

No country for young women farmers: A situation analysis for India

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This paper presents an overview of the state of young women farmers in India as they navigate livelihoods in a sector that faces severe challenges. Discussions of young women farmers in India often get lost in those focused on women farmers more generally and of youth in agriculture, whereas they are a distinct analytical and empirical category who merit attention. Besides being discriminated against compared to male youth, young women farmers are further likely more disadvantaged than their older female counterparts (in addition to their male peers) in terms of access to productive resources and are relatively more constrained as economic actors, even though they tend to have more formal schooling and access to information. We argue that knowledge of their challenges and circumstance is vital for the visibility and recognition of young women farmers as well as for sound, inclusive policies to support them. This is especially relevant in a context where non-farm opportunities for young men outstrip those available for young women. Towards this end, we draw on existing data and review literature to map the participation and situation of young women in agriculture in India.

Keywords: young women farmers, youth, agriculture, farming, gender, India

JEL Code: Q19; J13; J16

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No country for young women farmers

A situation analysis for India¹

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1. Introduction

In spite of their significant role in agriculture in India, women lack recognition as farmers, and face structural barriers related to land ownership, access to resources and markets, and mobility, which are associated with high levels of gender discrimination and gender-based violence (Agarwal 1994; Rao, 2017; UNODC 2018). There is a stark absence of an intersectional analysis based on (such as age, disability, class, education) in the otherwise substantial body of scholarship on women in agriculture and the gender barriers that they encounter, tending instead to generalize a communal female experience without accounting for intersections of identity. This lacuna is apparent in this current review of the situation of young women farmers in India. At the policy level, this silence is even more deafening; the predicament of young women farmers is something of a policy desert.

To be clear, there is not much information about young farmers in India in spite of the rhetoric of youth being a demographic dividend; we know even less about young women farmers (Vijayabaskar, et al 2018). In 2012, 56.6% of India's rural youth in the age group 15–29 years derived their livelihood from agriculture, forestry, or fishing (GoI, 2013; Vijayabaskar et al., 2018). According to a recent ILO estimate, female employment in agriculture was 57% in 2018, compared to 19% female employment in industry and 24% in services (WB, n.d). Young women farmers' experiences are lost between the two categories of rural youth and women. Even in the substantial body of work focused on women farmers in India, the generational aspects of women farmers are often under-researched.

This paper presents an overview of the state of young women farmers in India as they navigate livelihoods in a sector that faces severe challenges. Young women farmers are a distinct analytical and empirical category who merit attention. Additionally, in the Indian context, the trajectory of economic growth in recent decades has seen growing non-farm opportunities for young men rather than for young women (Binswanger-Mkhize, 2012). Besides being discriminated against compared to male youth, young women (farmers) are further likely more disadvantaged than their older counterparts (and their male peers) in terms of access to productive resources and are relatively more constrained as economic actors, even though they

tend to have more formal schooling and access to information. While young women farmers in India share several challenges faced by their counterparts in other countries, they also face others that are specific to the social context of India, arising from gendered social norms across caste and class. This is not to suggest that these are uniquely Indian issues, nor is it the case that young women farmers across India are all alike. The principal issue is that we know little about young women farmers in India. This paper is motivated by the urgent need to know who young women farmers are, what their (farming) experiences are, and the opportunities and challenges they face within broader socio-cultural and economic contexts. We argue that this knowledge is vital for the visibility and recognition of young women farmers as well as for sound, inclusive policies to support them.

We draw on existing data and literature to map the participation and situation of young women in agriculture. A brief discussion on a few methodological aspects related to defining, identifying and counting young women farmers in official data and scholarly material is warranted. The age group we adopt for a young farmer is 18-46 years; and a farmer is someone who farms (not for wages) for a livelihood with access to land (own, rented or shared). But in India, such a group is not easily recognisable as policies designed for agriculture and/or youth have historically not addressed the issue of women farmers, much less the needs of young women farmers. This is despite the vigorous advocacy in India by a number of rights based, women's organizations, in particular, for the recognition of the rights of women farmers and several programmes that purport to economically empower women. Part of this challenge comes from the absence of a definition of a farmer – in ways that renders visible invisible work.

The National Commission of Farmers in 2007 that preceded a National Policy for Farmers, 2007 noted: “For the purpose of this Policy, the term “FARMER” will refer to a person actively engaged in the economic and/or livelihood activity of growing crops and producing other primary agricultural commodities and will include all agricultural operational holders, cultivators, agricultural labourers, sharecroppers, tenants, poultry and livestock rearers, fishers, beekeepers, gardeners, pastoralists, non-corporate planters and planting labourers, as well as persons engaged in various farming- related occupations such as sericulture, vermiculture, and agro-forestry. The term will also include tribal families / persons engaged in shifting cultivation

and in the collection, use and sale of minor and non-timber forest produce.” (Para 3.2) This broad and inclusive definition of a farmer is however yet to be translated fully into policy.

