## **Birth in Those Days**

Tamil Women's Critiques of Agriculture Globalization

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As the rickshaw sputters along the dusty path, I brace myself against the cool metal side panel, stretching forward to get a better view of the vibrant green fields that surround us. My journey to Tirukarai, a remote village in the Indian state of Tamil Nadu, has lasted nearly an hour now, but the scenery has remained largely unchanged. The narrow road meanders through paddy fields that stretch to the horizon. Swathed in this endless sea of green, clichéd notions of a timeless rural India seem rather convincing. Despite appearances, however, much has changed in these fields over the last

I originally traveled to Tamil Nadu to conduct ethnographic research on rural women's experiences of pregnancy and birth. In nearly all of my interviews, women expressed a conviction that childbirth today has become more dangerous than ever before. Specifically, women suggested that a decline in the variety of foods available to poor women in Tamil Nadu and the increased use of agrochemicals in the region has rendered their bodies weaker and unable to give birth safely. Though my initial interest had been in childbirth, I found myself focusing increasingly on the women's perceptions of recent dietary shifts and the consequences these changes were having on their health. My conversations with these women convinced me that their condemnation of their modern diet and its implications on their health was not simply a reflection of their collective, self-embodied knowledge. It also expressed a profound and critical understanding of the negative impact that agricultural policies promoted by the Indian state and powerful international forces have had on their lives. Though the majority of women I spoke with had little schooling and had rarely, if ever, heard the term globalization, I argue that their narratives demonstrate a nuanced understanding of the deleterious effects the process has on their lives. While statistics contradict women's assertions that birth is more dangerous today than in the past, the physiological effects of dietary change that these women describe are very real and merit further consideration.

In foregrounding the narratives of poor, rural women of the Global South, my research contributes to a growing body of transnational feminist scholarship that grounds itself in the realities of women's lived experiences. Historically, Western academia has privileged particular ways of understanding the word—the quantifiable, the empirical—and, in doing so,

"assumes a universalistic, neutral, objective point of view. Historically this has allowed Western man...to represent his knowledge as the only knowledge capable of achieving a universal consciousness, and to dismiss non-Western knowledge as particularistic and, thus, unable to achieve universality."

Feminist epistemologies counter this discursive hegemony by beginning our "inquiry from the experience and perspective of poor Third World women who make up the majority of the world's poor and suffer economic, social, and gendered forms of domination." By centering our analyses on poor women of the Global South whose "lives embody the micro and macro structures of neoliberal globalization" we listen for voices that are often marginalized. 2 These voices speak to the multiple realities of globalization as they are experienced every day by women of varying race, class and national origin.

Little consensus exists across, or even within, the many disciplines that have taken up the study of globalization regarding its defining qualities or chronological starting point. The term is here used to refer to the unique climate of unequal transnational exchange of technologies and ideologies that arose along with the neoliberal state in the late 1970s. This system is the capitalist globalization described by social theorist David Harvey, resulting from "the implementation of the rule of the market via the restructuring of policies and standards across the nation-state system."3

In this piece, I consider the association that the women of Tamil Nadu make between the region's changing agricultural practices and the decline in their health. Thus, this project attempts, as described by Mittelman,

> "to elicit beliefs embedded in the agents' own consciousness about their conditions of existence...not just [by] observing what is out there but in part constructing propositions about hidden or subsurface phenomena, some of which may belie

I begin by presenting the direct results of my own fieldwork discussing women's conceptions of birth in the past and contrasting these with their descriptions of birth today. I then provide a brief summary of the essential political context in which these narratives must be understood. Next, I consider the ways in which women themselves may implicitly assign responsibility for the decline in women's health that they describe. Finally, I integrate perspectives from the disciplines of medicine, economics and environmental science to provide empirical evidence that supports the women's claims. Throughout my analysis I support my arguments with (translated) quotes from the women I interviewed, referred to as informants, as is typical in ethnography.

