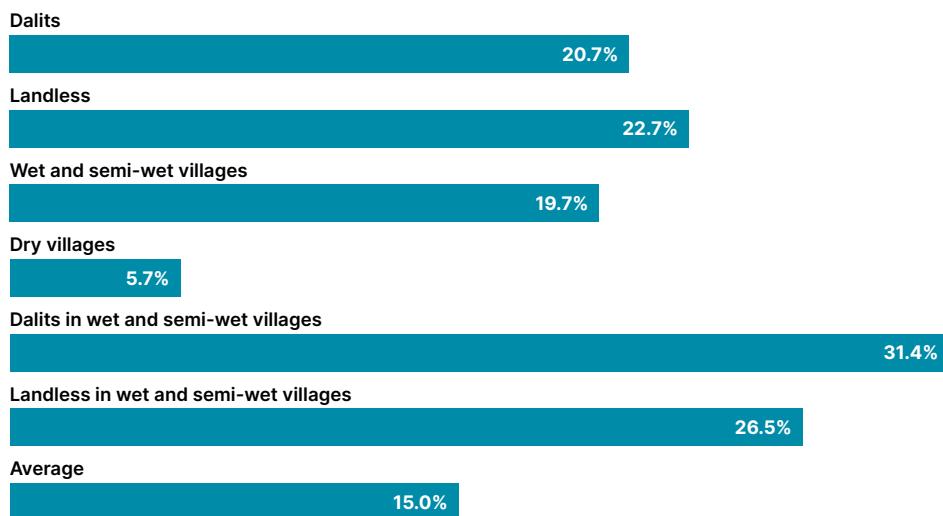


These different questions can be combined to construct a household food insecurity access scale (HFIAS). HFIAS is an experience-based indicator that captures the behavioral and psychological manifestations of insecure food access. It compares households according to the degree of severity of insecure food access (Coates, Swindale, and Bilinsky 2007). The HFIAS shows that 71% of households were food secure, 15% of households faced severely food insecure access and the rest faced mildly (6.5%) or moderately food insecure access (7%).

As Figure 9 shows, class, caste and ecotype systems are key differentiating factors. Severe food insecurity reached more than 20% for Dalits and 22.7% for landless and was

two to three times higher in wet and semi-wet villages than in dry villages. For Dalits and landless in these two villages, food insecurity affected nearly one-third of households.

Figure 9. Severely food insecure access (HFIA) (% of households)



Managing food (in)security

A feminised responsibility

Managing food (in)security is a female responsibility and is typically a hidden form of work (Cappellini, Marilli, and Parsons 2014). Participants in the *Depleted by Debt?* study emphasized the stress of cooking in times of lockdown and the tricks and tactics used to avoid or limit food insecurity. They explained that for men and children, now at home and idle, meals were an essential distraction and therefore it was even more important to feed them properly than in normal times. As one woman told us, the crisis “distends men and kids’ stomachs”. As usual, women ate last and made do with the leftovers.

The huge use of the government food distribution system was a first port of call for many households, including for people who usually despise this type of food, reserved for the poor and needy. Creativity and resourcefulness were then needed to appease each other’s hunger, to diversify meals as much as possible to limit complaints while spending the bare minimum. Tactics women used included:

- Returning to wood-burning stoves (when gas had become the norm for many);
- Eliminating or reducing meat, fish, eggs and dairy products;
- Eliminating “snacks” – salty or sweet cookies that children love;
- Cooking only once and eating less;
- Reducing the quantity of vegetables consumed by making-do with only chopped onion and tomato (and in addition using only “one onion for 4 meals instead of one onion per meal”);
- Collecting wild plants, an old but abandoned practice;
- Sharing gravies with neighbours (with some variation about whether it is reciprocal or charity);
- Sourcing gravies or other food stuffs from employers;
- Undertaking small-scale work in wealthy people’s house in exchange for rice;
- Buying lower quality rice and breaking it in the mill to achieve a finer grain;
- Stopping making *idli-dosa*, generally a daily staple (even though ration rice is normally a component for this, it is still too expensive since it requires oil, dal, chutney).

Apart from these everyday tactics, two other coping strategies were key and explain the disparity between households: saving and subsistence. Both were more common among the non-Dalit and wealthier, and subsistence was also much more common in the dry village. 91.3% of the upper castes used cash savings during the lockdown, compared to 52% of the Dalits. Monetary savings were used primarily for food, followed by health, ceremonies, and debt repayment. The amounts used varied widely. The median amount was 6650 INR, but the gap between Dalits and upper castes varied from 1 to 20 (1850 versus 33560 INR). The gap between Dalits and middle castes and Christians was from 1 to 6. 77.3% of upper caste consider that savings has been the most useful coping mechanism during the lockdown, against 31.2% for Dalits (59.1% for middle caste and 53.2% for Christians). Similarly, non-Dalits reported more frequent recourse to sharing and mutual aid, whether

for meals or work. Nearly 27% of middle castes said they had done so, compared to 7.1% of Dalits, 20% of Upper Castes and 15.4% of Christian. When subsidized food shops ran out of stock and had to rotate distribution and select the first recipients, some women organised to share the available quantities of food. Among the Christians in the semi-wet village, most own a small plot of land, and the women are usually in charge of it while the men migrate to Kerala. When the men returned at the time of the lockdown, the women continued to cultivate the land and rotated the work among themselves, taking turns working in each other's land to avoid paying wages.