Several advocates for women farmers have consistently urged the government to operationalize this definition of farmer and specifically recognize women farmers both those who own land and those working on others’ lands with a special focus on the most marginalized. Such an operationalization, they demanded should include tenant farmers, livestock-rearing women farmers, fisherwomen and women dependent on forests. Following the National Policy on Farmers in 2007, advocacy groups for the recognition of women farmers proposed a National Policy on Women Farmers in 2008, to redress some of the perceived failures of the former in providing a space for forwarding the interests of women farmers (Krishnaraj and Dattatri, 2008).

Over a decade has passed since this initiative and the struggles to recognize women continue. In 2011, M S Swaminathan, member of the upper house of the national parliament (2007-13) proposed the ‘Women Farmers Entitlement Bill’, which lapsed in 2013. According to Section 2(f) of the Bill, a woman living in a rural area, who is primarily involved in agricultural activity but does non-agricultural activity occasionally, is a woman farmer. Women engaged in agriculture in urban and semi-urban areas, and tribal women directly or indirectly involved in agriculture, shifting cultivation or collection (of agricultural produce), and the use and sale of minor or non-timber forest produce, are also considered women farmers. A woman can be considered a ‘woman farmer’ irrespective of marital status and land ownership. Even as the bill lapsed, the Government of India declared the *Rashtriya Mahila Kisan Divas* (The National Woman Farmer Day), observed annually on October 15.³

We argue that the question of young women farmers is enmeshed in the larger question of recognition of women farmers. And it is vital to recognize and support young women farmers as such given their unique strengths, needs, and challenges.

This paper is divided into four sections. By way of setting the context within which young women farmers operate, the first documents the triad of challenges confronting Indian

³ <https://pib.gov.in/newsite/PrintRelease.aspx?relid=171730>

agriculture—an agrarian crisis, an apparent youth disengagement with agriculture/ countryside, and an apparent feminization of agriculture. The second section draws on recently available data to estimate the extent of young women farmers and map the activities they engage in. The third section reviews existing literature on the challenges and opportunities young women farmers in India face. This section also addresses the extent to which policy in India addresses the specific needs of this group and reviews examples of a few approaches implemented by the state so far. We provide details on the data sets and literature we reviewed in the respective sections. The fourth section concludes the paper.

2. The Triad of Challenges

There is widespread agreement among researchers of Indian agriculture that it is in a state of crisis. Indian farmers' incomes today barely cover their costs of production; farmers tend to have high levels of debt and for a majority of them, agricultural income alone falls short of their consumption expenditure and costs of cultivation (NABARD, 2017). Wage income constitutes a significant share of total income amongst agricultural households (GoI, 2013; Vijayabaskar, et al, 2018) especially for smallholders. Among the many reasons for this apparent lack of profitability of agriculture, one serious structural issue has been the small and shrinking size of landholding. The average size of landholding has declined by half, from 2.28 ha in 1970-71 to 1.16 ha in 2010-11 (NABARD 2014). Research has confirmed that the negative effects of Green Revolution such as depletion in quality of soils, increase in use of purchased inputs, and extensive extraction of ground water through private investments (Reddy and Mishra, 2009), has led to a process of capital intensification of agricultural production without commensurate increases in yields and/or returns. Accompanying these agro-ecological factors are a series of policy shifts such as reduced public investments in research and development, and a lack of technological breakthrough in rain-fed and drought prone agriculture, which accounts for 60 percent of cropped area. Agriculture in India thus faces some stubborn problems that challenge

the viability of smallholder farming, in a context where smallholders constitute an estimated 99.43% of farmers in India.⁴

This challenge in turn exerts a strong push factor for youth to exit agriculture (Agarwal and Agarwal, 2017). Studies have documented that many young men and women, no longer want to remain in farming, preferring non-farm, factory jobs, especially in nearby urban centres (See Vijayabaskar, et al 2018 for a review of these studies; Sharma, 2007 and Sharma and Bhaduri, 2009). Many parents aspire for the children to get routine (and if possible) secure jobs outside the farming sector, given low returns to working the farm. While the continued non-viability of small-scale farming, successive subdivision and fragmentation of land push children from such families to move out of farming in search of urban employment, rising costs of rural land make it challenging to expand farms to a viable scale and pose an obstacle even to those (youth) who might be inclined to become (new) or continue as farmers. Agrarian land ownership has traditionally been the prerogative of certain caste groups across the length and breadth of the country making it extremely difficult if not impossible for those outside the acceptable caste groups to own land. At the same time, the stigma associated with manual work on farm, a marker of low (caste) status is another less documented reason for the youth turn away from farming (Vijayabaskar, et al, 2018; Jeffrey 2010).