The Chronology: Diet in "Those Days"

According to the women with whom I spoke, nearly everyone in Tamil Nadu ate food that was naturally grown and pesticide-free until a few decades ago. Many see a direct relationship between the quality of this food and the ease with which they believe women were able to give birth. I spoke with a traditional birth attendant whom, like my other informants, I refer to by a pseudonym, Malai. As Malai explained to me,

"[In the past] everything was very natural. There are no pesticides added in the food, there are no chemicals added in it. Everything is natural and everything gives strength to the female. We ate rice and we used to taste the chili. That is what our strength is all about. We used to pluck all the green leaves and we used to eat all those things. There were no pesticides added in the food that we [ate] previously. But nowadays what happens, whatever food we are eating, everything is pesticides. Everything chemical fertilizers are added. There's no strength for the female. She's not eating proper food nowadays. Previously that was not the case. We never had anemic women, all those things. So when we don't have anemic patients, delivery will be very easy for us. So in these cases we can deliver a baby very successfully. That time all these problems are not there. Then we deliver a baby in a very good manner."

The vast majority of my informants expressed similar sentiments. They characterized the food women ate in "those days" (a phrase often nostalgically employed to refer to their idyllic past, as opposed to their more troubled present) as natural and beneficial to women's strength and health.

On the other hand, women overwhelmingly described today's diet as "chemicalized" or "full of pesticides and fertilizer." One woman criticized the increasing consumption of "hybridized" plants, which she believes do not provide the strength that was once found in "natural" diets.Anthropologists working with Tamil women have noticed the same perceptions among their informants. Elizabeth Finnis observed a "lingering longing" among her informants for the millet varieties that were once a staple food in their diets, but have now been abandoned in favor of rice, which they eat at almost every meal. 5 Like the women I interviewed, the women she spoke with saw recent dietary changes—in particular, the abandonment of millet production and consumption as ones detrimental to their well-being. They voiced concerns about health problems they believe to be the result of pesticide and fertilizer use. They spoke nostalgically about the ways in which eating millet had strengthened women's bodies and prevented illness and worried about the effects the current lack of dietary variety may yield on their

The Change: A Lack of Variety and Increased Use of Agrochemicals

Chirapathi, with whom I spoke in her village outside Madras, also associated the current lack of variety in diet with a decline in Tamil women's health, particularly with the modern woman's lack of strength, a pattern that was described by many of my informants. She provided very specific examples of the ways in which food in "those days" was healthier for women's bodies. She explained that in the past

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"they ate meat of the fox, meat of the wild animals, and millet, and lots of pulses," emphasizing the variety of foods available to women in the past as compared to that available to women in the present who, according to Chirapathi, "only take rice." Indeed, scholars have documented and expressed concern about the reality of the dietary change Chirapathi describes, specifically the dramatic reduction in the consumption of legumes and pulses, which are essential sources of vegetable protein in the Indian diet.8,9,10

I also spoke with a doctor of Ayurveda, one of the three main systems of indigenous medicine in South India. Dr.

Peeraswami elaborated on the positive effects of a varied diet and the negative health consequences of one that lacks variety. She described the main components of the traditional South Indian diet, which consisted of wheat, rice and a type of millet called raggi, which are, in her words, the "three pillars of good food," since they contain "starch, carbohydrates, fat, vitamins, *everything*." In addition, she placed significant emphasis on the importance of raggi for women's health during pregnancy: "Raggi has all the strong nutrition. The main thing is the bone power and muscle strength. Even though [women] will eat [it], they will never increase their weight so much that it will [cause] complications." Here the doctor contrasts the benefits of consuming raggi with the harm she believes arises from regular consumption of large amounts of potatoes and other white starches, namely, the rise of obesity, which increases the risk of experiencing complications during pregnancy and delivery.

The lack of variety was not my informants' only concern regarding the food available to Tamil women today. Women frequently expressed their disapproval of farmers' widespread use of pesticides and fertilizers, which they often referred to simply as "chemicals." Geerthi, a woman from the outskirts of Madras, illustrated her concern, saying, "nowadays we are eating pesticides and that is why [women have more complications during childbirth than in the past]. These people [in the past] never had chemical foods. Now every food we eat is actually a chemical food."

