

# The Psychological Impacts of Climate Change on Indian Farmers and the Danger of the Farm Bills

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The Indian farmer protests present a unique opportunity to further discuss the psychological impacts of climate change on farmers, and the importance of governance that protects farmers and allows them to thrive and continue to produce in a sustainable way. The introduction of the Indian Agriculture Acts of 2020, or Farm Bills, could exacerbate the already prevalent mental health challenges faced by Indian farmers. This commentary aims to provide an overview of the intersections between farmer mental health, climate change, and the Farm Bills. Evidence on farmer mental health, climate change, and the Farm Bills is then used to provide recommendations to the Indian government on how to better support farmers.

## Introduction

Farmers worldwide face mental health concerns related to the changing climate. An increase in drought, extreme weather events, and unpredictable weather all caused by climate change can disrupt agriculture practices, increasing the incidence of stress, anxiety, loss of connection to the land, depression, and suicide in farmers.<sup>1-5</sup> Farmers in India face unique challenges related to farming and climate change. For example, most of India's farmers are smallholders (a farmer who owns less than two hectares of land) with 68% of farmers owning less than one hectare of land and only 6% of farmers receiving guaranteed price support for their crops.<sup>5-7</sup> As a result, the average annual income for a farming family is 20,000 rupees or \$271 USD.<sup>6</sup> Indian farmers are experiencing extreme financial hardship, with over half the country's farmers in debt.<sup>8</sup> 89% of Punjab farmers are in debt, which has been correlated with suicide.<sup>9</sup> Further, India is experiencing agricultural challenges associated with climate impacts, leading to a reduction in crop yields.<sup>5</sup> Specifically, rainfall during monsoons has become an unpredictable source of water for farming crops, where rainfall is less frequent but more intense. This change increases the risk of flood damage and drought which subsequently harms crops across the country.<sup>10,11</sup>

The unique financial and ecological struggles of Indian farmers puts them at high risk of mental health challenges.<sup>12</sup> The loss of crops and income as a result of

weather uncertainty, frequent extreme weather events, and limited resources, can lead to stress, depression, and anxiety in farmers and their families.<sup>5</sup> Most commonly cited are the vast data on suicides among Indian farmers, with 10,269 farmers dying by suicide in 2019.<sup>13</sup> One study revealed a strong association between climate change vulnerability and farmer suicides.<sup>14</sup> Nagaraj et al. (2014) note that between 1995 and 2021, a total of 298,084 farmers have died by suicide, a number that could be higher, as suicidality in women farmers goes underreported.<sup>15</sup> Another study notes that nearly 75% of the farmer suicides in 2014 were smallholder farmers, where being in debt was a major risk factor for suicide.<sup>16</sup>

Farmers in India are desperate for financial and psychological support, especially where 60% of the country works in the agricultural sector.<sup>17</sup> In September 2020, Prime Minister Modi, a known Hindu Nationalist, presented three new bills (the Farm Bills) to modernize the farming practices to address the challenges that farmers face. These bills were presented by Modi's party, the Bharatiya Janata Party (BJP), without consultations with farmers or debate with opposition parties. The rationale for introducing these bills was to provide a national framework that would keep farming practices in India consistent and improve the productivity of farmers. By introducing contract-farming, farmers are able to enter into a contract with larger retailers and corporations with pre-agreed terms,<sup>18,19</sup> however, farmers across the country have voiced their objection to the bills.<sup>6,20</sup> For

example, Samyukta Kisan Morcha, otherwise known as the United Farmer's Front, is a group representing over 40 Indian Farmer unions, formed as a response to the Farm Bills. The group views the Farm Bills as anti-farmer and a violation of the constitution. Throughout the protests they have asked for a complete repeal of the bills. Their presence in the protest highlights the solidarity of farmers in India and the unanimous rejection of the Farm Bills.<sup>21</sup>

By December 2020, 250 million people had participated in a nationwide strike to show solidarity for farmers, making it what some call the largest protest in the world.<sup>22,23</sup> Farmers united to protest the Farm Bills for nearly a year; however, they received little media attention until celebrities such as Rhianna, Greta Thunberg, and Menna Harris tweeted about them.<sup>24</sup> Approximately 700 people have died during the year-long protest from illness, road accidents, or suicide.<sup>25</sup> The farmers opposed the bills, claiming that they have the potential to cripple their livelihoods which are already volatile due to climate change, force them to sell their land, push them further into debt, and limit their agency by making them dependent on large corporations.<sup>26</sup> Contract farming, as proposed in the Farm Bills, is a western practice that has worked in other countries such as the United States (US) where additional supports are available to the public (e.g., welfare, public housing, unemployment benefits), and farms are much larger (roughly 162 hectares compared to less than one hectare in India). The infrastructure of developing nations cannot afford similar social policies, thus making contract farming and other agricultural legislature un-transferable to the Indian context. Wealthy countries (Canada, the US, and Australia) have been pushing India to use contract farming without recognizing the devastating implications it could have on Indian farmers.<sup>27</sup>

The Farm Bills would have compounded already psychologically burdened farmers by taking away their rights and agency. While these Bills have been revoked due to the perseverance of Indian protestors, many note how this repeal was purely an electoral tactic, as there is a crucial state legislature vote set for early 2022.<sup>25</sup> The Bills may be reinstated if the BJP is successful at garnering votes. Although farmers have considered their efforts victorious, they understand that the Farm Bills, and their struggles as farmers, are not something of the past. The connection between farmers' mental health and

the Farm Bills has yet to be examined. Below outline the potential psychological implications of the three Farm Bills.