A substantial number of households could rely on their own production for rice (12%), cereals such as maize, sorghum, millet (12.3%), dairy products (22.4%) and nuts (10.7%, mainly peanuts, used to garnish rice, to make chutney or as oil (pressed in local oil presses). But here again, this was very uneven. For example, according to our survey, subsistence of rice varied from one to three between Dalits and upper castes (8.9 against 28%), from 0 to 23% between landless and landowners, and from one to seven between wet and dry village (3.3% against 22.8%). Note also that nearly 50% of the rice consumption of landed Dalits came from the ration shop (and only 20% from their land, compared to 36% for the upper caste). Similar differences were observed for cereals, dairy products and nuts. The specialization of the dry village in subsistence agriculture has proven to be crucial in helping households limit the risks of food insecurity. We should also note the key role of storage and planning habits, forged by a constant climate of uncertainty and assumed, most often, by women. For example, they explained to us that they usually buy large quantities of vegetables when prices are low. They dry them and then store them. Each family has dedicated cabinets for storing grain. Villagers make it clear that the chronic uncertainty they face forces them to develop precautionary strategies for the lean months. And because of the lack of access to water, agriculture is still thought of as a way of feeding themselves rather than as a product for sale.

The debt distress-food insecurity nexus

It is clear that debt repayment obligations have contributed to food insecurity (and a variety of other issues such as health and asset sales). This was the case before the pandemic, and it was also the case during the pandemic and lockdown for these same households and others.

A significant (albeit unmeasured) proportion of households were already malnourished before the pandemic. The emaciated faces and wiry figures of some villagers, some of whom are also very short, are telling. A detailed analysis of our qualitative interviews indicate that these households share common characteristics: most are Dalit and landless, which is most often the case in the wet village; they don't have livestock; they have experienced the death, disability, or chronic illness of an earning family member, especially a male; and they are also highly indebted. Chronic health problems we came across during our survey include pancreatitis treatment; loss of mobility following an accident; heart problems; ulcer; kidney diseases; high blood pressure; bones and joint pains; chronic fatigue; mental health disorders and alcoholism, including among some women. Visually, women, especially among the older one, seem to be more affected by undernutrition. Among the better-off, obesity is also an issue, and here too women seem to be more affected: the lack of physical activity, control over their mobility and changes in food habit certainly contribute to this.

Health, nutrition and debt issues are closely linked. Medical treatment is expensive or neglected precisely because of lack of financial capacity, while illness reduces or stops the ability to work and therefore income. Theresa, a middle-aged woman with heart problems, explains:

"We will manage our hunger by eating biscuits. Even now I worked continuously for 2 days and I don't feel well. I spent the money I earned by buying medicines for me. Interviewer: You end up spending the money you earned by working hard for medicines? Teresa: Yes. I spent the entire money on medicines. Then what is the purpose of me working hard with such health issues?"

Lack of income and the cost of medical treatment lead to debt, and in return the burden of repayment puts a strain on budgets, can stop treatment and forces households to cut back on spending, starting with food. The burden of repayment also causes anxiety, sleep disorders, and sometimes depression or even suicide. "Debt raises blood pressure," one woman told us at the time of the village restitution.

For other households, food insecurity was the result of the lockdown and debt repayment contributed to this. In our quantitative survey, around 20% of individuals report that they have been threatened and pressured because of their inability to repay their debt. This is significantly higher for women (24.4%), Dalits (31%) and in the wet village (26.5%). To avoid or limit this pressure, sacrificing food was often an option. The loss of income combined with debt obligations forced people to eat less and less well ("We're only eating kanji with ration rice"; "We just buy an onion and tomato and cut it up to eat with our boiled

Health, nutrition and debt issues are closely linked. Medical treatment is expensive or neglected precisely because of lack of financial capacity, while illness reduces or stops the ability to work and therefore income.

rice"; "Most of the time [...] we boil the rice and make porridge out of it and drink for all the meals in a day." Our quantitative data show that the degree of food insecurity follows the degree of indebtedness. For instance, almost half (45.5%) of the top 25% most indebted Dalit households were (moderately or severely) food insecure against 19% for middle castes and 15% for upper castes. 91% of severely food insecure households have at least one loan that was used to repay a previous loan.

The loss of income combined with debt obligations also forced non-vegetarians to cut out meat, considered as an indispensable nutritive ingredient for a good physical condition; to revert to foraging practices ("We plucked some *murungai* leaves [spinach-like leaves] to make curry"), to sell jewelry ("We pawned our gold to buy oil and to make gravy"), to beg from neighbors, to ask in kind payment by the landowners (vegetables, peanuts). For many, subsidized food was their only food and was restricted to rice, lentils, sugar and oil. The low nutritional quality will have long-term health implications, especially for young children. Food insecurity was also a source of suffering ("I don't know how to say, we are suffering a lot and we don't have money to buy a milk for my children, it's a very hard situation"), and sometimes of shame ("we are in a very pitiable situation now"; "If you believe or not now I am eating rice porridge").

"For a hundred years I will have to live like this?" asked Jayarani when we met her (and her husband separately) few weeks after the end of the first lockdown. She was referring to the very hard time she had been going through since the lockdown. She and her husband took on heavy debt to renovate their home. He said she "waits for him every day with a knife to his throat" to find out how much he earns; she said she is "the only one who cares about debt". They had only eaten ration rice since the beginning of the corona, and when we met her they had only *rasam* (light soup) for two days. The children were very nervous with such poor quality food. "The children are hungry", she said, "but I owe this money". Her husband has an ulcer, and he is sure it is from the stress of the debt. She knew this, but she said that she too has many health problems but does not complain or even talk about them. She herself has very few job opportunities. Apart from a few days of daily agricultural work here and there, the only opportunity she found was a textile store, but the cost of transportation was prohibitive and it would be degrading for her, a married woman, to work outside the village.

Jayarani is one example among many others which illustrates two things: the responsibility of women in the management and mental burden of debt and food sacrifices. The better off were able to borrow again from financial companies to invest, for example in livestock, we came across few examples detailed in a companion report (Joseph et al. 2024). Others sacrificed their food security in order to meet their repayments.