Dr. Peeraswami similarly suggested that environmental pollution

from fertilizers and pesticides has affected women's ability to bear children safely. According to her, "the world we are living in, it is full of toxins here. The environment, the vehicles, the pollution, the food and everything is toxins, and it is going inside our body. Automatically it will give complications [during pregnancy and labor]." This sentiment reflects both an awareness of the very real, measurable effects environmental toxins can have on women's health and a more subtly expressed critique of the forces that have led to the increased presence of these toxins in women's daily lives.

The Context: Nutrition Transition and the Green Revolution

The dietary changes to which these women refer are characteristic of a phenomenon observed throughout the developing world, known as the nutrition transition, a process characterized by a shift from preindustrial eating habits to a diet high in sugar, fats and refined carboy-hydrates. These changes are usually accompanied by the adoption of a more sedentary lifestyle, which results in increasing rates of chronic diseases like diabetes and obesity, as seen over the last few decades in India. Anthropologists Pelto & Pelto view the nutrition transition as a result of agricultural delocalization, the transportation of crops grown in one country to another nation, perhaps thousands of miles away, for consumption. They note that this movement has had very different effects in Western nations than in developing nations. One of the most detrimental consequences of this shift in developing countries has been a significant reduction in the variety of foods, especially whole grains,

available for consumption by the general population. 13 In India specifically, the reality of the nutrition transition has been demonstrated by large amounts of data that reflect an increase in the consumption of sugars and fats, accompanied by a clear decline in the consumption of pulses and legumes, which have long served as essential sources of protein in the traditional Indian diet. 14,15,16 The lack of dietary variety and use of pesticides to which my informants refer are thus very real, observable phenomena, which must be historically and contextually explained.

An explanation of these changes begins by examin-

ing the Green Revolution policies of the 1970s, which are discussed in greater detail in the following section. At the time, the Revolution was promoted as a means to dramatically increase food production and alleviate world hunger. Today, economists and development workers supportive of Green Revolution policies claim that their adoption has established food security for hundreds of millions of the world's poor. Others, however, assert that these policies only serve to further enrich Western corporations that sell seed and agrochemicals. Yet most agree that an indisputable result of Green Revolution policies has been a massive increase in the production of wheat and rice at the expense of other crops.

The Critique: Assigning Responsibility

Anthropologist Cecilia Van Hollen sees Tamil women's emphasis on the ways their lives and bodies have changed for the worse since "those days" of the past as "fundamentally a critique of modernity." <sup>18</sup> I find her analysis to be further supported by my own fieldwork. I would like to go a step further and ask why so many women choose to express such a critique in terms of dietary changes. The introduction of fertilizers and pesticides and the decline in dietary variety are only two of many obvious changes that have accompanied globalization's penetration of rural communities throughout the state. So how can women's very specific focus on food and diet be explained?

To explore how women assign responsibility for the decline in health that they describe, I reconsider Chirapathi's comments regarding the poor dietary pattern of today's women. After describing the variety found in the diet of previous generations, she noted, somewhat indignantly, that this same variety is unavailable to women today because of the state's restrictions on hunting:

"Women then were much stronger because of the wild food that they eat. Earlier they were free to hunt, but these days the government doesn't allow them to hunt. And normally that's the way of living, but right now the government is banning these things, so they don't eat the meat of these things, they eat chicken and such things, which are fatter, since the chicken are not naturally fed. So they don't feel stronger."

She sees the "wild" quality of the food women ate in the past as an integral element of its strength-providing properties. She feels that chicken meat is no longer as healthy as it once was because the chickens are no longer "naturally fed." Now that the government has banned hunting, which, according to Chirapathi, is an essential aspect of the traditional tribe's "normal way of living," women no longer have access to the beneficial qualities of "wild food." Van Hollen describes women's emphasis on the differences between life in "those days" and the present as a critique of what her informants believe to be "the degrading effects of modernity on women's bodies". <sup>19</sup> Here Chirapathi extends this critique to apply to what she sees as the harmful consequences of the state's disruption of the community's way of life, specifically its ban on hunting.

