**Moving past the problematisation of tobacco farming: insights from South India**

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3,967 words

**What this paper adds**

*What is already known on this subject?*

* Tobacco control actors increasingly recognise the importance of supply-side issues as tobacco production has increased dramatically in many Global South countries over the past three to four decades.
* The FCTC mandated a working group to look at Articles 17 and 18 of the Convention in 2008, which focus on alternative livelihoods for tobacco farmers, and health and environmental impacts from tobacco respectively. It came up with a set of guidelines, adopted by COP 6 in 2014, which set out a research agenda and policy framework for member states to encourage tobacco farmers on to ‘economically viable’ alternatives.
* These working group guidelines suggest that tobacco farmers globally are unable to earn well from tobacco, but continue to cultivate it due to industry pressure. Wider literature by tobacco control researchers supports this view of farmers.

*What important gaps in knowledge exist on this topic?*

Both the document by the FCTC working group and wider research is focussed on *problematising* tobacco production, therefore a focus on broader trends in tobacco production can obscure the complexity of local settings. This is particularly the case with regards to the structure of tobacco value chains, the profitability of tobacco, and problems associated with production such as exploitation of farmers by the industry.

*What does this study add?*

* This paper focuses on tobacco farmers in South India to show that tobacco value chains are not always dominated by the ‘industry’, that tobacco production offers high levels of remuneration to certain producers, and that instances of exploitation are not unique to tobacco alone.
* The paper finally discusses the implications of this research for implementing Article 17 of the FCTC. It argues that tobacco control researchers need to move beyond problematisations of tobacco production, seeking instead to understand resilience within local contexts in order to curb it.

**Moving past the problematisation of tobacco farming: insights from South India**

*Abstract*

*Tobacco control actors increasingly recognise the importance of supply-side issues in seeking to address the problem of global tobacco consumption. However research in this field often depicts tobacco production as a problem for farmers and as a malaise of the global industry. This paper draws on research from tobacco producers in South India to argue that tobacco does offer high remuneration and increased power in the value chains for farmers in certain settings where the industry is not dominant. It also argues that where exploitation does take place, it is often symptomatic of agriculture more broadly rather than unique to tobacco. The paper ultimately advocates further research on locally-specific settings to better understand why this cash crop remains so resilient in the Global South today.*

**Keywords:** *Environment, Global health, Low/ Middle income country, Public policy*

***Introduction***

Despite the Framework Convention on Tobacco Control’s (FCTC) dominantly demand-led approach, there have been marked efforts over the last decade to address supply-side issues, namely *production.*

Specifically, the FCTC’s third Conference of Parties (COP 3) mandated the creation of a working group in 2008 to look specifically at Articles 17 and 18 of the convention, which focus on alternative livelihoods for tobacco farmers, and health and environmental impacts from tobacco respectively[1]. This working group developed a research agenda and policy recommendations, (henceforth the ‘17/18 document’), to help parties to the Convention to address the *problem* of tobacco cultivation; this was adopted by COP 6 of the FCTC in 2014[2]. Yet the 17/18 document, as well as wider research by the tobacco control community[3,4] can sometimes seek to *problematise production* in the same vein as consumption, painting tobacco producers as passive and trapped in tobacco cultivation, and the global tobacco industry as the ‘problem’ to be addressed.

This paper draws on primary research in Southern India to argue that in some cases, tobacco production is not driven by vertically-integrated tobacco corporations, showing instead that there can be numerous types of ‘industry’ within tobacco value chains. The paper demonstrates that a number of farmers in certain contexts enjoy high levels of remuneration from tobacco. Finally, the paper argues that where instances of exploitation do take place, they can be symptomatic of agricultural marketing in general, rather than being unique to tobacco. The paper ultimately suggests that approaches to tackling tobacco production at the local level will benefit from greater attention to the heterogeneity of tobacco-growing contexts, the specific structural drivers of tobacco production in different areas, and to understanding tobacco in a broader agrarian context.