Shakeela, a sugar cane cutter with her husband, told us they were having "an empty stomach". She had finally found some work as a day labourer in agriculture and construction. However, most of her wage was used to pay back a finance company, a pawn shop, and a local informal moneylender. Veena Mary, whom we interviewed by phone during the lockdown, shared her anxiety, the upheaval of her life ("I don't know how to say that life that was 8 months ago is now gone", with her sons returning from Chennai, now idle at home while they have to pay their rent from Chennai ("There is no peace of mind for my children") and her own anxieties about the burden of debt: "I am also unable to pay the pending loan amount and thinking and sitting before the stove," meaning she hesitates before cooking.

"We pawned our gold to buy oil and to make gravy."

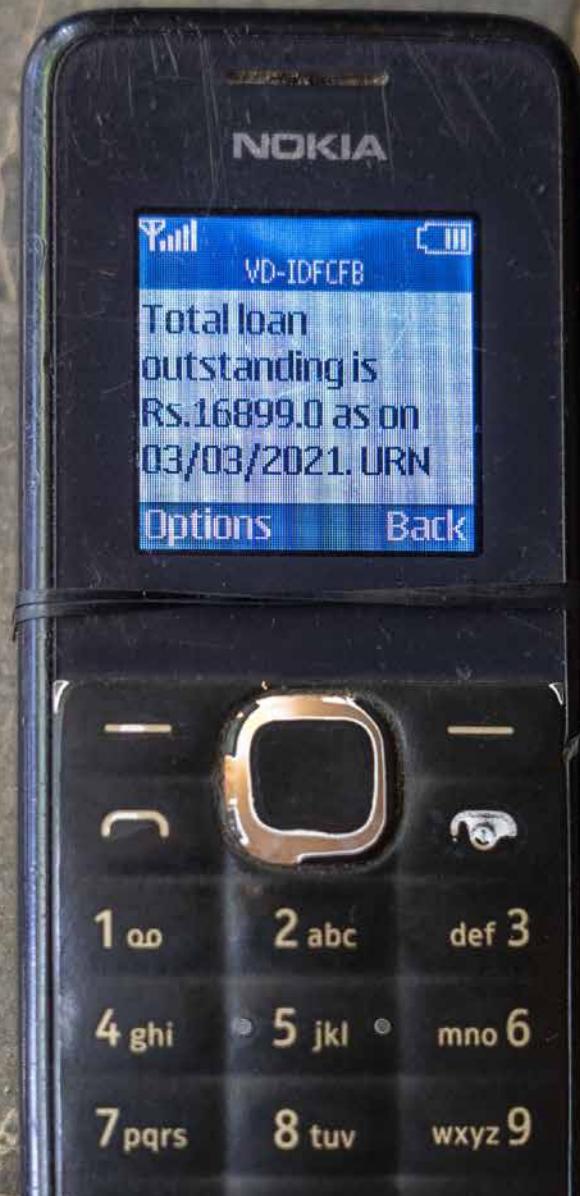
"The children are hungry, but I owe this money".

Premanathan, who was also heavily in debt, ate "old rice" (*pazhya sadham*, i.e. rice cooked the day before). Divya and Muthuraja ate the minimum, removed the "gravy" and explained "We will save that money to repay the loan". Chellarajan got by with the ration shop, took advantage of his dairy cow to add curd to rice, picks *murungai* leaves and drumstick to avoid buying vegetables.

Selling goods to pay debts or eat was also common. Balamurugan had to sell goats in order to pay two microcredit instalments and kept the rest of the money for buying rice and vegetables. At the time of our last interview, he had nothing left to pawn. Gauravelan was keeping a ring to pawn to buy vegetables or milk. Shalini, a widow with young children, pawned 10,000 INR worth of jewelry, which she may have lost since then, and at the time of the survey, she feared to pawn more in the future for buying vegetables. Sanjeevan was doing the same: "we pledge the gold and get money, from that we are managing the life".

Paying one's debts to finance companies and other private lenders was a matter of personal ethics – borrowers insisted on it. It was also a matter of maintaining one's creditworthiness: to default would mean not being able to borrow in the future.





Conclusion

The report shows how financial inclusion is not a panacea for achieving sustainable or just development. The gendered and caste-differentiated burdens of over-indebtedness are stark and require systems change.

Conclusion

Ultimately, the pandemic and lockdown have exposed and reinforced a deep crisis of social reproduction, acute problems of health and malnutrition, the complexities of adapting to changing climate and environment, and endemic debt, which allows families to make ends meet while locking them into unsustainable and predatory pathways of development. We know that the long-term consequences of food insecurity are serious, both in terms of physical fragility, overexposure to certain diseases, fatigue, difficulties in concentration, depression, and anxiety. As in other crises such as war and famine, women have been at the forefront. We have described here their pivotal role as care taker, food security guardians but also as debt manager, a heavy task that is invisible and ignored. This pivotal role does not seem to have given them any particular respect. "What to do?" women often responded when asked about the weight of their responsibilities during the pandemic. "Every day I wake up and run," Shakeela told us in a focus group. By this she means she has no time to think, she acts. Her neighbor said that women have "blinders", i.e. no chance to think and look elsewhere. When asked about the possible recognition they have received, one of the women laughs. "I never heard 'today you feed me'; I've been feeding him [her husband] from the day one without any recognition". "No one appreciates that my job is to earn and feed the family," said another. Ultimately, they were simply doing what is expected of them: ensuring the physical and social reproduction of their family. The psychological and emotional consequences are difficult to measure, but our qualitative testimonies highlight that women were facing recurring problems of anxiety, stress, and fatigue which in turn may have severe consequences in terms of exhaustion and mental health.