Many of the dietary changes discussed by the women I spoke with, such as the decline in dietary diversity and the increased use of pesticides, are, in fact, largely the results of interventions by the state government and multinational organizations like the WTO, which intensified during the Green Revolution. These interventions often took the form of incentives encouraging farmers to adopt "more modern" agricultural practices by subsidizing the purchase of fertilizers and pesticides or granting loans to those wishing to invest in these alluring new technologies. Such strategies have left many rural farmers with huge debts that they cannot pay now that government support for these farmers has been withdrawn in the name of the free market, again at the urging of the World Trade Organization. These circumstances are the result of the Indian government's collaboration with international coalitions promoting global trade liberalization.

Though they may be unaware of the WTO's existence and unable to define what is meant by neoliberal economic policy, rural Indian women possess a deep, intuitive understanding of the state's collusion with the larger economic forces responsible for the destruction of local ecologies and livelihoods. Such understandings are not often explicitly expressed but are implied in women's frequent and adamant condemnation of globalization's harmful effects on their bodies. Their critiques refer specifically to dietary changes that are the direct result of policies that multinational corporations and international financial institutions, like the IMF and World Bank, have designed and enforced.

Maheena, a woman who lives in a poor neighborhood outside a large city in Tamil Nadu, did explicitly connect the socioeconomic changes of globalization and trade liberalization promoted by government policy with the current state of women's bodies:

"Earlier they used to take porridge of cereals, especially millet...[In] those days it was available, these days it's not, because everything is exported. And the women in India they don't get it. It's become very expensive, even for the farmers. Earlier the farmers had all those things in their hand, but now they also have to earn more so they can send it to the market, so it can be sold at a high price for that. That's another thing that agriculture changed now, it changed the body of women."

Environmentalist Vandana Shiva decries the impact of the liberalization of export and import policies that occurred in 1991. She suggests these policies are "destroying the fragile fabric of ecological security, livelihood security, and food security, creating ecological devastation and deepening hunger and poverty". In the name of the free market, these policies allow foreign produce to be imported and sold to the Indian public for consumption. When this produce comes from rich countries like the U.S. that provide large subsidies to agribusiness, locally grown and unsubsidized crops cannot lower their prices enough to both compete with imports and make a profit. Given these conditions, more and more farmers have been forced to switch to growing crops for export in order to make a profit.

As Shetty notes, "globalization of trade encourages [farmers to grow] cash crops for export and the resultant movement of important micronutrients, which are now not available to the local population". Maheena furthers the connection between the increasing agricultural exports and the lack of dietary variety available to poor Tamil women through her suggestion that these phenomena have "changed the bodies of women," a comment that was further explained by another woman I spoke with, Pargavi.

Pargavi elaborated on the specific ways in which these policies may have affected women's bodies by linking women's poverty to complications during pregnancy and birth. She remarked,

"These days [women] live in fear, because they are weak and food is different and [doctors] recommend to eat greens, fruits. They go to the doctor. The doctor recommends these things during check ups and [women] do this if they can afford it now and then. What if the family is poor? These days women are anemic. They weren't in those days. Sometimes women who are pregnant even get jaundice and in those days it didn't happen."

Her question "What if the family is poor?" is particularly poignant when posed in the one-room home she shares with her daughter, granddaughter and husband. For many women throughout Tamil Nadu, paying for nutritious food during pregnancy on a regular basis is an economic impossibility, especially when they already have one or more children to feed. Pargavi's words emphasize the relationship between poverty and poor health, specifically women's diminishing ability to safely bear children. She locates the source of this problem not in some inherent defect of the female body, but in a particular weakness caused by the harsh economic realities of rural women. These realities, as Maheena makes clear, are not unfortunate accidents; they result directly from the neoliberal policies enforced by corporate giants and powerful nations with a keen economic interest in access to India's markets.

But how do such policies impoverish rural communities? Since the vast majority of these communities in Tamil Nadu depend on subsistence agriculture, the story begins during the Green Revolution. Aggressive marketing schemes appearing in the 1980s lauded the increase in productivity made possible by new hybrid seed strains. Many farmers saw these seeds as an opportunity for investment, not just in new technologies, but in the promise of a better life. <sup>23</sup> All over India, farmers took out massive loans to purchase hybrid seeds, in addition to the fertilizers and pesticides these varieties required in order to flourish.