**Existing approaches to researching tobacco production**

A proliferating literature from tobacco control researchers, activists and policy makers examines tobacco production in primarily Southern economies over the last two decades. Such research has clearly shown why tobacco production can be understood as a *problem* in a number of ways that go beyond its detrimental health impacts upon consumers. These include its environmental impacts such as deforestation[5] and soil degradation[6], its social impacts including child labour[7] and the exploitation of farmers by the industry[8], its occupational health impacts upon growers and workers[9,10], and its poor returns to farmers[11–13]. Such research is crucial in highlighting these issues; however, it can also be limited by the inherent need to *problematise* tobacco production, a remit that is ingrained in its very approach, and is also evident in the 17/18 document[2].

Such problematisation leads to three main issues which this paper addresses: firstly, a tendency towards presenting the global tobacco industry as hegemonic across all contexts. For example, the 17/18 document depicts small-scale farmers as commonly exploited by large, multinational tobacco companies[2], with no acknowledgement of the heterogeneity that exists across agrarian contexts in the Global South today[14]. It states:

*‘The global tobacco industry is a highly specialized oligopoly… The primary processing of the tobacco leaves is undertaken by specialized companies, called "first processors" or "leaf companies"... Worldwide, only a few companies work in this sector. The business model is a vertical integration of the tobacco growers and workers.’*[2]

Secondly, the profitability of tobacco is called into question, often framed as a rebuttal of the tobacco industry’s claim that tobacco control policies threaten farmer livelihoods[15]. For example, whilst a study on tobacco farming in Cambodia showed that it offered farmers more remuneration than other crops[16], subsequent research sought to contradict these findings by suggesting that labour costs were not taken into account, though the methodology clearly states otherwise[17]. The 17/18 document also adopts a similar approach:

*‘The farmers themselves earn very little for their crop in comparison with the final price obtained at the end of the value-added chain…It is possible that in any setting the farmers are vulnerable and trapped frequently by the tobacco industry in a vicious circle of debt.’*

The value chain is depicted as consistently un-remunerative for producers, and their decision to cultivate tobacco is thus portrayed as to the result of industry pressure and indebtedness[2]. Furthermore, the notion of tobacco’s profitability is referred to as a ‘belief’ among farmers[2], with no space afforded to the prospect of this being an empirical reality for some.

Thirdly, and linked to the first and second points, analyses of tobacco’s detrimental impacts are often made without reference to broader agrarian contexts. Thus research which suggests that tobacco farmers are pauperised by low prices under contract farming[18] or that tobacco engenders high social and environmental costs[17] does so without a clear overview of other comparable crop value chains in specific regions. The implicit suggestion that tobacco alone *causes* such issues (though potentially accurate) is often under-evidenced. In addressing the gaps in existing approaches, this paper employs concepts from Global Value Chain literature to explore the nature of the tobacco ‘industry’, and how farmers are able to take on value-adding activities beyond production alone to earn significantly from tobacco[19].

**Case study and research methods**

This paper focuses on the case of chewing tobacco farmers in the South Indian state of Tamil Nadu. Tobacco has been cultivated in the western part of Tamil Nadu, where this research is based, since at least 1801[20], and has a resurgence through state-support as part of the Green Revolution[21,22]. Currently, tobacco production in the state is in decline, comprising just 0.8% of all-India production in terms of area in 2013-14[23], and contravening an increase in tobacco production at a national level in recent decades[24]. This is in keeping with a broader agrarian decline in western Tamil Nadu; particularly among the *Gounder* community who are the main cultivators of tobacco in this region[25].

The research area covers the five main districts where tobacco continues to be produced: Coimbatore, Tiruppur, Salem, Erode and Dindigul (production also takes place in two further districts on a much smaller scale and located geographically separately to these five clustered districts; these were not researched due to location and low levels of cultivation).