Interestingly, the shock of the pandemic and the lockdowns raised many questions and debates among the villagers, which we witnessed during our visits. Dependence on commercial agriculture and urban migration, two pathways promoted as key forms of climate adaptation through mainstream development policies, were severely questioned. At the same time, villagers were clear about the challenges of an alternative model. Commercial agriculture is the only way for them to access bank loans, subsidies and pre-purchases. And the scale of the debt forces them to accept urban jobs, regardless of their quality. The pandemic could certainly have been conducive to a structural transformation of agricultural and rural economies, rehabilitating subsistence farming, short food supply chains, and "hundred-miles communities" (Bhatt 2015). But this presupposes structural conditions and strong political will, which the Indian government has not displayed.

Ultimately, the pandemic and lockdown have exposed and reinforced a deep crisis of social reproduction, acute problems of health and malnutrition, the complexities of adapting to changing climate and environment, and endemic debt, which allows families to make ends meet while locking them into unsustainable and predatory pathways of development.

Recommendations

In March 2020, UN Women launched a “comprehensive response plan” to women’s vulnerability to the pandemic. Five critical areas of concern were identified, including gender-based violence, unemployment, unequal distribution of care and domestic work, women and girls’ voices, and the inclusion of gendered data in the implementation of gender responsive plans (UN Women 2020). While all of these measures are obviously crucial, they obscure the problem of debt and over-indebtedness that is now endemic in some parts of the world, and often borne by women. UNDP and UN Women have developed a Global Gender Response Tracker that analyzes government interventions to the pandemic and lockdown through a gender lens. Their report identifies four categories of intervention: protection, labour markets, business support and violence against women and girls. No measures to address the debt burden are mentioned (UN Women and UNDP 2022).

At the same time, policymakers and development organizations express concern about women’s financial exclusion, but focus mainly on inadequate access to credit (what economists call “credit rationing”) and bank accounts, and underestimate situations of overindebtedness. In 2021, a report by the International Monetary Fund compares pre – and post-covid gender gaps in financial exclusion. The authors consider that “the gender gap in financial access may be partially mitigated, once microfinance institutions are taken into account as they are known to play an important role in providing credit to women in some low – and middle-income economies” (Shirono et al. 2024, 2). They ignore the dark side of microcredit and look at women’s debt levels as an indicator of inclusion rather than potential overindebtedness. Our analysis leads to 3 key recommendations:

Recommendations

1

Financial inclusion policies need a critical re-think

The extent of household debt remains largely understated. While so-called financial inclusion policies focus on providing loans to combat so-called “credit rationing,” policy makers should be concerned about the burden of debt and over-indebtedness. These threaten the very survival of families, forcing them to cut back on food (and health) expenditures to meet repayments.

2

Debt cancellation

Women's excessive responsibility for debt should also be a concern. Of all the measures implemented during the pandemic to improve the situation of women, in India and elsewhere, none has addressed women's debt and over-indebtedness. Thinking about debt cancellation measures, along with farmers and the private sector, should be a priority. It is then necessary to design services that are better adapted to the constraints of rural families in terms of cost and flexibility. More fundamentally, the sources of indebtedness must be addressed: inadequate health services, the cost of education, and irregular and low employment income.

3

Food sovereignty

Questioning the uneven resilience of village economies must be a priority. The pandemic and the lockdowns have highlighted the dramatic consequences of the lack of food sovereignty and dependence on commercial agricultural chains promoted through climate adaptation policy, and the need to encourage a return to subsistence agriculture that can feed families.

References

Agarwal, Bina. 2021. "Livelihoods in COVID Times: Gendered Perils and New Pathways in India." *World Development* 139: 105312.

Azim Premji University. 2021. "State of Working India 2021. One Year of COVID-19." Bangalore: Centre for Sustainable Employment/Azim Premji University.

Bhatt, Ela R. 2015. *Anubandh: Building Hundred-Mile Communities*. Ahmedabad: Navajivan Publishing House.

Brickell, Katherine. 2020. Home SOS: Gender, Violence, and Survival in Crisis Ordinary Cambodia. Hoboken, New Jersey: Wiley.

Brickell, Katherine, and Sylvia Chant. 2010. "'The Unbearable Heaviness of Being' Reflections on Female Altruism in Cambodia, Philippines, The Gambia and Costa Rica." *Progress in Development Studies* 10 (2): 145–59.

Cappellini, Benedetta, Alessandra Marilli, and Elizabeth Parsons. 2014. "The Hidden Work of Coping: Gender and the Micro-Politics of Household Consumption in Times of Austerity." *Journal of Marketing Management* 30 (15–16): 1597–1624. <https://doi.org/10.1080/0267257X.2014.929164>.

Chant, Sylvia. 2008. "The 'Feminisation of Poverty' and the 'Feminisation' of Anti-Poverty Programmes: Room for Revision?" *The Journal of Development Studies* 44 (2): 165–97.

Chatterjee, Partha, Soma Dey, and Shweta Jain. 2020. "Lives and Livelihood." *Economic & Political Weekly* 55 (22): 7–8.

Choudhuri, Pallavi, Sonalde Desai, and Santanu Pramanik. 2022. "The Impact of COVID-19 on Household Consumption Expenditure in India." IZA Conference.

Coates, Jennifer, Anne Swindale, and Paula Bilinsky. 2007. "Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide." Washington D.C.: Food and Nutrition Assistance Project.

Deshpande, Ashwini. 2020. "The COVID-19 Pandemic and Lockdown: First Order Effects on Gender Gaps in Employment and Domestic Time Use in India." Working Paper 607. GLO Discussion Paper. <https://www.econstor.eu/handle/10419/222416>.

