

Lives in Debt

Narratives of Agrarian Distress and Farmer Suicides

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A study in two districts recording high numbers of farmer suicide—Yavatmal in Maharashtra and Sangrur in Punjab—explores the tipping point for this desperate act and finds that in addition to the shame of indebtedness, especially when borrowing from members of the family, several other factors contribute to farmer suicides. These include faulty cropping patterns, rising input costs, aspirational consumption, and the absence of non-farm sources of income.

In this paper, we situate farmer suicides in the larger context of the agrarian crisis in India, based on our fieldwork in Maharashtra and Punjab.¹ In the first section, we outline the overall context of India's agriculture, as ascertained from various government reports and surveys. In the subsequent sections, we present observations from the fieldwork conducted in Yavatmal district of Maharashtra, and Sangrur district of Punjab, and analyse the preconceived dissimilarities and observed similarities in these two apparently diverse zones.

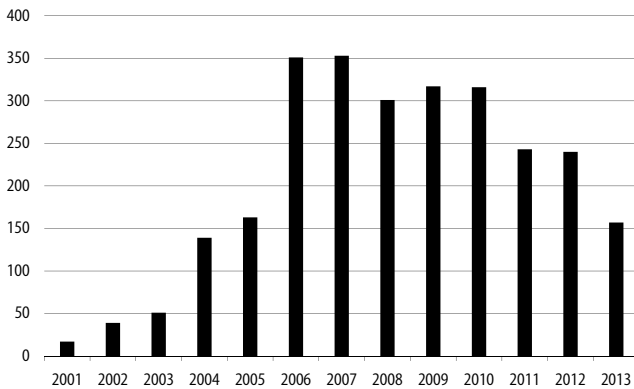
Drawing connections between farmer suicides, landholding patterns and outstanding debt, our narrative approach emphasises the kinship dimension of indebtedness, which creates a greater social and moral obligation to repay loans that are borrowed from relatives. While highlighting the shame of indebtedness, we argue that there are multiple factors that conjointly account for such tragedies, including faulty cropping patterns, rising input costs, nature of borrowings and informal sources of credit, as well as the aspirational consumption of farmers who often borrow money for non-agricultural purposes. As formal credit sources are not equal to the task of serving farmers, a large number of individuals who were not traditionally associated with lending have entered the money-lending business.

The concluding section recommends reformative measures to encourage an integrated policy framework on agrarian matters, particularly cropping patterns and institutional credit disbursement systems.

1 The Context: Signs of Distress

A striking peculiarity of agriculture in India is the continuing proliferation of small landholdings. The percentage of land owned by marginal farmers has gone up drastically, from 38% in 1953–54 to 70% in 2003, and over 80% of all landholdings are small or marginal (Ministry of Agriculture 2014). Also, the contribution of the agricultural sector to India's economy has dropped sharply. Today, it accounts for merely 13.7% of gross domestic product (GDP), compared to almost 47% at the dawn of independence. The decrease in the contribution of agriculture to GDP, however, has not been accompanied by a matching reduction in the share of agriculture in employment. Investment in Indian agriculture has been declining for several years. Investment in agriculture as a percentage of gross domestic produce reduced from 1.91% in 1991 to 1.31% by 2004 (Jha and Negre 2007). The more worrying factor, of course, is the trend of gross capital formation in the agriculture sector.

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Figure 1: Year-wise Frequency of Suicides in Yavatmal 2001–13

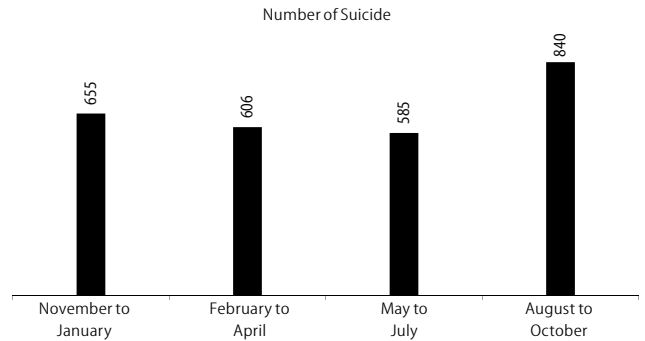
Source: Farmers' Suicide List, Yavatmal, 2001–13, from the DMO collected during fieldwork. X axis: Years; Y axis: Number of suicides.

Various estimates indicate that gross capital formation in agriculture has remained below 3% over the last 15 years.

Though the National Bank for Agriculture and Rural Development (NABARD 2013) report indicated a tenfold increase in the flow of formal credit from 2000–01 to 2011–12, it was insufficient to rule out the predominance of non-institutional sources of credit. In addition, commercial banks prefer “deepening” credit over “widening” it, making formal credit more accessible to farmers with larger landholdings. This trend was confirmed by another report, which suggested that the better-off farming households with large landholdings have greater access to institutional credit than others (NSSO 2014a).

Estimates put the number of indebted agricultural households in the country at 52%. The average outstanding loan per agricultural household is ₹47,000, and the proportion of indebted households in both Maharashtra (57%) and Punjab (53%) is higher than the national average of 52% (NSSO 2014a). The average outstanding loan in India has increased 3.5 times, from ₹12,585 in 2002 to ₹47,000 in 2012, with the growth percentage of the average outstanding amount highest amongst marginal farmers, where it rose from ₹6,121 in 2002 to ₹31,100 in 2012 (NSSO 2003, 2014b).