As promised, these seeds did indeed produce abundant yields.<sup>24</sup> However, such yields were only possible under a very specific set of circumstances; in general, the seeds were far less resilient than past local varieties and needed more water in order to thrive. Thus, many farmers were forced to take out more loans to pay for the irrigation technologies these strains required. Even after this investment, high yielding seeds remained vulnerable to droughts, which could destroy a whole season's worth of crops. In addition, these varieties were also more susceptible to pests and necessitated continual investment in pesticides.<sup>25</sup> Any number of circumstances could cause these vulnerable crops to fail, leaving farmers indebted with no foreseeable return on their costly investment.

Despite all this, before the liberalizations of the early 1990s, the Indian government provided some assistance for farmers that fell on hard times. Prices for crops were stabilized to an extent through government interventions. However, in 1991 conditions of a World Bank structural adjustment program stipulated a reform of the agriculture sector: the adoption of free market principles and ideology. In addition, the government was required to drastically reduce funding for the public assistance programs that were so essential to farmers' well-being. Since the removal of government safety nets in the 1990s, farmers who fall deeply into debt have nowhere left to turn. Out of options, many resort to suicide. Most do so by drinking the very pesticides they went into debt to purchase. Tonservative estimates suggest at least 150,000 Indian farmers committed suicide between 1997 and 2005 alone. The widows they leave behind struggle daily to provide for themselves and their children.

These suicides are a tragic result of the high levels of poverty found among farming communities in rural India, even in the comparatively wealthier state of Tamil Nadu, poverty that is the result of neoliberal trade policies and globalizing market forces. As my informants sug-

gested, the effect of this poverty on women's bodies is manifested in the prevalence of diseases largely caused by diet: iron-deficiency anemia, obesity and diabetes. The effect of socioeconomic status on the occurrence of these three conditions has been examined repeatedly. In today's global economy, the less nutritious, processed, sugary foods and starches that Dr. Peeraswami discussed are often all women can afford to purchase in addition to the daily staple of white rice. Foods that are rich in iron such as leafy greens, legumes and meat proteins have become prohibitively expensive and rarely consumed. Accordingly, poverty is widely recognized as one of the most important causes of iron-deficiency anemia, a prevalent and potentially serious condition, especially among pregnant women. As Dr. Peeraswami suggests, a diet high in white starches and processed foods contributes to the rise in other non-communicable diseases such as diabetes and obesity, which are discussed at length in the literature on the nutrition transition.<sup>29</sup>

My assertion that women's claims about the effects of these dietary changes and pesticide use on their health can indeed be read as a critique of the neoliberal processes of globalization, one that is strengthened by the empirical evidence that supports their perceptions. For instance, a traditional birth attendant I interviewed described "leg swelling," often caused by preeclampsia. There is indeed evidence for a potential link between pesticide exposure and hypertensive disorders in pregnancy like preeclampsia.<sup>30</sup> Though this connection is far from definitively established, another important relationship—that between dietary habits (specifically iron intake) and anemia—has been long recognized by the biomedical community.<sup>31,32</sup> Moreover, Finnis studied the abandonment of millet cultivation in favor of rice and the effects of this dietary shift on iron intake. Millets are rich in iron, some having two, three or even nine times the amount of iron available in the same quantity of cooked rice.<sup>33</sup> The decrease in iron consumption that results from shifting from a millet-based to rice-based diet very likely contributes to the extremely high rates of anemia present among poor women in Tamil Nadu. The fact that women overwhelmingly see recent dietary changes as the primary cause of their most serious health problems reflects Finnis' assertion that "villagers recognize [the] health implications [of such changes], even if they do not have access to nutritional charts and nutrient analyses."34

The Conclusion: Valuing Women's Knowledge

Over the last twenty years, the government of Tamil Nadu has aggressively promoted institutional delivery as necessary for women to give birth safely in an attempt to reduce maternal mortality. State rhetoric emphasizing the dangers of home delivery, which has increasingly prevalent in the last two decades, is interpreted by many women as a suggestion that they are no longer strong enough to give birth unassisted. This implication has great significance in the Tamilian context, where it is believed that women derive their ability to survive the intense pain of childbirth from their *sakti*, their divine, female power.<sup>35</sup> A woman's endurance during labor and birth is seen as one of the most central, defining characteristics of her femininity.<sup>36</sup>