Dixon, John M., Jeevika Weerahewa, Jon Hellin, Maria Fay Rola-Rubzen, Jikun Huang, Shalander Kumar, Anup Das, Muhammad Ejaz Qureshi, Timothy J. Krupnik, and Kamil Shideed. 2021. "Response and Resilience of Asian Agrifood Systems to COVID-19: An Assessment across Twenty-Five Countries and Four Regional Farming and Food Systems." *Agricultural Systems* 193: 103168.

Drèze, Jean, and Anmol Somanchi. 2021. "The COVID-19 Crisis and People's Right to Food." *Unpublished Document*.

FAO, IFAD, UNICEF, WFP and WHO. 2022. "The State of Food Security and Nutrition in the World. Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable." Roma: FAO.

Federici, Silvia. 2018. "Women, Money and Debt: Notes for a Feminist Reappropriation Movement." *Australian Feminist Studies* 33 (96): 178–86.

Fraser, Nancy. 2017. "Crisis of Care? On the Social-Reproductive Contradictions of Contemporary Capitalism." In *Social Reproduction Theory*, edited by Tithi Bhattacharya, 21–36. London: Pluto.

Ghosh, Jayati. 2009. "Informalization and Women's Workforce Participation: A Consideration of Recent Trends in Asia. Towards 'Embedded Liberalism'?" In *The Gendered Impacts of Liberalization*, edited by Shahra Razavi, 179–206. Routledge.

Guérin, Isabelle, Vincent Guermond, Nithya Joseph, Nithya Natarajan, and G. Venkatasubramanian. 2021. "COVID-19 and the Unequalizing Infrastructures of Financial Inclusion in Tamil Nadu." *Development and Change*. <https://doi.org/10.1111/dech.12674>.

Guérin, Isabelle, Nithya Joseph, and G. Venkatasubramanian. 2021. "How Indian Financial Infrastructure Failed during the Pandemic." *The Wire*, June 23, 2021. <https://m.thewire.in/byline/isabelle-guerin-nithya-joseph-and-g-venkatasubramanian>.

Guérin, Isabelle, Santosh Kumar, and G. Venkatasubramanian. 2023. *The Indebted Woman. Sexuality, Kinship and Capitalism*. Stanford: Stanford University Press.

Guérin, Isabelle, Youna Lanos, Sébastien Michiels, Christophe Jalil Nordman, and Govindan Venkatasubramanian. 2017. "Insights on Demonetisation from Rural Tamil Nadu." *Economic & Political Weekly* 52 (52): 45.

Guérin, Isabelle, Solène Morvant-Roux, and Magdalena Villarreal, eds. 2013. *Microfinance, Debt and over-Indebtedness: Juggling with Money*. London and New-York: Routledge.

Harriss, John. 2020. "'Responding to an Epidemic Requires a Compassionate State': How Has the Indian State Been Doing in the Time of COVID-19?" *The Journal of Asian Studies* 79 (3): 609–20. <https://doi.org/10.1017/S0021911820002314>.

Harriss-White, Barbara. 2010. "Globalisation, the Financial Crisis and Petty Commodity Production in India's Socially Regulated Informal Economy." In *Globalization in India and China: Impacts and Responses*, edited by David Bowles and John Harriss, 131–50. London: Palgrave Macmillan.

Harriss-White, Barbara. 2020. "The Modi Sarkar's Project for India's Informal Economy." *The Wire*, May 20, 2020. <https://thewire.in/political-economy/the-modi-sarkars-project-for-indias-informal-economy>

Iskander, D., F. Picchioni, L. V. Long, Laurie Parsons, Vincent Guermond, Sébastien Michiels, Katherine Brickell, G. Zanello, and Nithya Natarajan. 2022. "Trapped in the Service of Debt: How the Burdens of Repayment Are Fuelling the Health Poverty Trap in Rural Cambodia." London: Royal Holloway, University of London.

Kalaiyaran, A., and M. Vijayabaskar. 2021. *The Dravidian Model: Interpreting the Political Economy of Tamil Nadu*. Cambridge: Cambridge University Press.

Kannan, K. P. 2019. *Interrogating Inclusive Growth: Poverty and Inequality in India*. New-Delhi: Routledge India. <https://doi.org/10.4324/9781315661896>

Kar, Sohini. 2018. *Financializing Poverty: Labor and Risk in Indian Micro-finance*. Stanford: Stanford University Press.

Karunakaran, Kalpana. 2017. *Women, Microfinance and the State in Neo-Liberal India*. New-Delhi: Routledge India.

Kennedy, Loraine. 2014. "The Political Determinants of Reforming Packaging: Contrasting Responses to Economic Liberalisation in Andhra Pradesh and Tamil Nadu." In *The Political Determinants of Reforming Packaging: Contrasting Responses to Economic Liberalisation in Andhra Pradesh and Tamil Nadu*, edited by R. Jenkins. New Delhi: Oxford University Press.

Nair, Tara S. 2020. "Precarious Livelihoods, Flourishing Finance, and the Delusion of Wellbeing: Women's Financialised Lives in Ahmedabad." In *Financialisation and Household Economies: An Interdisciplinary Inquiry in the Context of Select Indian States. Report of the Study Carried out with ICSSR Project Grant under the Research Programme (2016-17)*, edited by Tara S. Nair. Ahmedabad: GIDR.

National Human Right Commission. 2020. "Human Rights Advisory on Rights of Women in the Context of COVID-19." New Delhi: National

Human Right Commission.

Neve, Geert De. 2016. "The Economies of Love: Love Marriage, Kin Support, and Aspiration in a South Indian Garment City." *Modern Asian Studies* 50 (4): 1220–49. <https://doi.org/10.1017/S0026749X14000742>.