Another apparent issue is the feminization of Indian agriculture, although the picture here is complex and different datasets do not always present a consistent picture. It is well documented that women in rural areas are more likely to engage in agriculture (and other primary occupations such as forestry and fishing) than men in rural areas. According to the National Sample Survey, in 1977-78, the figure was 88.1 percent for women, and 80.6% for men (see Table 1). Over time, the primary sectors, including agriculture, have declined in importance as a sector of employment for both men and women. However, the decline in the proportion of male workers was steeper than for women in the 1990s when India entered a phase of rapid economic growth. In 2009-10, for example, whereas only 62.8% of the men were engaged in agriculture (a decline of 25%), it was 79.3% for women (just over a 10% decline) (Himanshu et al, 2011; Ghosh and

⁴ As per India's notification to the WTO (G/AG/N/IND/15), farmers owning land less than 2 hectares are considered low income, resource poor farmers and as per the agricultural census, 2015-16, 86% of operational holdings are small/marginal.

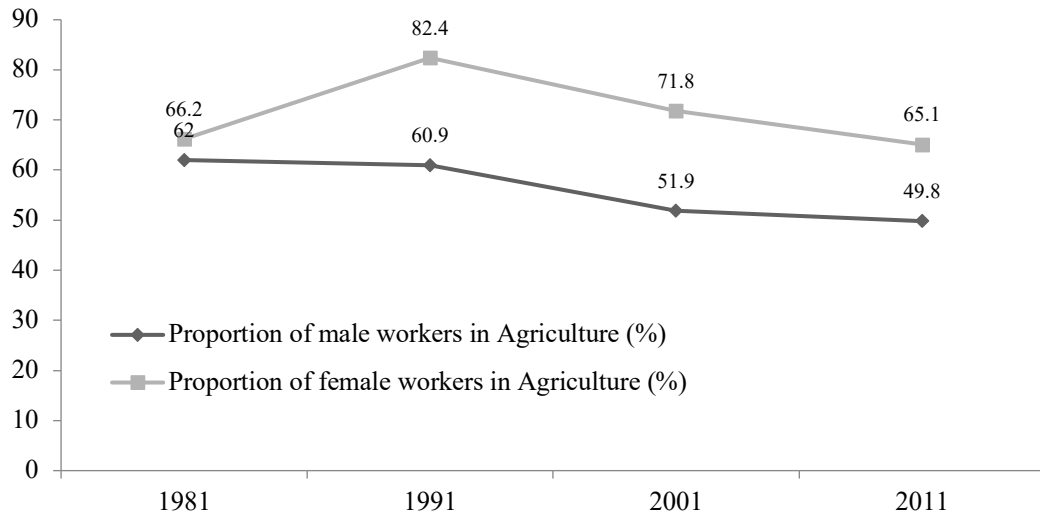
Ghosh, 2014). These trends are mirrored to some extent in data from the Indian Census at least until the 2000s (Figure 1). One oft-cited reason for the feminization of agriculture is that employment opportunities in the rural non-farm sector have been more for young men than for young women, translating into a higher rate of exit out of farming for young men relative to women (Binswanger-Mkhize, 2012). Pattnaik et al (2017) use four rounds of Indian census data to demonstrate that the feminization of agriculture is driven by outmigration of men. The Agricultural Census too shows that the proportion of operational holdings managed by women has increased over a five-year period, from 12.79 % in 2010-11 to 13.87 in 2015-16. The corresponding figures for operated area are 10.36% and 11.57% respectively. Further, Patnaik et al (2018) point out that where participation of women has increased in agriculture relative to men, this seems to be correlated with indicators of poverty rather than of women's higher social or economic status, suggesting that the feminization of agriculture should be seen as the feminization of agrarian distress.

Table 1: Trends in Employment according the National Sample Survey (various rounds)

NSS Round	Rural Males			Rural females		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
32 (Jul `77 to Jun `78)	80.6	8.8	10.5	88.1	6.7	5.1
38 (Jan-Dec `83)	77.5	10	12.2	87.5	7.4	4.8
43 (Jul `87-Jun `88)	74.5	12.1	13.4	84.7	10	5.3
50 (Jul `93-Jun `94)	74.1	11.2	14.7	86.2	8.3	5.5
55 (Jul `99-Jun `00)	71.4	12.6	16	85.4	8.9	5.7
61 (Jul `04-Jun `05)	66.5	15.5	18	83.3	10.2	6.6
64 (Jul 07-Jun 08)	66.5	16.2	17.3	83.5	9.7	6.8
66 (Jul `09-Jun `10)	62.8	19.3	17.8	79.3	13	7.6

Source: Himanshu et al (2012)

Figure 1: Data from Indian Census on women working in agriculture



Source: Based on Pattnaik, et al (2017)

