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## How many farmers are really there in India? A critical assessment of nationally representative data

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**Abstract:** A fundamental prerequisite for designing public policy for farmers is that we know who they are. In the case of India, despite agriculture's continuing importance as a source of livelihood, there is little understanding of how many farmers there are in the country and who they are. This paper suggests that there are three constructs of farmers – a statistical construct – that national agencies deploy for different surveys, a programmatic construct – that governments use to define beneficiaries and a construct that derives from the complex reality of what farming entails, that researchers often rely on. In the context of India these constructs don't often align with one another. This has important implications for policies that end up, often by construction, being exclusionary. This paper suggests the need for a coherent set of definitions. Too often, researchers call for collection of more or better data in response to the limitations of existing surveys. We argue that existing surveys can be leveraged to generate better estimates that match not just the requirements of programmatic goals but also to reflect the realities of farmer identities better.

**Keywords:** farmer, agricultural household, national statistics, subsidy, India

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### Introduction

Although agriculture contributes only around 15% of the India's GDP, as much as half of the workforce depend, at least in part, on agriculture for their livelihood. Yet, there is little coherent understanding of how many farmers there are in the country and who they are. This is especially puzzling since in recent times, there have been several efforts to design government transfers to farmers, that fundamentally presumes that farmers can be identified clearly. Further, to the extent that the agricultural work that women do as part of farming families is rendered invisible, we know even less about how many women farmers there are in India.

This paper argues that this is in part due to a lack of clarity on the definition of a farmer itself and in part due to the fact that surveys do not explicitly or directly the work that men and women do in a consistent way. This paper seeks to highlight three constructions of the idea of a farmer – the first is a statistical construct, as measured by statistical agencies via surveys; the second is a programmatic construct the defines farmers for specific government programmes mainly to circumscribe and identify beneficiaries; the third notion of a farmer is a construct that is based on the lived experience of those who work the land. The paper suggests that these three notions of a farmer are not consonant with one another and consequently public policy that is oriented to farmers, especially in the form of direct benefit transfers are by construction exclusionary. We conclude that an alignment of these three constructs is useful and desirable; the considerable effort that go into large scale data collection can then feed into better shaping policy support to farmers. While this paper focusses on India, the issue itself is of wider relevance, especially in developing countries, where plural activities and fluid rights over use of land are common. This paper is organized as follows. We first outline the complex reality of farmers in India, and discuss attempts to theorize, characterize and define a farmer. We then discuss the programmatic construct of farmers, focussing on ways in which programmes targeting farmers define eligibility of beneficiaries. Following this, we elaborate on the central focus of the paper. We discuss farmers as statistical constructs

and the various ways in which existing surveys collected routinely by the Indian government define farmers or capture characteristics of farmers and farm households that enable us to estimate the number of farmers in India. Some of these pertain to households, others to individuals and still others to holdings. The focus is variously on land ownership and possession or on engagement in economic activity. After reviewing these various data, we generate and present estimates from select surveys, using the most recent data available for each. We conclude the paper with some remarks on the way forward.

### Who is a farmer in India?

The idea of a farmer has never been systematically articulated in policy documents in India; most official documents either presume the notion of a farmer or adopt a working definition for the limited purpose of the document itself.

Perhaps the most notable effort to define a farmer came in 2004, when on November 18, 2004, the Government of India constituted a National Commission of Farmers to address a wide-ranging set of issues in the wake of widespread agrarian distress and farmer suicides. The Commission submitted four reports between 2004 and 2006 marking the first serious effort to define a Farmer that, the Commission proposed, would form the basis of a National Policy for Farmers, 2007. The National Commission of Farmers in 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.”

It is clear that this definition is very broad and inclusive; in particular it transcends ownership of land, goes well beyond the narrow idea of growing field crops and of settled farming practices. Further, and somewhat surprisingly, even agricultural labourers, who typically do not manage or make decisions relating to the farms would be counted as farmers, as per their proposed definition. Importantly, in defining a farmer as “any person”, the Commission allowed women claim to the status of farmers, a status that is often derived from the status of the male spouse or head of the household.