Pattnaik, Itishree, and Kuntala Lahiri-Dutt. 2021. "Do Women like to Farm? Evidence of Growing Burdens of Farming on Women in Rural India." *The Journal of Peasant Studies* 0 (0): 1–23. <https://doi.org/10.1080/03066150.2020.1867540>.

Pattnaik, Itishree, Kuntala Lahiri-Dutt, Stewart Lockie, and Bill Pritchard. 2018. "The Feminization of Agriculture or the Feminization of Agrarian Distress? Tracking the Trajectory of Women in Agriculture in India." *Journal of the Asia Pacific Economy* 23 (1): 138–55.

Ramachandran, V. K., and Vikas Rawal. 2010. "The Impact of Liberalization and Globalization on India's Agrarian Economy." *Global Labour Journal* 1 (1): 107–30.

Ramesh, B. R. 2022. "Environnemental Profile of Villages." Global Challenge Research Foundation Project. Puducherry/London: French Institute of Pondicherry/Royal Holloway, University of Mondon.

Reboul, Elena, Isabelle Guérin, and Christophe Jalil Nordman. 2021. "The Gender of Debt and Credit: Insights from Rural Tamil Nadu." *World Development* 142 (June): 105363.

Schicks, Jessica. 2013. "The Sacrifices of Micro-Borrowers in Ghana – A Customer-Protection Perspective on Measuring Over-Indebtedness." *The Journal of Development Studies* 49 (9): 1238–55. <https://doi.org/10.1080/00220388.2013.775421>.

Shah, Alpa, Jens Lerche, Richard Axelby, Delel Benbabaali, Brendan Donegan, Jayaseelan Raj, and Vikramaditya Thakur. 2018. *Ground Down by Growth. Tribe, Caste, Class, and Inequality in Twenty-First Century India*. London: Pluto Press.

Shirono, Kazuko, Hector Carcel-Villanova, Esha Chhabra, and Yingjie Fan. 2021. "Women's Financial Access in Times of COVID-19." IMF Statistics. Washington D.C.: IMF.

Somanchi, Anmol. 2020. "COVID-19 Relief: Are Women Jan Dhan Accounts the Right Choice for Cash Transfers." *Ideas for India*. <https://www.ideasforindia.in/topics/poverty-inequality/covid-19-relief-are-women-jan-dhan-accounts-the-right-choice-for-cash-transfers.html>.

UN. 2020. "Private Debt and Human Rights." Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of human rights, particularly economic, social and cultural rights. Geneva: UN.

UN. 2021. "Your Questions Answered: Women and COVID-19 in India." *UN Women* (blog). July 2021. <https://www.unwomen.org/en/news/stories/2021/7/faq-women-and-covid-19-in-india>.

UN Women. 2020. "Gender-Responsive Prevention and Management of the COVID-19 Pandemic: From Emergency Response to Recovery & Resilience." Geneva: UN Women.

UN Women and UNDP. 2022. "Government Responses to COVID-19: Lessons on Gender Equality for a World in Turmoil." Geneva: UN Women and UNDP.

Appendix 1

Socioeconomic characteristics of the sample population

The rate of landownership is over 70% for non-Dalits, compared to 43.5% for Dalits and 32.8% for Christians. According to our estimate of assets (tractors, livestock, vehicles, durable consumer goods), Dalits own on average three to four times less assets than the Middle Caste and Upper Castes, and Christians are in between. For income, the differences are 1.5 to 2, and again, Christians are in between. Education is progressing, but remains uneven. Among households "heads", who are predominantly male, almost two-thirds have passed primary education among the upper castes (62.5%), and the rate is almost the same among Christians (61.5%). In contrast, it is only one-third among Dalits (33.5%), and barely more among the Middle Castes (37.3%). Class and caste distinctions are also visible in the uneven access to regular or permanent non-agricultural jobs. The poorest have to settle for daily agricultural (*coolie*) work and increasingly, for men, non-agricultural work outside the village. For the landless, the main employment opportunities constitute a permanent trade-off between regular but seasonal jobs (e.g. sugar cane harvesting and brick molding) based on a wage advance system and involving dire working conditions, and casual jobs (e.g. manual labour in construction, transport and markets). For some young people however, who are increasingly qualified, including Dalits, slightly better jobs in manufacturing and services are now accessible.

Table 1. Characteristics of the population

	Dalits	Middle caste	Upper caste	Christian	Total
Number of households	n=155	n=153	n=25	n=65	n=398
Households characteristics					
Household size (mean)	5.1	4.9	4.7	4.4	4.9
Land owner (%)	43.5	73.2	76.0	32.8	55.3
Size own land (acre)					
Mean	1.6	1.7	3.7	1.4	1.8
SD	2.5	2.5	5.1	0.8	2.8
Median	1	1	1	1	1
Mean Nber income source	5.6	6.3	5	5.4	5.8
Share of non-agri income*	52.7	48	44.2	64.7	52.3
Annual income (1000 INR)					
Mean	224	336	472	379	304
SD	273	397	343	426	361
Median	172	246	307	243	217
Assets (1000 INR)					
Mean	878	2845	3347	1745	1931
SD	1314	3204	3284	2636	2694
Median	484	1600	2830	923	942
Household head characteristics	n=149	n=152	n=24	n=65	n=390
Male (%)	91.3	90.2	83.3	83.1	89
Age (mean)	46.9	52	53.7	52.9	50.3
Education (%)					
None	40.3	44.4	20.8	23.1	37.9
Attended/completed primary school	26.2	18.3	16.7	15.4	20.7
More than primary education	33.5	37.3	62.5	61.5	41.4

* Share of non-agricultural activity in the total income of the household.