Farmer suicides in India need to be situated in this distressing context. Latest estimates indicate that almost 2,70,000 farmers have committed suicide over the last one-and-a-half decades. In 2014 alone, 12,360 farmers committed suicide² (NCRB 2014). It is in this context that we present our year-long fieldwork on the situation of the cultivators on the ground in Yavatmal and Sangrur districts. The choice of these two districts as fields of study was influenced by the high rate of suicide in both. Yavatmal is a rain-fed agricultural zone, part of a mono-crop farming zone cultivating BT cotton, soybean or *tur*. Sangrur grows three or more crops in a year—mostly rice and wheat—at the cost of massive depletion of underground water in the erstwhile “green revolution” areas. These two agro zones, Yavatmal and Sangrur, display major differences in a number of areas such as land rents (₹3,000–₹5,000 per acre in Yavatmal and ₹30,000–₹50,000 per acre in Sangrur), modes of irrigation, rates of interest on credit from informal sources, crop assurance, risk involved in cultivation, and linkages between farmers and procurers. Despite these differences, the

Figure 2: Frequency of Farmer Suicide in Cluster of Four Months in Yavatmal

Source: Farmers' Suicide List, Yavatmal, 2001–13, from the DMO collected during fieldwork. X axis: Years; Y axis: Number of suicides.

manifestations of the crisis in these two areas have striking similarities.

2 Farmer Suicides: Yavatmal and Sangrur

In 2014, 2,568 farmers committed suicide in Maharashtra, the highest amongst all states; the count was 3,146 in 2013. Of the 2,568 farmers who committed suicide in 2014, 1,052 cases were due to farming-related issues—predominantly crop failure—and 475 were due to illness (NCRB 2013, 2014). This may also be indicative of how health costs aggravate the farmers' loan burden. Therefore, the tipping point for farmer suicides need not always be solely farm-related.

Of the 2,678 farmer suicides in Yavatmal district from 2001–13 (Table 1), 1,211 were in the five talukas of Yavatmal, Kalapur,

Table 1: Number of Farmer Suicides in Yavatmal District (2001–13)

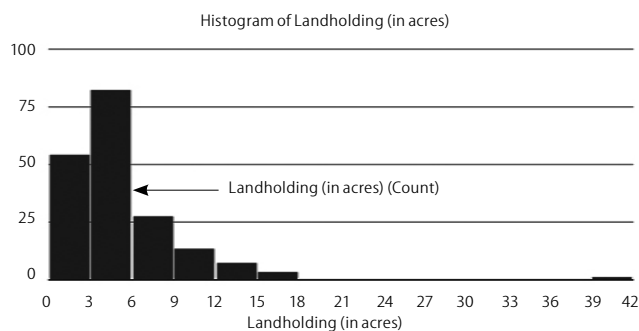
Year	No of Suicides in Yavatmal
2001	17
2002	39
2003	51
2004	139
2005	163
2006	351
2007	353
2008	301
2009	317
2010	316
2011	243
2012	240
2013	157
Total	2,678

Source: Farmers' suicide list, Yavatmal, 2001–13 (district records).

Ghatanji, Ralegaon and Kalamb. From January to May 2015, 139 farmers had committed suicide, according to official figures. This does not include farmers who committed suicide but cultivated rented land or took loans for farming and had hefty land rents to pay.³ However, only 35% of the farmers who committed suicide were considered eligible for state compensation.

The maximum number of suicides occurred in 2006 and 2007 (Figure 1). Repeated crop failure in the preceding years had resulted in increasing outstanding debts, inability to repay, loss of creditworthiness and further stress. This accounts for the huge increase in farmer suicides from 2007 to 2011. Poor harvest and farmer suicide follow each other with alarming regularity.

The number of suicides in Yavatmal district peaked from August to October and November to January (Figure 2). District data also record the highest number of suicides in the month of September from 2001 to 2013. This is because the cotton cropping cycle generally requires cotton to be harvested between October and January. A poor harvest or unexpected crop damage would often lead to a crisis, resulting in such tragedies.

Figure 3: Relationship between Landholding and Farmer Suicide in Yavatmal

Source: Survey by Vandana Foundation.

X axis: Landholding area in acres; Y axis: Number of suicides.

Survey data⁴ confirm that farmers with small and marginal landholdings and no alternative source of income were more likely to commit suicide (Figure 3) as they lacked non-farm sources of income-generation. This inability to access non-farm employment suggests that it is not only agricultural distress but the absence of a non-rural (urban) occupational backup that can often constitute the tipping point.

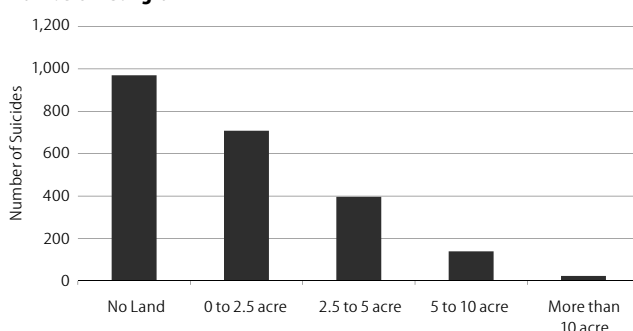
In Sangrur district, 2,213 farmers have committed suicide from 1995 to 2015.⁵ The single village of Kishangarh in Malerkotla tehsil in Sangrur recorded a shocking 79 cases of farmer suicide from 1980 to 2015. Kulrian, with 31 cases of farmer suicide, and Bahadurpur (Bareta) with 20 cases (the distance between Kulrian and Bahadurpur is less than 10 km) also recorded high numbers of farmer suicide. An extensive data set comprising more than 2,000 suicide-affected families (compiled for blocks Moonak, Lehragaga and Budhlada in Sangrur district from 1988 to 2015) revealed an excessive outstanding loan amount of ₹2 lakh to ₹2.5 lakh per household. The village-wise list of suicides also confirmed that those affected by suicide were invariably indebted. Select case studies from the field support the claim that they were also indebted to *arthis* (intermediaries)⁶ and had, in fact, exhausted all avenues to draw from banks.⁷