3. Counting young women farmers in India

In this context, what do we know about young women farmers in India? The decadal Population Census classifies individuals as main or marginal agricultural workers, but without publicly available data on their age; a quinquennial Agricultural Census focuses on operational holdings and their ownership, again without distinguishing age. Other than this, there are two decadal surveys on the situation of agricultural households (2002-03 and 2013) that sample agricultural/farm households but does not delve into the role of individuals other than a single brief question on whether or not the individual participated in agriculture a year preceding the survey. In the absence of other data, the main source for capturing specific trends by gender and age has been the various rounds of the National Sample Statistics Unemployment-Employment Survey quinquennially (as in Table 1). These capture detailed information on employment status, sector of employment, spells of unemployment and a 7-day recall of tasks undertaken. The NSS Survey data are age-explicit and hence allow us to focus on the age of young farmer as we use in our study (18-45 years), disaggregated by gender. It also allows us to identify those from households that cultivate land, even if they do not own land. In terms of employment, the survey identifies those who reported agriculture as the principal activity as well as those who reported it as a subsidiary activity. In this section, therefore, we rely on these data to map the participation of young women (who are actively working and belong to cultivator households) in agriculture

(Table 2). Given these assumptions, there were an estimated 25.5 million young women farmers in India in 2011-12. In 2011-12, as with earlier rounds (Table 1, for example) proportion of workers from households who operate land who depended on agriculture as principal or subsidiary activity as cultivators and/as workers was much higher for women than for men, and this is evident across age groups (Table 2). For example, 91.9% of older women workers (over the age of 45 years) whose households operate land reported agriculture as their principal or subsidiary occupation (as opposed to 89.4% of their male counterparts) and for younger women (18-45 years), the figure was 89.2% (against 81.4% of younger men in the same age group). The role of agriculture as a source of employment among those workers whose households operate land is therefore more important for women than for men. The numbers above also suggest that agriculture is more important as an employer for older women than it is for younger women workers, among households that operate land, although the difference is not substantial. This reflects that younger women have more opportunities than older women in the non-farm sector. This is evident from village studies as well. Padmaja and Bantilan (2014) draw on decades of data from specific villages in the Indian semi-arid tropics and note that the younger female age cohorts, for example, join off-farm employment in greater numbers, whereas women beyond the age of 35 tend to remain in agriculture in the rural areas even as rural-to-urban migratory patterns develop.

Differently, when one considers all agricultural workers (agriculture as primary and subsidiary activity), not just from cultivator-households who operate land, the share of younger women is 2.34 times that of older women and comparable times that of older men. Thus, given that a woman works in agriculture, it is more than twice as likely that the woman is between 18 and 45 years than she is older than 45 years. Younger women constitute close just over a quarter of all workers in agriculture in 2011-12. Although there are 1.7 times more young male workers than there are young women workers (Table 2), this difference has been narrowing between 2004-05 and 2011-12 (not presented here). The data from 2011-12 also reflect a significant departure from previous trends, in that for the first time, India saw an absolute decline in overall female labour force participation (FLRP) across all sectors including agriculture to the tune of 19.16 million (Andres, et al., 2017). The FLFPR fell from 49.4% in 2004-05 to 35.8% in 2011-12. An estimated 53 percent of this decline was from among the 15 to 24 year olds,(brought about in

large part by those staying in school longer), about 32 percent of this decline was among 25-34 year olds, and 15.6 percent of this decline among those 35 years and above (Andres, et al., 2017). In other words, If 100 people left agriculture, 53 of them were aged 15-24 years, 32 were aged 25-34 years, 15.6 were over 35 years.

These numbers do not represent the true extent of women's participation in agriculture. Rural⁵ women who report domestic duties as the main or sole activity but are still engaged in specific agricultural tasks, especially caring for livestock, etc. The status of work captured only documents someone as being engaged in agriculture if they spend either most of the time the past year in agriculture or have spent at least one month in the past year on agricultural activities. Most likely therefore this is a lower bound of the estimates. These national data also mask important variations across region and social groups such as caste.

⁵ A limitation of this source of data is the absence of information on those under the age of 18 years.

Table 2: Distribution of the workforce National Sample Survey, 2011-12

Group (% of total; number in millions)	Agriculture			Primary sector (agriculture, fo fishing)		
	All workers	Cultivators- workers	Cultivators- labor force	All workers	Cultivators- workers	Cul labo
Men (over 45 years)	75.3	89.4	89.3	75.9	89.6	
	32.4	25.8	25.9	32.6	25.9	
Men (18 to 45 years)	65.0	81.4	80.0	65.6	81.6	
	57.5	43.4	43.7	58	43.5	
Women (over 45 years)	84.1	91.9	91.6	84.4	92.1	
	15	11.2	11.2	15	11.2	
Women (18 to 45 years)	78.3	89.2	87.8	78.5	89.3	
	34.7	25.5	25.5	34.8	25.5	
All	72.1	86.1	85.1	72.6	86.3	
	140	106	106	140	106	

Notes:

Workers are classified in the NSS based on usual principal status (UPS), that is the status of a person engaged in any one mentioned above for 183 days or more (a majority of time) during the reference period and Usual subsidiary status (USS) the activity status of that person during the minor time (183 days or less) during the reference period, if the person was engaged during the minor time period. The USS of a person is recorded only if the person was engaged in that activity for at least 3 table classifies a worker as being involved in agriculture based on a concept called Usual status that considers principal and status taken together (PS +SS). According to the usual status (PS+SS), workers are those who are accounted for as workers UPS or USS criteria. WE designate them as cultivators if the household they belong to report having cultivated some land of how they accessed that land) in the 365 days preceding the survey. These are expressed in absolute terms, but also as p workers and of the labour force. For definitions please see NSSO (2011)