Source: *Depleted by Debt* project

Appendix 2

The bias of rural development and welfare policies

Table 2 lists the cash transfer policies (or in-kind transfers, such as food) in force in the villages studied, the official eligibility rules and implementation challenges, and the % of households that have benefited from them, according to our quantitative survey. Several findings emerge:

- Schemes targeting the poor are also used by the rich (subsidised food, employment programs).
- Many schemes targeting the poor or low castes do not work.
- Schemes targeting peasants require land ownership, which excludes both the landless who rent the land and those who do not hold title to the land.

In addition to cash transfer schemes, rural policies also include active agricultural support policies, which clearly benefit medium and large-scale farmers (but our survey did not quantify this):

- Free electricity is officially targeted at small farmers; in practice, all farmers benefit from it.
- Subsidies for equipment (tractors, harvesters, pumps) are channeled through banks, but only the middle and upper castes and the wealthy have access to banks (see Joseph et al. 2024).

Rural policies also involve subsidised loans and loan write-offs, which benefit mostly non Dalits and the wealthiest (see Joseph et al. 2024). Social policies also include education: some measures are universal (mid-day meal): they have benefited all and have certainly contributed to the improvement in education over the last decade among the poor, low castes and women. Other measures (scholarships, university quotas) have mainly benefited Christians in our three villages (see our previous table). The same is true for public-sector jobs – there are a few in all three villages (nursery assistants, nurses, police officers).

Percentage of households benefiting from each scheme (N=406)

Scheme description	Lower caste	Middle caste	Upper caste	Christian	All
PDS (Public Distribution System)	97.4	100	100	100	99.0
Free and subsidised food for the poor. Requires a ration card that the most vulnerable don't have. Content adapted to poverty level; 10-20kg free rice according to poverty level, 1L kerosene, 1kg sugar, 1L palm oil. In practice, poverty levels are difficult to assess and classifications are sometimes random, especially among the rich who can easily be classified as poor.					
NREGA (National Rural Employment Guarantee Act)	96.1	94.1	80.0	86.2	92.7
Employment program for the poor, 100 days a year paid 220 INR a day. In practice, about 30 days on average per household, paid 120 INR. Here too, poverty levels are difficult to assess and classifications are sometimes random, especially among the rich who can easily be classified as poor.					
House construction grant	11.6	11.8	4.0	13.9	11.6
Only low and middle castes are eligible. Amounts depends upon caste: 2.2 lakhs for SC (lower castes); 1.8 lakhs for MBC and BC (middle caste and Christians). Eligibility requires payment of a bribe of between INR 20,000 and INR 40,000.					
Land grant	2.6	0.7	0.0	3.1	1.8
Only low and middle castes are eligible.					
PM-KISAN scheme	9.7	40.5	44.0	15.4	24.6
Farmer cash transfer. 6,000 INR paid annually. Requires land ownership and a property title. Most Dalits (lower castes) are excluded.					
Livestock loan	0.7	3.3	0	0.0	1.5
Subsidised loan of INR 20,000 to 36,000 (depending on caste) to buy cattle. Only SC and MBC are eligible. Managed by local cooperatives. Strong political interference in loan distribution and repayment. This led to the bankruptcy of many cooperatives, and in turn to the cessation of the scheme in many villages.					
Seed and organic manure scheme	4.5	2.6	0.0	3.1	3.3
Subsidy covering 50 to 75% of seed requirements (depending on caste) and 40% of manure requirements. Loan from 12000 to 20000 INR. Scheme not attractive to farmers. Only certain seeds are eligible. Hybrid and genetically modified seeds, which most farmers prefer, are excluded. Agricultural loans target rice for the public distribution system, which farmers consider insufficiently profitable.					
Education loan	2.6	0	0	0	1.0
Only for SC. INR 2 lakh without security. Eligibility conditions are highly restrictive (dependent on students' grades, targeting only certain courses). Loans are granted by nationalized banks located in large cities and not easily accessible to villagers.					
Pension (old age and disability)	3.9	2.0	0.0	12.3	4.3
1500 INR monthly. Eligibility is officially inclusive, but in practice requires a number of conditions (validation by the local administration, political allegiance, payment of bribes). The high proportion of Christians (concentrated in one of our three villages) is certainly due to good local political connections.					

Scheme description	Lower caste	Middle caste	Upper caste	Christian	All
Fish pond	0	0	0	0	0
Only for SC. INR 40,000 per pond (agro-ecology objective, combining fish farming, water reserve and forestry). Implementing the scheme requires training, monitoring, provision of fish manure and marketing. This is not done. In most cases, the pond is just used as a temporary water reservoir for rice cultivation. In our sample, no villagers have asked to benefit from the scheme, as they know that the benefits are negligible.					
Birth of girl child	13.6	22.9	24.0	18.5	18.6
Universal scheme. Cash transfer of INR 22,000 to the baby's fixed bank account, available when the baby reaches the age of majority (18) The scheme is easily accessible when the birth takes place in an urban hospital. Dalits more often give birth in the maternity wards of local primary health centers, so they have to obtain a birth certificate from the local administration, which involves bureaucracy, delays, bribes, and so on.					
Funeral scheme	0	0	0	0	0
Only SC and MBC. Cash transfer of 15,000 to 17,000 to the nominee to cover funeral expenses. The scheme requires a legal heir certificate, which is difficult to obtain. All heirs are eligible, but collectively, and the sum is deposited in a joint account for all heirs. Complex procedure discourages potential beneficiaries					
Marriage scheme	3.9	2.6	0	1.5	2.8
Only SC, and MBC under poverty line. Cash transfer of 15000 INR and 4 grams of gold based on marriage certificate. A very ambitious scheme, which the government could not afford to implement (especially given the constant rise in the price of gold). In practice, eligibility was restricted to political allegiances (and the scheme has since been abolished).					
Medical scheme	0	0	4.0	0	0.3
Medical assistance of up to 2 lakhs . Scheme restricted to specific diseases or surgical operations, whose treatment is only available in urban hospitals. Village medical centers have to prove their inability to offer treatment with a specific certificate, which most do not provide.					
Other (please specify)	1.9	1.3	8.0	7.7	3.0
This may include student bus fees, school uniforms and notebooks, cycles, etc.					
None of the above	3.2	0.7	0	0	1.5