Although the government of the time took cognizance of this definition and the contents of the report, despite the six reports that have been submitted by the National Commission on Farmers, this notion of a farmer has not yet translated fully into policy. Nor has this comprehensive definition of farmers been absorbed in government committees and documents. For example, the preface to The Doubling Farmer’s Income Committee Report (2017) notes emphatically “Farmers have land” (page vii) only to discuss later that possession rather than ownership is the appropriate characterization of the relationship that farmers have with their land.

... wherein the absolute number of households engaged in agriculture in 2011 (119 million) outpaced those in 1951 (70 million).

This is one example of the kind of contradictions that are prevalent in official versions, often divorced from the complex reality of the farmers’ experiences themselves.

Three issues are worth noting. First, the inconsistencies in the official recognition of who is a farmer is not unrelated to larger theoretical debates on how one defines and researches peasants. Second, this is also related to the varying ways in which statistics becomes a tool of governance and thus of the

government. Third, this issue is not a uniquely Indian problem, even though this paper itself focusses on India.

Academic discussion in the context of agrarian studies often distinguish between different theoretical perspectives on who a “peasant” is (Edelman, 2013), distinguishing a historical view, a social scientific view, an activist view and a normative view. Accordingly, Edelman (2013) notes that social scientific definitions of “peasant” generally recognize that this category is heterogeneous; it also notes that peasants as per this view, engage in pluriactivities, including agriculture, wage labor, pastoralism and livestock production, artisanal production, fishing and hunting, gathering of plant or mineral resources, petty trade, and other skilled and unskilled work. “Peasant” according to Edelman, is both a category of social scientific analysis as well as self-ascribed identity. Further, Edelman notes that as a social scientific category, “peasant” usually includes landless rural people who either work others’ land and might aspire to own/manage their own.

In contrast, the notion of farmers, does not. In the Indian context, some critics point out that recent academic work has increasingly homogenized cultivators (Reddy, 2018, for example). Whereas earlier work distinguished landlords, the rich, middle and small peasants and agricultural labourers, recent work uses instead “farmers” as a single category of analysis. A corollary of this is that labourers (landed or landless) are treated as a separate class, delinked from cultivators. Other critiques note that even determining whether a household is “agricultural” or not remains flawed (Rawal, 2014, for example).

In defining a farmer, there is more agreement that land *ownership* should not serve as a criterion, and consensus that a farmer should be recognized by his or her role. A distinction is then made between a cultivator (farmer) and a labourer (farm-worker). A farmer is deemed to be one that makes operational decisions, has a managerial role and undertakes effective supervision or direction in cultivation, often bearing some risk. The worker/ labourer in contrast works for wages and does not take on the role of managers. From a policy perspective, this distinction is often deemed useful, especially in the context of potentially adversarial relationship between cultivators and labourers. A workfare program might thus want to target agricultural labourers rather than cultivators, whereas interventions such as subsidies for investment in farm machinery, for example, demand the identification of the manager of the farm. At the same time, a role-based definition misses the fact that within an agricultural household, only the head or male members might have managerial roles, therefore failing to recognize women within households as farmers.