4. The Social Context of Being and Becoming Young Women farmers

In India, young women farmers' predicaments—lack of recognition as farmers, access and control of land, little say in decision making, and other factors of production and markets, mobility, skills and training to pursue farming— reflect the intersection of gender and generation, embedded in the context of cultural norms related to caste, class and religion across different regions (Dyson and Moore 1983). Young women's lives are embedded in the context of high levels of gender discrimination and gender-based violence particularly in rural India (Croll 2000; Rajan et al. 2017; UNODC 2018).

4.1. Gendered tasks

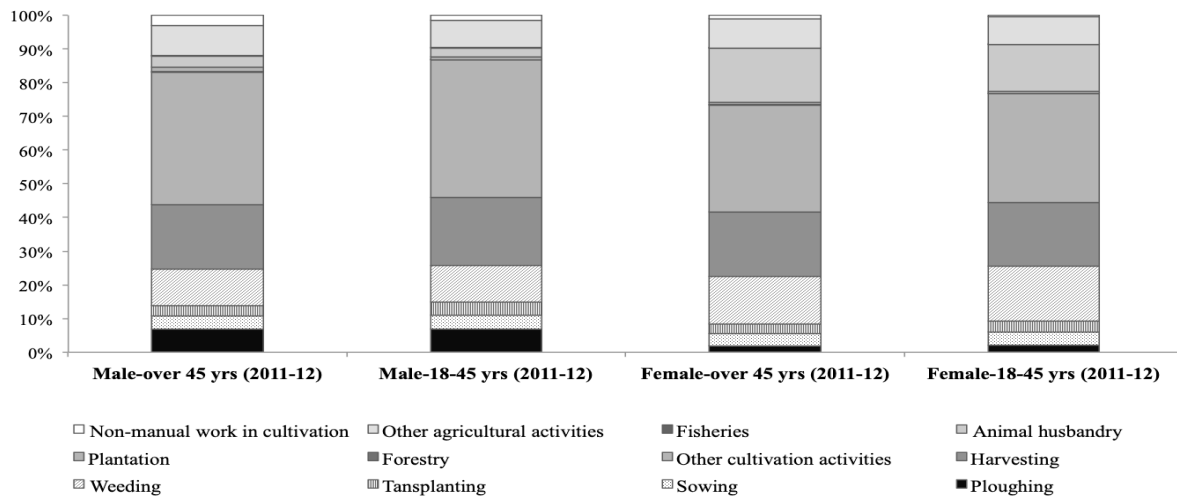
Nationally, within agriculture, women tend mostly to do manual work; non-manual work in cultivation is usually done by the men (Table 3). Women, both old and young, are also disproportionately involved in animal husbandry activities. Women's participation in sowing, transplantation, weeding and harvesting is historically high. In the past decade, however, the use of machines for harvesting, and the emergence of weedicide as a popular way of controlling weeds, have reduced women's role in these activities. In contrast, ploughing, which was historically a man's task (because of the strength required to use the plough and the cultural belief that women should not break the ground due to notions of impurity attached with menstruation and a belief that it would bring bad luck to the village, is increasingly being undertaken by women (Dube 1988; Kishwar, 1987, for example).⁶

Micro-level field studies confirm the gendered nature of tasks. Patnaik and Lahiri-Dutt (2016) report from West Bengal and Gujarat that a larger proportion of women respondents were involved in harvesting, sowing, application of manure and weeding, with only minor variation across sites. Few women involved themselves in marketing, pesticide spraying or ploughing, an issue we will return to later. Padmaja and Bantilan (2014) use long-term panel data mainly from