As in Yavatmal, in Sangrur as well the impact of debt is severest amongst small and marginal farmers (Figure 4), as this comment by a farmer with a large landholding suggests:

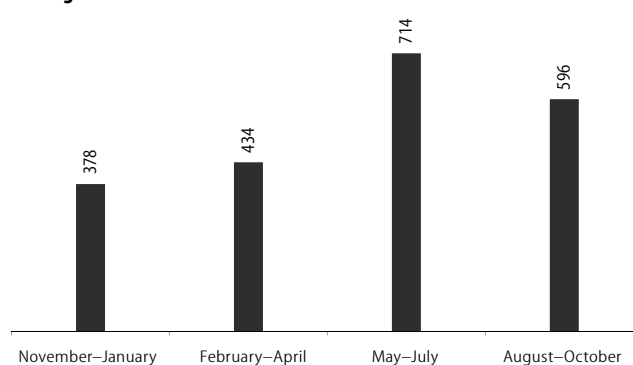
Those who take land on lease (*theka pe lena*) face greater risk than those who own the land. Last time I gave my land on lease to someone for ₹53,000. There was a crop failure due to heavy rain, however, and he could get only 1.5 quintals per acre. He sold the crop at ₹1,800 per quintal. That means he could not even recover his rent. That is why he did not take our land on lease this year.⁸

Sangrur reports a number of suicides amongst those who take land on lease and are therefore listed as landless. Not owning the land makes it even more difficult for poor farmers to get bank loans.

The majority of the suicides in Sangrur occurred from May to October (Figure 5). High rates of suicide in this period may be attributed to the relatively poor harvest of kharif crops and increase in outstanding debt. The pressure to repay intensifies in such a scenario, and combined with the inability to get more credit for future farming operations, causes higher stress levels.

Figure 4: Relationship between Landholding and Farmer Suicides in Real Numbers in Sangrur

Source: Village-wise List of Rural Suicide Cases pertaining district Sangrur, 1988 to November 2015. X axis: Landholding area in acres; Y axis: Number of suicides

Figure 5: Frequency of Farmer Suicides as per Cluster of Three Months in Sangrur

Source: Village-wise List of Rural Suicide Cases pertaining to district Sangrur 1988 to November 2015. X axis: Cluster of months; Y axis: Number of suicides

The inability to begin sowing for the next season due to a dip in creditworthiness leads to a larger number of suicides in the subsequent months.

3 Factors Causing Distress

3.1 Shame of Debt

Indebtedness and the inability to repay loans cause loss of face and sometimes, public ridicule. In Yavatmal, we found a major reliance on family members for credit. The dependency on credit from the family intensifies if other avenues of borrowing, including moneylenders, have been tried and exhausted. The shame associated with one's inability to repay is immense in village society and it is all the more acute if money is borrowed from relatives. Banks and moneylenders do not necessarily chase after borrowers for repayment, but families affected by suicide were most burdened by the obligation to repay relatives under any circumstances.

Offering a unique interpretation of the obligatory nature of repayment within the family and the shame and social humiliation associated with the inability to repay, particularly when money is borrowed from the wife's side of the family, Gupta (2015) argued,

Unlike north India, Maharashtrian farmers often practice cross-cousin marriage. This brings about a greater degree of equality between bride-givers and bride-takers than the 'kanyadaan'-led marriage relations in north India ... [T]he sense of shame is greater when taking a loan from an equal. Things get compounded if the man cannot return

the amount back on time. He now looks like a fugitive in family gatherings, as in marriages, and must duck out of sight [if the] wife's kin are around. His north Indian counterpart in UP or Bihar has no such qualms. As kanyadaan ordains the girl's family to be inferior to the boy's, the man takes, as his right, both dowry and periodical gifts from his wife's parents, or brothers.⁹

However, it would be wrong to presume that suicide brings relief or comes as a solution to the problem of outstanding debt. The loan is not waived after the suicide and the ability to repay diminishes further after a suicide in the family. As a local bank manager in Yavatmal said, "Even if the person commits suicide, the loan remains. Suicide does not solve the problem. The loan will be transferred to the person in whose name the land gets transferred."

Thus, the problem intensifies after the suicide as the family is often left without an earning member and the debt remains unpaid even after the unfortunate death, creating the possibility of further suicides. For example, in one of the families in Sangrur, three brothers from the same family took their lives, with the wives of the deceased farmers identifying debt as the cause of their husband's suicide. The three brothers had four acres of land between them. The families are now left with less than half an acre each. Each of the brothers had outstanding loans of ₹4 lakh–₹5 lakh. They were compelled to sell off the land to repay loans, particularly to the arthis. They had to take further loans to meet household expenditure. Their wives were not aware of the loan amounts, which is often the case while the husband is alive. Interestingly, contrary to rumours, creditors do not necessarily come knocking on the doors of debtors, fearing implication in the suicide. They just stop giving further loans to the family and this news is quickly transmitted to all informal credit operators. The quiet withdrawal of loans has an equally devastating effect on the indebted farmer's family.

3.2 Flawed Cropping Pattern

In Sangrur and Yavatmal, where paddy and cotton respectively are grown, the crop choice is not harmonious with the agro-climatic features of the region.