Field research was undertaken from 2014-2015 as part of a Doctoral dissertation. The research methodology was largely qualitative, comprising semi-structured interviews with 68 tobacco farmers and traders in 38 villages across five districts, triangulated with informal discussions with over 100 agrarian actors both connected and unconnected to tobacco, extensive ethnographic field notes, and interviews with state and NGO actors. Interview questions were focused on production (assets, inputs, labour); curing and exchange (price, marketing channels, value chain structure); and perceptions of agriculture more broadly (reliance on tobacco, reliance on agrarian vs. non-agrarian income, move away from agriculture in future generations).

In terms of sampling, there is no existing research on tobacco farmers in Tamil Nadu, no data available on the overall ‘population’ of tobacco farmers in the state, and state-level reporting on tobacco production by overall area/ weight in agricultural reports[26] is problematic, as evidenced by an interview with the State tobacco research station[22]. Furthermore, it was clear that tobacco farmers were not necessarily representative of farmers more generally in the region. For example, whilst producers in Tamil Nadu are primarily small-scale, with 91% of all agricultural landholdings in the state being under one hectare in 2010/2011[27], tobacco farmers tended to be slightly larger landowners: 83% of farmers interviewed owned over one hectare of land (though 75% owned under 10 hectares, thus they largely remained ‘medium-scale’ rather than ‘large-scale’)[27]. As such, a representative sampling frame was not possible. Instead, interviews were based on snowballing methods, with the aim being to capture the ‘general’ scenario across 5 districts where tobacco is produced; thus aiming to represent the region’s tobacco production as much as possible given the aforementioned constraints. Prior to interviews, ethnographic methods were used to meet agrarian actors in tobacco-growing villages and understand the general scenario of tobacco production in that area.

Interviews were conducted by the author and a field assistant in Tamil, and then transcribed by the author into English. Analysis involved basic quantitative data analysis using Microsoft Excel, and qualitative data analysis using Nvivo. All subsequent analysis in this paper is taken from field research.

Tobacco in Tamil Nadu offers an interesting case because production is clearly at odds with the depiction set out by the 17/18 document. However this paper does not claim *external validity* in terms of understanding drivers of tobacco producers in other parts of the world. Instead, the paper’s message in part is to argue that policymakers must understand the highly diverse types of tobacco production globally, and the specificity of the local agrarian contexts within which they are embedded, whilst also paying heed to common patterns across tobacco production systems. This point will be substantiated through subsequent analysis.

**Tobacco ‘industry’ in Tamil Nadu**

Tobacco production and marketing in Tamil Nadu contrasts with the depiction of vertical integration and farmer passivity reflected in the 17/18 document. Instead, value chain analysis reveals that producers enjoy heterogeneous marketing channels and state support in cultivation.

The 17/18 document depicts a vertically-integrated value chain as ubiquitous across global tobacco production[2]. In value chain literature, vertical integration refers to a structure where a retail company or corporation sits at the top of a commodity value chain and wields significant control over the production process below[28]. In the 17/18 document, vertical integration refers to contract farming, where a company provides inputs such as seeds, pesticides, fertilisers and even loans to producers in exchange for procuring the crop at a fixed rate through closed markets[29].

This is not the case for tobacco farmers in Tamil Nadu. Producers procure High-Yielding Variety (HYV) seeds and seedlings at subsidised rates from the Central Tobacco Research Institute (CTRI), a central state-funded agricultural research station that comes under the Indian Council for Agricultural Research and is part of the network of agri-research stations set up during the Green Revolution era[22]. These continue to provide subsidised HYVs for a number of agricultural commodities[30,31]. The CTRI develops new HYVs every decade, and they are bred to be drought-resistant and produce high-quality leaves. Pesticides and fertilisers are purchased openly from local state-subsidised/ private shops. As such, farmers enjoy *state* support in procuring high-quality inputs, and there is no industry presence at this stage in the value chain. There was no discernible relationship between CTRI Tamil Nadu and the ‘industry’, as the research station was only concerned with production. However in Karnataka, where farmers grow Flue-Cured Virginia tobacco and sell almost entirely to ITC (a subsidiary of British American Tobacco), the local CTRI stations and the state Tobacco marketing Board enjoy a very close relationship with ITC’s agro-research operations, both in terms of developing agro-technology, and marketing channels[32]. These insights are from a short pilot trip to the region, further research on these arrangements is certainly warranted in light of India’s strong stance on the FCTC.