### **1. Farmer's Produce Trade and Commerce (Promotion and Facilitation) Act, 2020**

With the introduction of this bill, farmers are allowed to trade their produce outside physical markets, known as mandis, a government regulated wholesale market where farmers traditionally sell their crops.<sup>6</sup> Mandis have traders and large landowners who act as the "middleman"; they broker sales, help with financing and organizing storage for crops, and assist with transportation.<sup>6</sup> Through mandis, farmers are given autonomy of the sale of their products and can bargain prices. This bill proposes that farmers now must have a contract with a buyer, often a large company, which makes them vulnerable to exploitation.<sup>6</sup> For example, many smallholder farmers would not have legal knowledge needed to identify clauses in their contracts that make them vulnerable. Further, farmers are not allowed to take their buyers to court if they decide not to pay. In the case that farmers do not produce enough to fulfill their contract, companies can then offer to buy their farm, which has led to Indian farmers' fear of land loss.<sup>28</sup>

**Mental health implications:** The introduction of this bill forces farmers to meet the demands of companies they are in contract with. These contracts could create pressure to increase production, leading to additional stress and the loss of autonomy for farmers. For example, without Mandis, farmers lose agency, assistance, and bartering strategies when selling their crops. This is especially concerning for smallholder farmers who would have difficulty opposing large companies. Kureshi and Somsundaram (2018) note that smallholder farmers are most susceptible to stress, even before the introduction of these bills.<sup>12</sup> The added pressure of these contracts could compound the stress of working in a volatile agricultural landscape caused by climate change.

### **2. Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020**

With the introduction of this bill, farmers are provided a framework to engage in contract farming where they enter into a direct agreement with the buyer and sell their product at a predetermined price.<sup>6,29</sup> With this bill,

the buyer can decide how much to give the seller.<sup>6,29</sup> Farmers were concerned that they would be given low prices due to no written indication of a minimum support price (MSP) in the bill.<sup>6,29</sup> MSPs are calculated by the government based on the average cost of production.<sup>28</sup>

**Mental health implications:** With no written MSP in place, prices proposed by buyers could put farmers at risk of exploitation. Further, without an MSP, farmers may lose profit at the mercy of the predetermined contract, which could exacerbate debt. Debt has been correlated to an increase in suicide for Indian farmers.<sup>30,31</sup>

### 3. Essential Commodities (Amendment) Act, 2020

This amendment is aimed to impose limits on government control of production, supply, and distribution of key commodities.<sup>32</sup> Prior to the introduction of this amendment, the government had a list of commodities that farmers could produce based on the market's needs.<sup>6,32</sup> With this new amendment, these commodities are now removed and the decision on what farmers should produce is now up to the buyer.<sup>6</sup>

**Mental health implications:** Farmers have increasingly less control over their land and crops due to worsening drought, extreme weather events, and unpredictable weather from climate change, which subsequently impacts farmers' mental health.<sup>5</sup> By having buyers dictate what products they would like the farmers to produce, this amendment could deepen farmers' already diminished sense of agency over their crops. Furthermore, farmers' livelihoods could be put at risk, especially if the land they have does not meet the needs of the buyer. Given that most farmers have less than two hectares of land, they are at risk of losing their property to corporate buyout if they are unable to produce the quantity/quality of product directed by the contract company.

To address the mental health crisis experienced by farmers, we need to ensure that these bills are permanently repealed. Further recommendations to protect farmers from the negative mental health implications of climate change and agricultural policy are listed here:

#### **Recommendations to Support Indian Farmers**

» The Indian government should permanently repeal the Farm Bills, meaning that there is no possibility

of reintroducing these bills again or presenting them in another way.

- » The Indian government should legislate a national MSP to ensure that a formula is in place when farmers are selling their products. Having this set would provide farmers with financial security by having farmers aware of the minimum price they would receive for their products. This is especially important for smallholder farmers who are already at risk of debt and poverty which can then impact their mental wellbeing and lead to suicide.<sup>27</sup>
- » The Indian government should provide psychological support for farmers, especially those in debt and are therefore at risk of suicide.
- » The Indian government should provide financial support for farmers in debt to reduce risk of suicide.
- » The Indian government should provide subsidies and incentives for farmers to use climate adaptation practices in agriculture. As our climate changes, farmers must be supported in transitioning their agricultural practices to more appropriate methods.
- » The Indian government should include farmers in decision-making related to agricultural legislation and policies. This inclusion may help to build supportive law and policies, as well as trust between government and farmers. Where farmers bear a disproportionate burden of the climate crisis, it is imperative that they are a part of climate adaptation plans to voice their knowledge of their lands and needs.
- » The Indian government should include farmers in decision-making related to mental health policy. The inclusion of farmers' voices in mental health discussions can help ensure their voices, concerns, and needs are heard.
- » The Indian government should undertake further research on the intersection of agriculture, climate change, and the mental health of farmers to produce knowledge on how to modernize farming practices in India that consider the changing climate and farmer wellbeing.

Climate change has led to negative mental health implications for farmers. In India, this is compounded by unsupportive agricultural policy, exemplified in the Farm Bills that have been revoked for now due to large scale protesting. As such, farmers in India are at increased risk for suicide, especially those experiencing debt. To reverse this trend, the Indian government

should permanently repeal the Farm Bills, secure MSPs, provide financial and psychological support to farmers, and ensure farmers are actively involved in decision-making around the country's agriculture legislation and policy. Further research should be conducted on the intersection of agricultural law, climate change, and the mental health of farmers to ensure farming practices are sustainable and protect farmer mental wellbeing.

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