Dryland farming on small landholdings in adverse conditions is always a risky proposition. This risk severely reduces a farmer's ability to repay and remain eligible for fresh loans. Repeated crop failure emerges as a recurring stress factor that has pushed farmers to the brink over the past decade in Yavatmal. Lack of timely rainfall after the sowing operation, excessive rainfall after sowing, or hailstorms before harvest could be fatal to the crop. Farmers from Johmohda village voiced their concerns about the uncertainty and irregularity of rainfall and the subsequent losses:

In the last three years, we have not managed to pay the loan due to crop failure. If in between there is a marriage in the family, we hit rock bottom. We are entirely dependent on rainfall, since we have no irrigation facility. If nature is benevolent, we still manage something. Last year, we thought that the crop was good, but it rained so heavily that the crop was damaged.

Most of the cases from the field support the fact that lack of timely rainfall has caused crop failures over the years.¹⁰ There

seems to be a direct and positive correlation between yield of BT cotton and rainfall in the right amount and at the right time. Hence, the cultivation of BT cotton in an area entirely dependent on unpredictable rainfall with no alternative source of irrigation cannot possibly be the appropriate crop choice.

The monsoon was already delayed in 2015, when this field-work was conducted. One could sense the growing anxiety amongst farmers desperately waiting for the first showers to begin sowing operations. While revisiting the field a month after sowing following the first spells of monsoon rains, the farmers were found to be waiting for the next round of showers, which are required soon after sowing. A further delay invariably meant opting for a second or third sowing, causing additional expenditure on seeds. Given these circumstances, one needs to question the viability of growing BT cotton in these regions that are so dependent on a fine balance between timely rainfall and the right amount of rainfall. It is not merely the yield of the crop that is affected by poor or excessive rainfall. The farmer is also hurt due to increases in the cost of production. Anxiety caused by delayed rainfall leads to either premature sowing or repeated sowing.

Faulty cropping patterns are not limited to the choice of BT cotton in Yavatmal, but also its cultivation at the cost of indigenous mixed cropping. Farmers used to grow jowar and pulses, which also met domestic needs. The predominance of cotton farming in the last two decades has wiped out the more sustainable and healthier mixed cropping patterns necessary for fodder and soil rejuvenation.

If the cultivation of BT cotton is not suited to Yavatmal, rice cultivation is ecologically unsustainable in Sangrur. Diversification of agriculture away from wheat and paddy is necessary for improving soil fertility and maintaining an ecological balance. Rice cultivation has had an adverse impact on groundwater, as 2,000–4,000 litres of water are required to produce one kilo of rice.¹¹ Falling water tables threaten farmers across the state, particularly those who operate on smaller landholdings, as the cost of boring a well is directly proportional to the depth of the well and not the size of land. With the water table sinking each year, a farmer invariably has to bear the huge recurring costs of digging deeper without the assurance that the new depth at which water is available today will be sustainable in the near future.

The Johl Committee Report (1986) submitted to the Government of Punjab had raised the alarm on the existing cropping pattern in Punjab. Thirty years ago, the committee had identified paddy as a problem crop and suggested shifting at least 20% of the area under paddy and wheat cultivation to other crops. The re-intervention of the committee (Johl 2002) emphasised that

The state should aim at replacing at least one million hectares of land under wheat-rice rotation with other crops, which consume less water, are compatible ecologically and are in demand ... The target of shifting one million hectares of land from rice-wheat rotation to other crops can be achieved at a cost of ₹1,280 crore only by providing compensation to the farmers for not growing rice and wheat and shifting the area to other crops under a Crop Adjustment Programme.

3.3 Rising Input Costs

All farmers in both regions complained about rising input prices (seed, water, electricity, fertiliser, pesticide and land rent) and the absence of a commensurate increase in minimum support price (MSP). Box 1 summarises the cost and price equation as understood from the cultivators in Yavatmal.

Box 1: Summary of Cost, Bank Credit, Earning from Cultivating BT Cotton	
Cost of Production of BT Cotton	₹30,000–₹35,000 per hectare (or ₹2,000 per acre)
Yield of BT cotton per acre	3–4 quintals per acre
Bank loan per hectare	₹30,000
Minimum support price	₹3,800–₹3,900 per kilo
Earning per hectare	₹30,000–₹35,000

It is quite clear that a BT cotton farmer is barely able to meet the cost of production, let alone generate a profit sufficient to sustain the household. Traders and middlemen make profits at the cost of farmers who are not able to store the harvest and wait for the right price. Farmers from Antargaon village in Yavatmal question the instability of prices and demand an enhancement of the loan amount from formal credit sources so that they can cover input costs and make farming viable:

If the price of seeds, fertiliser and pesticides remains the same, why should the selling price of the product come down? While we sold, the prices were low, but after we sold, the prices have gone up. So who has made this money? Hence, why should the farmer not commit suicide? We demand that the government come up with a price every season and that nobody should buy below that price. On one hand, the government is saying not to borrow from the moneylenders and on the other, it is not willing to give more than ₹30,000 per hectare. When our land valuation per acre is ₹3–4 lakh, why should they give us only ₹12,000 per acre as crop loan?

The story of increasing input prices plays out differently in Sangrur. Farming practices, including cash renting of land, labour costs, tractors, deep tube wells, fuel, seeds, animal feed, harvesters, combines, chemical fertilisers, insecticides and weedicides, have increased the cost of production. If the MSP of paddy has increased by 1.8% annually in the last decade, the cost of production has gone up by 8% per annum (Pattanaik et al 2008). The increase in cost of production is also attributed to the additional cost of irrigation to support paddy cultivation and depletion of groundwater resources due to aggressive boring.