During her fieldwork, Van Hollen noticed a common perception among her informants that the processes of modernity have drained women of their sakti so that women today no longer possess as much sakti as their mothers and grandmothers.<sup>37</sup> Similarly, the women I interviewed implied that they too had lost some of this strength and were no longer strong enough to give birth like their grandmothers had. However, by attributing such weakness to the lack of nutritious, chemical-free food available to modern Tamil women living in poverty, my informants implicate both the state and powerful, multinational groups like the World Bank and World Trade Organization in the creation of conditions through the promotion and implementation of neoliberal agricultural and trade policies - that continue to impoverish the women of Tamil Nadu. Assertions about dietary changes and their impact on both pregnancy and birth therefore can be interpreted as a powerful critique of the larger forces of globalization, a critique grounded in women's experiences of the effects these processes have had on their own bodies. Global health policymakers must recognize the legitimacy of such critiques if they hope to design successful programs that truly address the fundamental causes of maternal mortality and morbidity.

Many heath policymakers in India and other underdeveloped nations continue to place undue emphasis on cultural or behavioral factors in their explanations of maternal deaths and malnutrition. Such explanations encourage the design of health programs that focus on modifying women's behavior rather than remedying the underlying structures of poverty and class inequalities that ultimately lead to poor maternal health. For example, Van Hollen noticed a tendency among maternal and child health development workers to blame cultural beliefs and practices or rural women's supposed ignorance for the prevalence of malnutrition.<sup>38</sup> Similar attitudes are found in a 2009 WHO publication discussing maternal health in Tamil Nadu. In their analysis of the causes of maternal mortality, the authors emphasized women's lack of awareness and failure "to appreciate the seriousness of the risks" inherent in pregnancy and childbirth as well as their "unwillingness to seek appropriate medical assistance in time" as reasons for poor maternal health outcomes.<sup>39</sup>

The validity of explanations that attribute ill-health to indigenous culture, women's behavior, or "lack of awareness" has been repeatedly called into question by a variety of scholars and health professionals. Medical anthropologist Paul Farmer criticizes this "victim-blaming" model of global health that "place[s] the problem with the poor themselves...[claiming] that these people are backward and reject the technological fruits of modernity". Furthermore, UCSF Professor Vincanne Adams similarly condemns the underlying ideology of global health interventions that imply "ignorance is the real cause of disease—ignorance of truths that arrive via international health programs". Like Farmer and Van Hollen, Adams considers structural, not cultural, factors of poverty and inequality to be the most important determinants of health.

The Tamil women I interviewed are acutely aware of the importance of diet and nutrition during pregnancy. Interventions that focus on health education or behavior change but ignore the structures of poverty and inequality, which are intensified by globalization, fail to address the root causes of poor maternal health in this state and others like it. Furthermore, framing culture and ignorance rather than socioeconomic factors as the principle explanation allows the Indian government and transnational actors like the World Bank or WTO to avoid blame for creating the very conditions that lead to the prohibitively high costs of nutritious food for pregnant women. Professor Barbara Cooper makes a similar argument about discourses in Niger that draw on the "trope of the bad mother" to construct the problem of child malnutrition as cultural rather than socioeconomic. She argues that "invoking cultural causes seems to be primarily a way of deflecting responsibility off of the state and other established institutions and onto 'those cultures out there'".42

Rural Tamil women assign the responsibility for their poverty and lack of access to affordable, healthy foods to the state and international agencies like the WTO through their critiques of the globalized food system. These critiques reflect knowledge gained through women's own lived experiences. This form of knowledge has been historically discounted and undervalued by policymakers and politicians across the globe, but today, some global health professionals are attempting to remedy this error by listening for the long-silenced voices of the marginalized. Paul Farmer calls this practice "listening for prophetic voices." If they hope to be successful and sustainable, maternal health interventions must not ignore the knowledge of the women for whom these programs are designed. Obstacles to maternal health must be examined through a feminist lens that centers its analysis on women's own lived experiences and knowledge. The research presented here describes Tamil women's poignant critiques of agricultural globalization as part of a larger argument that asserts the inherent value of women's knowledge and advocates for a new global health paradigm that values this knowledge to a greater

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