 Tobacco marketing in Tamil Nadu is also free from industry interference, producers sell through an open market to petty local traders, and value chains comprise myriad retailers at the apices, from petty-tobacco shops in Tamil Nadu all the way to the Malpani Group, a national company that has an annual turnover of £116,000,000 (INR 1000 Crore)[32,33]. The Malpani Group is the largest Indian company involved in chewing tobacco production. It is domestically-owned and has no evident links to multi-national tobacco corporations, and it does not operate through vertical integration. Instead, a village-level network of commission agents purchase from farmers through open marketing channels, offering competitive prices in relation to other local traders purchasing for different value chains.

The 17/18 document’s portrayal therefore does not capture the Tamil Nadu case, and this is important for two main reasons. The first is that rather than being ‘trapped’ by arrangements where the tobacco industry wields a monopoly over marketing, it is clear that farmers enjoy open and competitive marketing channels. Secondly, in the case of Tamil Nadu, the Indian state, which is a party to the FCTC, is subsidising productive inputs for producers through the CTRI. Thus rather than suffering at the hands of an exploitative industry, farmers are incentivised to cultivate tobacco through access to state-funded agro-technology. This is an issue that has gained some attention at the level of national policy conflicts between trade and tobacco regulation[34,35], and requires further exploration.

Research from Tamil Nadu thus highlights the need to embrace the specificity of tobacco production systems in different contexts, as well as looking beyond problematisations of the industry alone to understand what drives tobacco production.

**Remuneration for farmers**

Evidence from Tamil Nadu also suggests that producers can enjoy high levels of wealth accumulation from tobacco for two reasons – its agro-ecological suitability to the region, and the ability to upgrade within the value chain. Remuneration is shown in this case to be broader than just profit margins, with farmers stressing tobacco cultivation as a means of mitigating ecological risk, and the ability to control their income and access higher seasonal prices through curing; thus demanding a more holistic understanding of economic drivers behind cultivation.

Firstly, as mentioned previously, farmers use seeds and seedlings distributed by the CTRI, a state-funded research station, and seeds are HYVs, designed to be particularly resistant to drought and yield high-quality leaves. Farmers choosing to cultivate tobacco thus have access to low-cost, high-level agro-technology. This is particularly important in light of the agro-climactic context of western Tamil Nadu. The region is characterised by low rainfall, a rapidly declining water table and high temperatures, leading to high levels of evaporation[36,37]. As such, farmers have historically relied on expensive well, and more recent *bore* well, technology in order to undertake year-round farming in this tract[36,38]. Farmers thus expressed a strong preference for crops that require minimal irrigation, can stand up to the vagaries of poor irrigation access in light of a deepening water table, and still offer remuneration. In this sense, tobacco is remarkably well-suited, its drought-resistance means that even in conditions of poor rainfall and poor irrigation, the crop fares reasonably well, and its short duration limits its thirst for water. As one farmer noted, “No matter how much water there is we always plant tobacco”[39].