As *Key Indicators of Situation of Agricultural Households in India* (NSSO 2014a) clearly shows, the total monthly household expense (including on agriculture) per agricultural household in Punjab (₹11,768) is way above the national average (₹2,192). In all other categories of expenditure (barring expenditure on animals)—such as seeds, fertilisers, chemicals, repair and maintenance of machinery, and labour—Punjab ranks substantially higher than all other Indian states and also higher than the national average. Summarising the increase in input costs, an arthi stated:

The expenditures have increased so much. They have to spray pesticides two or three times a season. Spraying pesticide on one acre of land costs around ₹1,500 to ₹2,000. The cost of a DAP [di-ammonium phosphate] packet was ₹470 three to four years ago. Now it costs ₹1,200. A urea packet was priced at around ₹150. Now it costs ₹300. Three years ago, farmers used to pay only ₹50 a day for a labourer, but now they have to pay more than ₹300.

It is not only input costs that have gone up substantially but also land lease rates. Pattanaik et al's (2008) study of 60 blocks and 420 villages across Punjab reveals that Sangrur has the highest land lease rates (per acre) compared to any other district, and land leased at ₹15,000 per acre per year constituted close to 70% of the total cultivable land in Sangrur in 2006. As observed during fieldwork in 2015, the land lease rate went up to as much as ₹50,000 per acre (per year), increasing the cost of cultivation manifold. The bank manager of the local Punjab National Bank confirmed the prevalence of high land lease rates: "Land rent is as high as ₹45,000–₹52,000 per acre per year. The input cost for paddy is close to ₹25,000 per acre for one season, against which a farmer may get a price of ₹50,000–₹60,000."

Shergill (1998) studied rural indebtedness and the escalating costs of inputs in Punjab to argue that very little surplus is left with farmers to spend or repay outstanding loans. Even though rice is one of the few crops to enjoy an MSP, price fluctuation has nullified the advantages of the support price assurances. Although the support price should ideally be determined by taking into account the increase in input prices and other expenses, there seems to be a mismatch, as is evident from this statement by an affected farmer:

Even if the yield remains the same, the price fluctuates. It could be anything between ₹1,800 and ₹5,000 a quintal. There are different rates for different kinds of paddy. Only certain varieties enjoy an MSP. If they manage to get a good rate, it prompts the farmer to take more land on rent the next season. This is a risky proposition since there is no price assurance. If the prices fall in the next season, it is absolutely devastating for the farmer who has taken the risk.

High land lease rates in Punjab have encouraged many land-owning farmers to rent out their landholdings fully or partially to generate an income without the burden of farming operations. It also suits those who have already moved out or are intending to move out of farming and towards non-farm sources of income-generation even while enjoying the benefits of returns from land. During an interview on the issue of land rent, Shergill stated:

Fifty percent of the farmers who rent out land are absentee landlords who either do not engage in farming or live in urban areas. Big owners do not want to farm. Hence, renting out is a win-win proposition. Since most of the arrangements are informal in nature, during a crop failure the rents are readjusted. If there is a drop in the yield, those who take land on rent bear the burden and the loss ...

3.4 Dependency on Informal Credit

High rates of interest from non-institutional sources of credit compel farmers to prioritise the payment of these debts before dues to banks are paid. While Yavatmal reveals a shocking percentage (above 80) of bank defaulters, in Sangrur there is excessive dependency on informal sources as bank loans are insufficient to meet high input costs.

In Yavatmal, given the direct relationship between a bad crop year and increase in outstanding credit burden, two distinct scenarios emerge. In one scenario, the farmer borrows from moneylenders and relatives at a very high rate of interest (as much as 10%–12% per month) to pay off the bank loan in order to remain eligible for fresh credit from the institutional source.

A defaulter is not eligible for a fresh loan from the bank unless the previous dues are fully paid off. A short-term crop loan taken from the bank has to be repaid on time, at the end of every financial year (31 March) to avail of interest-free credit or an increase in loan amount. Also, the bank charges interest of 4% (which increases in successive years) after the first year of interest-free credit for crop loans as part of priority sector lending. The desperation to remain within the banking system is explained by a farmer from Metikhera village in Yavatmal:

Money is borrowed from private sources to be paid to the bank. The fresh loan received from the bank is used to pay off the private sources. We are left with the remaining amount. Obviously, it is not possible to carry out farming operations with the remaining amount. Hence, we are compelled to borrow again from informal sources.

Farmers who can still afford to repay bank loans are in a minority. Mostly, farmers with larger holdings use informal credit taken at the last moment to pay off the outstanding bank loan. Given the scale of non-profitability of farming (see Box 1) and repeated crop failures, it is obvious that a small and marginal farmer would find it extremely difficult to repay a bank loan. Hence, it is not surprising that the rate of default, according to central and cooperative bank records, is alarming. The local bank manager confessed, "Eighty percent of the account holders are defaulters on crop loans. From 2006 onwards, people are not returning their loans."

A time soon comes when the moneylender refuses to advance credit because the backlog of debt keeps rising. This moves farmers who have defaulted completely outside the ambit of institutional credit, as they are not in a position to repay the bank loan. There seems to be a hierarchy of warning signs announcing this distress, as indicated by a local official:

They are going down a chain. You start with the bank; you default with the bank. You go to the moneylender; you default with him. Then you go to the relative ... If you default on the bank loan, and also on the moneylender, then you become vulnerable.