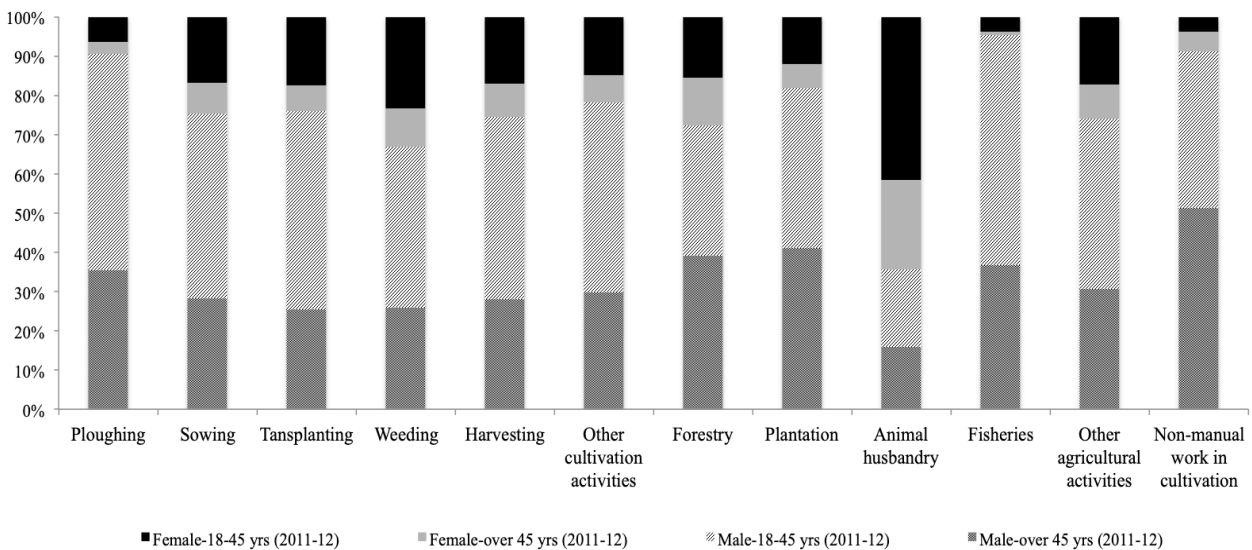
⁶ These national trends represent an average and there exists substantial variation across regions, depending on cropping patterns and social norms.

the semi-arid tropics from 1975 to 2014 to document substantial variation in which tasks women engage in. Despite differences, planting is more frequently practised by women, picking of cotton is done by women whereas ploughing is a male activity. They also observe that there is progressive feminization of labor and agriculture in

Figures 2: Tasks by generation-gender among cultivators based on 7-day recall, NSS 2011-12



Figures 3 Gender-generation participation in different tasks among cultivators, based on 7-day recall, NSS 2011-12



the rural areas, but the patterns vary a great deal across sample villages. Anecdotal evidence from across the country indicate that norms around which tasks women and men undertake have changed over time. At the same time, there is evidence to suggest that drudgery reducing tools and implements for what are considered women's tasks have been slow to come as evident in a scientist's remark that "All we have given them is a sickle".⁷ Primary surveys of women farmers suggest that many of the tasks are extremely hard and implements and tools are inadequate to the task (Makaam, u.d), with serious health implications, discussed later.

In unpaid work, there is an analogous difference in the burden borne by young women relative to young men working on the family farm. In general, whereas men hardly engage in care work, women, especially younger women, shoulder a disproportionate amount of household responsibilities, which renders much of what they do invisible, leaving them vulnerable. This is well documented by feminist economists across the world, including in rural India. Surveys from the field on time disposition of women (Deshpande and Kabeer, 2019; Padmaja and Bantilan, 2017, Antonopoulos, and Hirway, 2010 for example) suggest that across contexts the burden of care work falls disproportionately on women and in ways that undermine their ability to take advantage of market work or access/claim resources.

Young women, especially daughters-in-law in rural areas, are often the first to rise and the last to go to bed (Narayanan, et al 2019), taking on roles ranging from fuel, food and water collection, care for the elderly, the sick and for young children, much more than older women do and often without the support of men in the family. These responsibilities are especially acute if the woman is the household head or main breadwinner of the family. The familial obligation and interconnectedness between a farming lifestyle and farming jobs also mean that there is a fine line whether an individual is doing work (compensated), or work in terms of household expectations (uncompensated, but expected roles and obligations). There are also instances where second wives of farmers are younger, (Emran & Shilpi, 2015), and therefore, notably

⁷ R.S.Paroda at the Policy Forum on Social Transfers to Revitalize Rural India, Co-Organized by IFPRI, Indian Council of Agricultural Research (ICAR), and the National Academy of Agricultural Sciences (NAAS), April 26, 2019.

more vulnerable to exploitation, abuse within work and home settings, as are young daughters-in-law in general (Santhya, 2011).

4.1.2 Agency and autonomy

Despite the large number of women engaged in agriculture, only a minority has a substantive role in decision-making. Given that most of these women are married, their status as young daughters-in-law in their marital homes is precarious, especially in north, central and north western India which strongly embody characteristics of Kandiyoti's (1988) classical patriarchal belt.⁸ Pattnaik and Dutt (2016 presentation) for instance report that among the women farmers they interviewed less than 3% reported being involved in decision-making on major purchases or farm related decisions. In Telangana, the number was higher. A fifth reported participating in farm decisions with 15% reporting that the major say rests with them. Most of these were single women or from women-headed households (Ashalatha, 2015). Quantitative work on women-managed farms often don't distinguish between supervisory and executive roles of women in farming (Chandrasekhar, et al., 2018, for example) Those that do, rely on self-reported involvement in decision making in cultivation and is often an unreliable measure (Mahajan, 2019, for example). Age hierarchies in patriarchal contexts also mean that younger women are far less likely to be consulted in these decisions than older women. In field surveys of rural households in Odisha and Bihar, Narayanan, et al (2019) note that while women in general might be marginalized from decision making roles in agriculture and in having control over income, in some contexts, for example, in Bihar, young women, especially daughters-in-law, were less likely to have a say relative to their mothers-in-law in decisions around cultivation and kitchen gardens.