Secondly, tobacco is remunerative due to the ability for farmers to *upgrade* through taking on the curing process themselves*.* This is a process whereby actors in a value chain take on activities higher up in the chain that add more value to the commodity, therefore enabling producers to earn more from the sale of the commodity, and improving their ‘structural power’ vis-à-vis larger actors such as corporations[19].In the case of Tamil Nadu tobacco, farmers are able to take on *sun-curing*. This type of curing comprises over 70% of all tobacco produced in the state[22], and is characteristically low-capital, requiring just bamboo sticks, string, storage space, and most expensively, adequate labour. The process involves cutting tobacco plants from the earth, leaving them on the ground to dry out for 1-3 days, then hanging them on bamboo frames or *pandals,* and leaving them to dry for a further 30 days, before taking them down. Leaves and stems are then separated, leaves are bound together and stacked in large bundles to cure further. This whole process Sun-curing takes three months and once complete, the tobacco leaves can be stored by producers for up to three years, though they are usually sold within 12 months. This is crucial, as it removes the crop’s perishability. As such, producers are afforded significantly more bargaining power with traders seeking to drive prices down post-harvest, as they can sell later, when the market is not saturated. As one farmer noted, “The traders say that there is a ban and so we don’t sell to them, we hold on to the stock and sell it slowly over time… they say it to bring the rate down, but if we hold on to our stock for six months to wait for the rate to come back up we can sell it slowly and profit”[40]. Producers can also regulate their income streams by choosing to sell tobacco during the low season (pre-harvest) when they do not cultivate as much. Upgrading thus enables producers to increase their structural bargaining power and maintain better control of their income, thereby accessing higher remuneration.

This remuneration is significant. In terms of profitability, cured leaf fetches a far higher rate at market, albeit with regional variation across the five districts covered here, as shown in table one. Rates are calculated by multiplying the different reported rates for 1st, 2nd and 3rd grade leavesby the proportion of a yield that is composed of each of these grades (70%, 20% and 10% respectively), in the range of yields that farmers reported – 0.9-1.2 tonnes/ acre. Rates for tobacco suffer peaks and troughs year-to-year; this is common across a range of cash crops, notably onion in India in recent years[41]. It should also be noted that 2013-14 saw very high tobacco leaf prices due to severe under-production in the previous three years as a result of sustained drought[37]. Due to the drought, there were unusually high levels of profit among farmers (53 farmers out of 68 overall interviewees), with 73% of farmers reporting profits after cultivation costs. All of these farmers answered that tobacco had been the most profitable crop that they had cultivated in 2013-14.

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| Table 1: Tobacco profits 2013-14[42] |
| Area | Green/kg | Cured/kg | Green/acre | Cured/acre |
| North (Erode, Salem) | N/A | ₹ 150-180 | N/A | ₹ 122,513-163,350 |
| Central (Coimbatore Tiruppur) | ₹10 | N/A | ₹ 7,425-9,900 | N/A |
| South (Dindigul) | ₹10 | ₹ 90-130 | ₹ 7,425-9,900 | ₹ 81,675-108,900 |

 In 2014-15, Farmers were able to earn up to ₹163,350 when leaf was cured in Northern districts where yields were 1.2 tonnes/ acre, with an average of 50% going on cultivation costs[42]. This is significantly more than rates of ₹10/kg for un-cured or green leaf in the same year, giving gross profits of ₹7,425-9,900/acre[42]. Table two comparatively shows rates of return for the main cash crops that farmers reported cultivating alongside tobacco. The rates are for Coimbatore District, which is the central and largest district within the research. This year is used as it is comparable to 2014-15 in terms of rainfall [37], whereas 2012-2014 were years of particularly low rainfall and thus erratic prices. Commodity prices for 2014-15 were not published at the time of writing.

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| Table 2: Rates for crops in Coimbatore District, 2011-2012[20,21] |
| Crop | **Chilli** | **Tomato** | **Aubergine** | **Ladies Finger** | **Maize** |
| Price/ kg | 72.34 | 14.83 | 15.8 | 13.91 | 12.96 |
| Yield: kg/Ha | 437 | 12790 | 10899 | 11703 | 7455 |
| Duration (days) | 165-210  | 135-145 | 120-180 | 90-110 days | 90-110 |
| Gross profit/ acre | **₹ 12,793** | **₹ 76,759** | **₹ 69,689** | **₹ 65,878** | **₹ 39,099** |