3.5 Loans from Informal Sources and Banks

This brings us to the second scenario, in which farmers prioritise repayment of loans taken from informal sources over bank loans in order to maintain their rapport with the moneylender, or to avoid verbal abuse, and to remain creditworthy. Explaining the importance of prioritising payment of loans from informal sources, a farmer stated:

Loans from private sources are generally repaid first. Banks loans are usually repaid later. Most of the borrowing is happening within the family, as outsiders are not giving us money. Farmers also divert credit from institutional sources meant for the farm to meet non-farm expenditures, such as health, education, housing, ceremonies, and regular household expenditure.

Several families become heavily indebted either because of out-of-pocket medical expenditure or because of large expenses on marriage¹² or consumer durables. The principal of Savitri Phule Samaj Karya Mahavidyalaya in Yavatmal said:

The influence of urban culture has left an impact. If I am in the village and my brother is in the city, then our social universes do not meet. Aspirations are heavily influenced by behavioural patterns seen in the

city. The impact is visible on marriage. Villagers are constantly trying to match standards set by relatives in the city, when it comes to gifts and other commodities.

Given that prices of agricultural produce have not matched the increase in input costs, and land rent in the country is highest in Punjab in general, and Sangrur in particular, it is unsurprising that income generated from farming is insufficient to sustain a household here. A continuous flow of cash is required to meet expenses on regular household consumption, basic health and education (all of which have increased manifold). This becomes a major issue for farmers operating on small landholdings with no non-farm sources of income. As mentioned earlier, consumption expenditure of most small and marginal farmers usually exceeds their income from farming, and we have already seen how farm incomes are insufficient to meet most other household and consumer demands. The mismatch between farm income and expenditure is aggravated in Punjab. The state ranks first in purchase of consumer goods such as mobile phones, cycles, televisions, refrigerators, washing machines, air conditioners, motorcycles and cars, compared to the rest of the country (Shergill 2015). With few avenues to access institutional capital for non-farm expenditure, dependency on non-institutional sources to meet these expenditures is inevitable.

Due to the insufficiencies of the formal credit system, a sustained dependency on arthis is obvious. An arthi plays the dual role of selling output in the market and of satisfying a farmer's need for liquidity when required. Many farmers do not own the land but have taken it on lease and therefore do not qualify for bank credit. Unlike a typical moneylender, an arthi can be both patronising and a support in times of need. A farmer would therefore not like to spoil his relationship with an arthi. An arthi, on the other hand, assured of his crop share (fully or partially), already has a guaranteed return mechanism in place. He therefore finds no need to resort to violence for recovering his capital investment.

In Sangrur, we did not find a single family that had suffered a suicide devoid of debt burden from non-institutional sources. The bulk of the outstanding debt was owed to arthis. The rate of interest may vary from 2% to 3% per month, depending upon the quantum of loan, urgency, farmer's rapport with the concerned arthi, and farmer's creditworthiness. Farmers in Sangrur, particularly those operating on smaller landholdings, and those farming on rented land, are excessively (if not exclusively) dependent on arthis for short-term crop loans and for other household expenditure. This credit flow is seasonal in character, availed during a crop season and repaid along with the harvest.

Farmers lack storage facilities, and this compels them to sell their crops soon after harvest even if they do not get the best price, because of the pressure to repay to non-institutional credit sources charging high rates of interest. One marginal farmer from Sangrur claims,

Arthis generally know the conditions of farmers and the quantum of stock available with them. They do not increase prices until farmers have exhausted their stocks. The sellers start pushing the price after

the farmers have sold most of their harvest. Arthis fix the price by taking the mill owners into confidence, such that the farmer is left with no choice but to accept the fixed price. Farmers cannot store grain for more than three months, after which it starts deteriorating.

4 Severe Consequences of Increasing Debt

Mounting outstanding debts have severe consequences on farming operations. In Yavatmal, it leads to diminishing credit-worthiness of farmers and increasing difficulties in accessing non-institutional sources of credit as well. In Sangrur, high consumption expenditure leads to constant diversion of credit towards fulfilment of consumer needs. The practice of accessing credit from private players due to insufficiency of formal credit is not a new phenomenon in Yavatmal. However, in recent times, there has been a dearth of credit flow as moneylenders are increasingly refusing to disburse credit in lieu of land and jewellery. The majority of farmers are outside formal credit mechanisms due to massive defaulting caused by repeated crop failure. The most frightening point emerging from the field study is the exhaustion of informal sources of credit. Nobody is willing to offer credit readily, knowing that the ability to repay, in general, is poor. Moneylenders prefer a one-time transaction of assets against which credit can be provided, such as buying out jewellery or any other asset, as opposed to mortgaging or using those assets as guarantee. A farmer with large landholdings in Yavatmal explained why the situation is bleak, particularly for small and marginal farmers, who are now moving out of the bounds of informal credit as well:

At present, moneylenders are not giving loans to farmers. After the Moneylending Act was passed, getting the land transferred in a moneylender's name became impossible. As input costs were rising, farmers started looking for other credit sources as crop loans from banks were not enough. Today moneylenders do not push for mortgaging since they cannot acquire the land. Unless one is a big farmer, and there are few of those, nobody is willing to give credit.

Under these conditions, goldsmiths also prefer a one-time settlement where the return is assured. Moneylending is also undergoing a massive change in Yavatmal, because of a new class of entrants, as reported by a farmer:

The educated service class or contractor has appropriated the role of a small-time lender. They provide small loans between ₹5,000 and ₹10,000. There is no written record. Credit is given on trust and familiarity. Seed dealers also play the role of creditors, offering inputs on credit with proportional claims on harvest.