Marketing in market yards is almost always undertaken by men while women typically engage in sales to traders at the farmgate or retail sales within the village (Ashalatha 2015). Younger

⁸ The young wife in a context of severe patriarchal oppression is subordinate to the mother-in-law and will have to wait to become a mother-in-law herself to exercise power. This cyclic nature of patriarchy (Kandiyoti, 1988) forces women who are junior in their marital homes to bargain in ways (son preference) that accentuate gender discrimination and their own subordination.

women tend to face more restrictions on mobility and on interactions with men before marriage and upon marriage with men outside the immediate family, especially among castes higher in social hierarchy in rural areas in north, central and north-west India where the practice of veiling is prevalent, disadvantaging younger women farmers. Few young women are therefore involved in marketing as these public spaces are overwhelmingly “male” spaces.

This issue is stark in the context of animal rearing as well. Both livestock and backyard poultry rearing are often the responsibility of the (old and young) women in the household. They however tend to have little control over decisions around rearing or marketing and over the income that it yields. Where they do, there is some evidence that those dairy operations in India have higher productivity (Sneyers and Vandeplaas, 2015). There is also some evidence that when these activities are on a commercial scale, for example poultry reared in thousands in sheds, women’s role in these activities tends to be lower (for example, Narayanan, 2014 for poultry contracting in Tamil Nadu) presumably reflecting men’s control when activities are associated with cash income (Mies, 1986). Ashalatha (2015) notes that when it comes to both dairy and livestock products (and vegetables) sold in local markets, women tend to have some say in decisions, but not if they were sold in non-local markets.

More broadly, women’s status and aspirations can work to undermine family farming. Earlier work on women’s status in India suggested that a greater demand for female labour in agriculture resulted in a relatively better status for women (Miller 1981; Bardhan 1974 & 1982) but also that given the drudgery of farm work, women did not want to be married into agrarian families (Jeffery & Jeffery 1996; Srinivasan 2017). Traditionally land is owned by specific castes and among large landowning families, women do not typically engage in farming but may undertake supervisory tasks. Another pattern evident is the withdrawal of women from labour with status mobility especially upon (hypergamous) marriage. In a context where women have little incentive to farm (lack of ownership, control of land, decision making), women’s desire to marry out of farming stems from the hardships in farming as well as their aspirations for a good, urban lifestyle. The latter has been further spurred with the increase in school enrolment and rising

educational aspirations among young women in rural India.⁹ Young women who aspire to become and are farmers do so while negotiating complex and oppressive social norms.

4.1.3. Limited access to land

Most crucially, despite the large numbers of women reporting that they work in agriculture, far fewer own the land they farm. According to the India Human Development Survey, 83 per cent of agricultural land in the country is inherited by male members of the family and less than two per cent by their female counterparts. Women comprise over 42 per cent of the agricultural labour force in the country, and yet they own less than 2 per cent of its farmland (Mehta, u.d.). A long tradition of patrilineal, patri/ virilocality leads to discrimination against daughters on land inheritance.¹⁰ In several Indian communities—largely adivisais, (officially known as the Scheduled Tribes), daughters still could access some land in the parental village as an insurance against risks of marriage failures (Rao, 2017, for example, documents these practices among the Santals in Jharkhand), even if in many cases the land eventually passes on or back to the male heirs. In these communities, marriage failures can actually prompt women to farm the lands they receive in the parental home, providing a pathway into farming, even if temporarily. Along with other changes such as the practice of dowry, successive subdivision of land that leaves very smallholdings for individual members of the household has put pressure on these customary practices and traditions since they further reduce the land available for the male successors.

A 2005 amendment to the Hindu Succession Act 1956 ensures that daughters can inherit ancestral land. In practice, however, most women continue to not claim their share of land. One common rationale for this is that young women typically inherit movable property, often part of a large and increasing dowry (Srinivasan 2005). The gold, cash and consumer goods transferred to a young bride is supposed to be in lieu of land for sons. But this is a false equivalence (see Agarwal 1994). A second reason is that the severity of patriarchal oppression in marital household necessitates maintenance of natal ties. Women trade their land inheritance to the lifelong goodwill and support of their brothers. This issue particularly constrains young women

⁹ Bordieu (2008) writes persuasively about the role of the woman and her family in the demise of farming in France by choosing to marry into non-farm families.

¹⁰ There are several matrilineal communities in India, but we focus here on the dominant practice.

farmers, whose name only ever gets recorded, if at all, on the land records in the marital home, when the father-in-law or husband passes on.