As shown in Table two, tobacco fares very well in terms of profitability per acre and duration when compared with existing crops in the region. As one farmer noted, “Compared to everything else, you get a bit more profit with this [tobacco]"[43]. Conversely, farmers were able to earn more from any crop in Table two in 2011-12 than from planting *Green* tobacco in 2013-14. Producers do not take on curing every year, as it does require a trade-off in terms of investments in labour costs. Instead, they are able to remain flexible in choosing on a year-to-year basis whether to cure or sell green, as markets for both are available. The point therefore is not that tobacco *always* offers high remuneration; rather that it *can*. In years where prices peak and producers can take on curing, they do enjoy significant remuneration, and they do so with mitigated agro-ecological risk, and increased structural power within the value chain as opposed to producing for a vertically-integrated chain[19].

This therefore refutes the claim made by both tobacco control literature[44] and the 17/18 document[2] that tobacco is never a remunerative cash crop, and that profits are a ‘belief’ among farmers. Evidence from Tamil Nadu shows that the crop *can* offer high profits to producers. Furthermore, the case of Tamil Nadu challenges the 17/18 document’s depiction of vertically-integrated chains where ‘first processing’ is undertaken by leaf companies, showing instead that in some contexts, farmers take on curing themselves. This has also been shown to be the case in other parts of the world[45,46].

**Exploitation**

Despite the emphasis thus far on tobacco’s open marketing channels and profitability, tobacco value chains in Tamil Nadu do have problems, including the exploitation of producers by traders, consistent with the 17/18 document and wider literature. Thus the crop is simultaneously remunerative and exploitative. Yet rather than seeing these problems as *specific to tobacco*, it is argued that such issues are often embedded within the broader agrarian context of Tamil Nadu itself.

Specifically, tobacco marketing, whilst open in the sense that there are no contractual arrangements between growers and traders, does entail problems for those producers that are unable to cure tobacco. This is because without curing, tobacco is a highly perishable crop, and thus producers are in a weaker position in terms of bargaining with traders due to its perishability [42]. Furthermore, tobacco trading has always taken place on the farm itself rather than in a central, open market place. As such, traders bargain one-on-one with farmers, and peddle myths around oversupply and tobacco taxation to drive prices down for farmers[42]. Farmers lack associational power in response, they are not unionised like traders, and the isolated marketing leaves them vulnerable to deception[42]. Yet such a practice is by no means unique to tobacco. Harriss-White’s extensive research in the same region[21] shows that traders across a range of commodities drive prices down, and research on class relations in agrarian settings globally affirms that such a process is central to profit-making in agriculture across the world[14]. As one of the farmers interviewed commented, “Traders decide the price... in the whole of agriculture traders are the ones running the show"[47]. It can therefore be argued that whilst tobacco traders in Tamil Nadu employ a number of myths and make use of structural power[19] in driving down leaf prices for farmers, curing can in many cases enable farmers to increase bargaining power and drive prices up. Traders’ tactics are not unique to tobacco, though the isolated nature of tobacco trading can enable them to be more successful in this case. Tobacco farmers are disadvantaged, but there is a context within which this claim must be understood, and which moves beyond depictions which only stress either tobacco’s merits or problems.

**Conclusion**

This article highlights a specific case of tobacco production where farmers enjoy state support, come up against petty capital rather than a vertically-integrated industry, and are able to profit from value chains in *good* years. The paper contextualises instances of exploitation within the value chain through a broader look at agrarian class relations. In terms of policy, this case highlights the need for further research into the role of FCTC member states in promoting production and marketing of tobacco, the issue of policy coherence within states between tobacco control and agricultural sector policy, and the need for alternative crops to address agro-ecological risk and value chain power structure.

The majority of research on tobacco production is focussed on producers selling into cigarette value chains, thus the case in this paper could be regarded as somewhat *exceptional.* However this case highlights the importance and value of conducting locally-specific investigations alongside research highlighting broader trends, and argues that such research is ultimately necessary to provide viable alternatives to tobacco in the future.

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**Competing Interests**

No competing interests to declare.

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NN collected and analysed data, and wrote and edited this manuscript fully.

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