In Sangrur, a substantial amount of outstanding loans are not only diverted to non-farm household expenditure but also to the purchase of exterior markers of affluence in an assertion of class identity and display of aspiration. A large chunk of the expenditure is diverted towards grand ceremonial ventures, particularly weddings, and the purchase of commodities such as cars, gadgets and machinery that demonstrate status. Irrespective of the size of their landholdings, farmers go out of their way to borrow money to keep up socially. As Shergill says,

They have a very strong desire to emulate others. They spend a lot on marriage. They are converting from pit type toilets to toilets with flush. There is immense pressure to keep up. People with just 3 acres

of land are also sending their children to Australia for higher studies. Earlier, there was no expenditure on LPG, electronic gadgets, mobile phones, etc. Earlier, family members spent time together; now, each member has his own lifestyle. Every farmer has his own vehicle even though he finds it hard to buy one. If a farmer takes money for agricultural reasons, and uses that amount for other expenses, then certainly he will not be able to repay.

This pattern of excessive spending is further reflected in the following discussion with arthis:

Farmers spend a lot of money on marriages. There is a kind of competition between villages on marriage expenditure. Those who have the capacity to spend only ₹5 lakh to ₹7 lakh, also end up spending ₹25 lakh. Only a small percentage of farmers has the capacity to spend on marriages of this scale. The rest of the farmers try to emulate them. This leads to a trend of spending more than they can and then they get trapped in debt. A farmer gets a crop after six months, but he has to pay every month. Now almost every family has a tractor, whereas one tractor can serve four families.

5 Reformative Measures

If the data on average farmer household income is taken into account, the structural problems are starkly evident. The average farmer household income from all sources was ₹6,426 per month, which consisted of ₹2,071 received as wages, ₹512 from non-farm business, and the rest from cultivation, which works out to less than the consumption expenditure of almost 70% of farmer households (NSSO 2013).

Macro and micro data suggest very clearly that the earnings barely cover the costs of cultivation. This compels the farmer to look for credit at rates that he cannot afford, pushing him into a dependence on the informal sector.

5.1 Immediate Interventions

5.1.1 Cropping Pattern

(i) In both Sangrur and Yavatmal, the pattern of cultivation is not harmonious with the agro-climatic features of the region. The foremost requirement to resolve the crisis is to move towards farming practices according to agro-climatic zones.¹³ Cropping patterns that are harmful to nature and natural resources should be discouraged through denial of support prices or denial of crop loans for the wrong choice of crops, no matter how profitable the cultivation might be in the short term. Similarly, incentives should be given to those crops that are more suited for cultivation in their agro-zone.

(ii) Indigenous mixed farming patterns that are not cost-intensive should be encouraged. It helps in providing foodgrain support to the family and rejuvenates soil fertility.

5.1.2 Institutional Credit Disbursal System

(i) Incentivising repayment by modifying the institutional credit disbursal system is essential to minimise the number of bank defaulters by introducing the option of repayment in installments. There are greater chances of recovery if payment of the outstanding loan amount is bifurcated into smaller portions.

(ii) A proportionate loan-land ratio would enable the farmer to retain rights over the rest of his landholdings, which can

then be used as a source of liquidity. Currently, a farmer's entire holding cannot be sold or further mortgaged since a bank loan locks in all the land owned by him.

(iii) A specific dryland farming credit policy should be considered, as the nature of cultivation often varies fundamentally from rainfed farming and requires a different kind of attention.

(iv) Cashless loan components should be introduced to avoid diversion of crop loans towards non-farm expenditures, where payment to a formal credit source can be made at the point of sale (factory or dealer).

(v) Restructuring of loans against localised crop failures, where specific and targeted compensation packages take extreme weather events or natural calamities into account. In addition, the principles of cross-subsidisation are more effective if they are shaped along the lines of group insurance schemes for groups of farmers who bear the risk together and not individually.

NOTES

- 1 This research project was proposed by the Shiv Nadar University and commissioned by the Reserve Bank of India (RBI), 2014–15. The report was submitted to RBI in 2016. The views expressed in the paper are solely those of the author(s) and not of RBI.
- 2 Extending the argument forwarded by Nagraj (2008), this research is also sceptical about the credibility of macro data on farmer suicides. For a farmer suicide to be listed, the deceased must possess land and be indebted to a bank. If these conditions are not met, then the farmer who has committed suicide will not be eligible for state compensation. So a host of cultivators who may have committed suicide due to agrarian debt or distress but were landless, or worked on rented land, or may have defaulted on a loan taken from an informal source, or may have somehow managed to repay the bank loan in the previous financial year, are not counted as eligible cases of farmer suicide. We must also remember that such notification for eligibility rests on discretionary powers exercised by lower-rung officials in charge of inspecting and reporting the cases.
- 3 As observed during the fieldwork, land rent in Yavatmal is approximately ₹3,000–₹5,000 per acre annually. Even though this is significantly lower than land rent in Sangrur (₹30,000–₹50,000 per acre per year), one must not overlook low crop assurance due to dryland farming in Yavatmal, which makes farming extremely risk-prone.
- 4 Since the farmer suicide data maintained by the district authorities do not record the amount of landholding of the deceased farmer, the relationship between landholding and farmer suicide in Yavatmal is deciphered from 30 case studies conducted during the fieldwork and surveys (sample size: 200) conducted by Vandana Foundation over the last 10 years. Vandana Foundation is a non-profit organisation that works with the wives of deceased farmers in Yavatmal.
- 5 Compiled from data on farmer suicides in Sangrur collected and maintained by Baba Nanak Educational Society, a non-profit organisation that has been working with suicide-affected families since the 1980s. In the absence of official records, this is the only legitimate and expansive data source on the issue of farmer suicide in the region. Inderjit Singh Jaijee, the founder of the organisation, devised a mechanism of panchayat-level certification and recognition of farm-related suicide to avoid the mixing up of general suicides with the farmer suicides. The affidavit from the village panchayat also certifies that suicide committed was due to debt.