Issues relating to land rights for women in India have been well researched (Agarwal, 1994; cite cite). That said, limited access to land puts young women farmers at a disadvantage. The absence of recognition of women as farmers and using land ownership as a proxy for identifying a farmer marginalizes young women farmers. For example, many schemes in India targeting farmers require evidence of land ownership – for example for crop loans, to sell to the government procurement system and so on. As long as the woman farmer's name is not on the land records, highly unlikely for young women, such support for agriculture is largely out of their reach. For example, Ahmad (n.d) points out that the Rajasthan Farmer's Participation in Management of Irrigation System Act which was passed in July 2000 brings the water user who is a land owner in the command area but as only 8% of the land owners are women, they are unable to benefit much, even though women are the primary consumers and collectors of water in Rajasthan. Recent work on farmer suicides demonstrate that women farmer suicides are not recognized as such because of the invisibility of women farmers, and the widows of farmers who commit suicide struggle to gain control over the (tiny) plot of land from money lenders and relatives, even as they try to cultivate the land to support themselves and their young children as well as paying of their husband's debts (Neelima, 2018).

4.1.4. Access to other resources

There is empirical evidence from the micro-level data that women have much poorer access, control and ownership of land and other productive resources (Swaminathan et al 2012; Lahoti, et al., 2016). They also have inadequate access to public services, such as training, extension and credit. (Padmaja and Bantilan, 2014) In the study on Gujarat and West Bengal, almost no woman farmer had ever met an extension agent and less than a fifth were aware of common agricultural programs (Pattnaik and Dutt). Few women in Telangana were aware of crop insurance, for example (Ashalatha, 2015). Young women farmers also have to contend with inherent male bias in policies and programs, which are often presented in gender-neutral terms. Extension agents are usually men and their target group is also often men. Social networks that aid in

dissemination in technologies are also often gendered so that knowledge disseminated to men tend to remain with the social networks among men (See Magnan, et al., 2015 and Khan, et al, 2018 for examples). If in particular, these extension programmes are conducted outside the village, mobility restrictions as well as care responsibilities prevent younger women from accessing these.

4.1.5. The vulnerability of young women farmers

Recent work on women farmer health have drawn attention to the specific set of nutritional and health issues women face. In general, existing evidence on women's empowerment in agriculture, represented by greater agency and access to resources seem to not have a consistently strong correlation with women's own health. Insight into women's role in farming and their iron deficiency/rates of anemia show a lack of access and consumption of nutritious foods compounded with the energy expenditures of women farmers, this also can result in the risk of lower average weights and poorer immune health (Subasinghe, et al., 2014, pp. 1, 2). The age group that is most at risk are young women in rural areas who are burdened with (unpaid) economic and care activities along with discriminatory social norms around eating.

LAANSA studies on South Asian women working in agriculture suggest negative consequences on health of not just themselves, but also for their children, when pregnant women undertake strenuous agricultural work (Rao, et al, 2019; Subasinghe, et al, 2014). Field surveys from rural India also find that younger women eat last and least, and compromise their own nutritional needs, especially during times of scarcity (Lentz, et al, 2019). There is documentation that some techniques of farming are less inimical to women's physical well-being than others. Sabarmatee (2013), for example, finds from an innovative analysis of pain and disease, that the System of Rice Intensification (SRI) entails less burden and fewer instances of water-related illnesses among women farmers. She found that in Odisha state transplanting operations go much faster in SRI rice production, with less painful labor for women, Also, weeding, traditionally done by women by hand, is facilitated with SRI because a mechanical hand weeder is used. This greatly reduces the time required and permits upright rather than bent posture. A study in Andhra Pradesh, also found that mechanical weeders reduced women's labor time for weeding by up to

76%, also reducing physical discomfort from this work (Mrunalini and Ganesh, 2008). In some parts of India, men take over the task of SRI weeding because cultural norms expect them to do 'mechanical' work. A study in Tamil Nadu, found that men's labor in rice cultivation increased for this reason by 60%, while women's workload in rice production was reduced by 25% (Thiagarajan, 2004).

Beyond these systematic issues associated with women's nutrition and health, there are concerns in India, as elsewhere, that women are likely to be disproportionately impacted by migration and climate change. But there is, as yet little systematic research on the gendered impacts of migration and climate change on (young) women farmers.

5. Concluding Remarks

Discussions of young women farmers in India often get lost in those focused on women farmers more generally and of youth in agriculture, whereas they are a distinct analytical and empirical category who merit attention. This paper aimed to review existing literature and draw on available data to map the state of our knowledge of their predicament. Besides being discriminated against compared to male youth, young women farmers are further likely more disadvantaged than their older female counterparts (in addition to their male peers) in terms of access to productive resources and are relatively more constrained as economic actors, even though they tend to have more formal schooling and access to information. This is especially relevant in a context where non-farm opportunities for young men outstrip those available for young women, so that the future of farming will likely involve young women to a larger extent than is currently the case. Knowledge of their challenges and circumstance is vital for the visibility and recognition of young women farmers as well as for sound, inclusive policies to support them.

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