Endnotes

- 1 Migrants were often in cramped and poorly ventilated living quarters without the possibility to keep distance from others and with no income. For a description, see for instance <https://www.bbc.com/news/world-asia-india-56561095>
- 2 For a detailed analysis of the consequences of the demonetization in rural Tamil Nadu, see (Guérin et al. 2017).
- 3 According to available statistics, by 2020, women had lost 46.6 million jobs overall, a loss of 3.6%, compared to 2.9% for men. By the end of 2021, there were still 19.7 million fewer jobs for women, compared to 10.3 million for men (UN Women and UNDP 2022, 15). Due to the closing of schools, the return of migrants, increased hygiene constraints and shrinking budgets, domestic and care tasks have intensified. In 45 countries surveyed as part of UN Women's rapid gender assessments, women more often than men expressed increased childcare responsibilities (UN Women and UNDP 2022, 45). The report refers to a "shadow pandemic of violence against women and girls" and gives alarming results from surveys conducted in 13 countries. "Roughly half of the respondents reported that they or a woman they know had experienced violence during the pandemic, with rates as high as 80 per cent in Kenya and 69 per cent in Morocco" (UN Women and UNDP 2022, 14). According to FAO estimates, about 30% of the global population was moderately or severely food insecure in 2021, with a 15% increase from 2019. The gender gap in food insecurity has widened, with 31.9 percent of women worldwide being moderately or severely food insecure, compared to 27.6 percent of men (FAO, IFAD, UNICEF, WFP and WHO 2022, 10–11).
- 4 We come back to the point of view of international organizations on women's indebtedness in conclusion.
- 5 The 2004 Tsunami hit the Coromandel coast hard, but none of the three villages are located on the coast.
- 6 During the last 105 years (1916–2020), depressions and cyclonic events happened 25 times at an average interval of 4.2 years. During the last 30 years, cyclones were found to be eventful as compared to previous decades: (1) very severe cyclonic storms occurred twice, 2011 and 2020; (2) the cyclones that brought heavy rains >500 mm occurred in 1991, 1996 and 2008; (3) Heavy to very heavy rainy days (>100 mm in a day) during the same cyclone, occurred two times in village D and four times in W and SW villages.
- 7 Between 2001 and 2004 due to the significant failure of both SW and NE monsoon, drought period was widespread and often reached severe to extreme conditions; particularly, during the last five years, drought frequency and intensity show increasing trend.
- 8 During the last 30 years, rainfall becomes highly erratic with the three lowest and the highest annual rainfall recorded since 2016.
- 9 While the total agricultural workforce, including own-account farmers and agricultural labourers, has been decreasing over the last decades (from 70% in 1971 to 44% in 2018, NSSO data), men are exiting agriculture at a faster pace than women: in 2018, 73.4% of rural working women were primarily involved in agriculture, while the share of rural working males in agriculture was only 55% (PLFS data 2017–2018).
- 10 Data collected in a neighbouring region of India shows a similar trend (Guérin, Kumar and Venkatasubramanian, 2023; Reboul, Guérin and Nordman, 2021).
- 11 The COVID-relief package of the central government included a monthly cash transfer of INR 500 (US\$ for three months to all women's bank accounts created through the Pradhan Mantri Jan-Dhan Yojana (PMJDY) financial inclusion scheme initiated under Modi's premiership in 2014. Senior citizens, people with disabilities, and widows were promised two instalments of INR 1,000 to these same accounts. Amongst our respondents, no one had received, or knew anyone who received, these cash transfers in their bank accounts. A key reason was that their bank account had not been opened through this specific PMJDY scheme, but prior to 2014 to receive payments from another governmental program (NREGA). At the national level, it is estimated that 38 per cent of poor households and 46 per cent of rural households have been excluded from the transfer program as they did not have a female member holding a PMJDY account (Somanchi 2020). In addition to the PMJDY scheme provided by the Central government, the Tamil Nadu state government offered a one-time cash payment of INR 1,000 through the Public Distribution System which provides food grains in the village on a monthly basis. All study respondents received this sum as well as food assistance for five months. For more details, see (Guérin et al. 2021).
- 12 Some of the owners of the brick factories, where many seasonal migrants from the sample villages were working at the time of the lockdown, fed the families for a few months, but more out of self-interest than generosity. The recruitment of brick workers is always on a wage advance. Not only were the amounts given added to the advance, and therefore to be repaid later, but in doing so, the employers wanted above all to secure their workforce (and their money) when the economy would recover.
- 13 Time spent in domestic work also reveals the unequal distribution of unpaid work within the family. According to OECD data, Indian women spend on average 352 minutes a day on unpaid work as against 52 minutes by men; and spend 185 minutes on paid work or study, against 391 minutes for men. https://stats.oecd.org/Index.aspx?datasetcode=TIME_USE (Accessed: 15 July 2021)
- 14 Castes (or jatis) are administratively classified for the purposes of quotas and affirmative action policies. Dalits are classified as Scheduled Castes (SC), Vanniyars as Most Backward Castes (MBC) and Christians as Dalits or MBC. Here, Upper castes (mostly Reddiyars and Naidu), are classified as Other Castes (OC).