5.2 Long-term Policies

Long-term measures would, of course, include land reforms and correcting the terms of trade that are against the cultivating class. However, it is also clear that penury and deprivation would have a cascading effect on the economy as a whole. The stance of the state does not help either, as the public expenditure on agriculture as a percentage of the GDP is less than 1% and has remained at that level for the last decade-and-a-half. We need far-sighted and sustained policy initiatives to provide farmers dignified livelihoods; these are essential to sustain agriculture, which is so critical to our collective well-being. In an economy driven by jobless growth, compulsive migration to cities is often a case of distress transhumance. These migrants then become the new “serfs” of the informal services and construction sector, while the existing rural and agrarian problems remain unresolved.

- 6 Arthis act as commission agents and middlemen between farmers and the wholesale market, facilitating the sale of crops immediately after the harvest. The arthis charge wholesale traders a price for the services provided in terms of weighing and grading produce. However, they also provide credit to a farmer, which is often adjusted with an arthi's claim on the share of the harvest.
- 7 Case studies amongst suicide-affected farming families in Sangrur (sample size: 30) reveal an average outstanding loan of ₹3,31,000 (approximately) amongst farmer households.
- 8 All quotes are from interviews conducted during fieldwork, unless otherwise stated.
- 9 Interestingly, dowry deaths are higher in states such as Bihar, Odisha, Tripura, Uttar Pradesh, Rajasthan, Madhya Pradesh, Jharkhand, Haryana, and West Bengal. All these states have lower rates of farmer suicide as a percentage of all suicides as “Accidental Deaths and Suicides in India” (ADSI) records suggest.
- 10 A closer look at each taluka separately would reveal the deficits and variation in patterns within the district (see <http://yavatmal.nic.in>). There is a big difference between district-level rainfall data and actual village-level variations. While assessing crop failure, taluka-level data are taken into account as the rain gauge is at the taluka level. However, rainfall fluctuates greatly and varies drastically between villages.
- 11 To check the water footprint of various food items, see Institution of Mechanical Engineers data reproduced in <https://www.theguardian.com/news/datablog/2013/jan/10/how-much-water-food-production-waste>.
- 12 Indebtedness, economic decline and marriage were cited as major causes of suicide amongst farmers in the seminal report “Causes of Farmer Suicides in Maharashtra: An Enquiry,” Final Report submitted to the Mumbai High Court (Dandekar et al 2005).
- 13 These agroclimatic zones are already well-demarcated, along with cropping patterns specifically suited to these regions prescribed by the Ministry of Water Resources, Government of India.

REFERENCES

- Dandekar et al (2005): “Causes of Farmer Suicides in Maharashtra: An Enquiry,” Final Report submitted to the Mumbai High Court, Tata Institute of Social Sciences, Tuljapur.
- Gupta, D (2015): “Home and the World: Why Do Farmers Commit Suicide? It's a Man Thing and More,” *Times of India*, New Delhi, 10 October.
- Jha, P and M Negre (2007): “Indian Economy in the

Era of Contemporary Globalisation: Some Core Elements of the Balance Sheet,” http://www.macrosan.org/anl/may07/pdf/Indian_Economy.pdf.

- Johl, S S et al (1986): “Report of the Expert Committee on Diversification of Agriculture in Punjab,” submitted to Government of Punjab.
- (2002): “Agricultural Production Pattern Adjustment Programme in Punjab for Productivity and Growth,” Johl Committee report submitted to Government of Punjab.
- Ministry of Agriculture (2014): *Agriculture Census 2010–11: All India Report on Number and Area of Operational Holdings*, Agriculture Census Division, Department of Agriculture & Co-Operation, Ministry of Agriculture, Government of India.
- NABARD (2013): “Annual Report, 2012–13,” National Bank for Agriculture and Rural Development, Mumbai.
- Nagraj, K (2008): “Farmers' Suicide in India: Magnitudes, Trends and Spatial Patterns,” Madras Institute of Development Studies, http://www.macrosan.org/anl/maro8/pdf/Farmers_Suicides.pdf.
- NCRB (2013): “Accidental Deaths and Suicides in India,” National Crime Records Bureau, Ministry of Home Affairs, Government of India.
- (2014): “Accidental Deaths and Suicides in India,” National Crime Records Bureau, Ministry of Home Affairs, Government of India.
- NSSO (2003): “Situation Assessment Survey of Farmers 2003, NSS 59th Round,” National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
- (2013): *Debt & Investment*, NSS 70th Round, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
- (2014a): *Key Indicators of Situation of Agricultural Households in India 2014*, National Sample Survey Office, 70th Round, Ministry of Statistics and Programme Implementation, Government of India.
- (2014b): “Situation Assessment Survey of Agricultural Households, January–December 2013,” National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
- Pattanaik et al (2008): *Contract Farming System in Punjab: An Appraisal*, Chandigarh: Centre for Research in Rural and Industrial Development.
- Shergill, H S (1998): *Rural Credit and Indebtedness in Punjab*, Monograph Series IV, Chandigarh: Institute of Development and Communication.
- (2015): “Has Punjab Lost Number One Position in Level of Development,” *Journal of Agricultural Development and Policy*, Vol 25, No 1, pp 1–10.