This is not a uniquely Indian problem. It is not uncommon for countries to define farms and family farms rather than farmers. The FAO for example prefers to define agricultural holders rather than farmers. According to the FAO, an agricultural holder is a “civil person, group of civil persons or juridical person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation” (FAO, 2020; paragraph 6.17). An agricultural holding in turn is an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size (FAO, 2020; paragraphs 6.2 6.14). The OECD too focuses on agricultural holdings and agricultural household as opposed to farmers, distinguishing agricultural holdings as an economic unit from an agricultural holding as a unit of enumeration for a census (OECD, 1999; UN 2020). According to the OECD therefore, “a household is considered to be an agricultural household when at least one member of the household is operating a holding (farming household) or when the household head, reference person or main income earner is economically active in agriculture. Debates in the United States focus on the implications of alternate definitions of farms (O’Donoghue *et al.* 2019). This concern pertains to the tradeoffs between statistical goals and agricultural policy. Whereas the former aims to obtain a

comprehensive account of all farms, the basic unit of interest, this implies a risk that it is too inclusive – that establishments classified as farms might produce little agricultural output – but nevertheless be counted as eligible for substantial aid. These issues speak to theoretical work on the use of statistics as a government tool that facilitates enumeration, governance or understanding, not all of which are necessarily consistent with one another (Desrosières, 2001, for example). The next sections discuss focuses on three main constructs to understand Indian data on farmers.

### **Farmers as beneficiaries: Programmatic constructs**

In the absence of an accepted definition of farmers, policies and programmes, each programme that is designed to benefit farmers is associated with its own delineation of who is a farmer.

Historically, the support structure for Indian agriculture has been predominantly price based, relying on a combination of input subsidies on power, fertilizer, seeds, irrigation water and so on and output price support via a set of Minimum Support Prices (MSP) at which the government procures produce (OECD, 2018). Recent years have seen a distinct shift away from price support to income support, from providing a price subsidy or support to commodities to transferring a cash amount to the beneficiary to enable him/her to procure the commodity (for inputs) or payments for price dips (for output). This shift is often seen as a “game changer” for the potential it has to remove the distortionary impact of price-based subsidies and many have advocated for replacing price-based support with income support. Yet, the key advantage of price-based subsidies is that for the most part, because it was focused on commodities, the identity of the person who is engaged in the purchase or sale of the commodity did not matter and the need to define and identify a farmer was therefore obviated. With Direct Benefit Transfers (DBT), it becomes essential to define and identify the farmer.

This imperative has led governments, at the centre and state, to design programmes that attempt to define farmers based on some verifiable criteria; this has led to the emergence of land as a key factor in identifying farmers. Here we discuss a few examples of programmes that seek to identify farmers (Table 1). The best known among recent programmes is the PM-KISAN (Pradhan Mantri Kisan Samman Nidhi) that constitute three instalments of cash transfers to farmers. Another well-known scheme is Telangana’s Rythu Bandhu, which served as a precursor and model for PM-KISAN and designs payments per acre of land owned.

The eligibility criteria for many such schemes is thus tied to land ownership, mandating that the beneficiary’s name is on the land records and then circumscribing the beneficiary implicitly to one per household, with some exclusion criteria to filter out institutional land owners and those who have salaried positions, work in government and/or pay taxes to name a few. For example, the PM-KISAN’s intended beneficiary is a landholder farmer defined as “a family comprising of husband, wife and minor children who own cultivable land as per land records of the concerned State/UT”. The existing land-ownership system will be used for identification of beneficiaries and calculation of benefits. The Rythu Bandhu scheme identifies beneficiaries based on the ‘update and purification’ of land records by the Revenue Department, so that they determine the actual numbers of ‘farmers’ and extent owned by them in acres is determined.

In both schemes, although overtly designed for farmers – KISAN and Rythu – denote farmers in Hindi and Telugu, respectively, their identities are established by land records and only beyond that by the economic activity, if at all. Second, in targeting farmer families, it subsumes a number of individuals who might be joint owners of land, undermining in particular women farmers who often have only joint ownership or none at all even though they farm. There is also a risk of exclusion of siblings who might farm or generational exclusion where if the land is still in the older father’s name, the one who in fact

farms the land, the son or daughter and the nuclear family would be excluded. These risks are well noted in the context of these schemes and seem obvious. Yet, these programmes tend to be designed based on what is expedient or feasible rather than based on who a farmer is in reality. Thus, whereas the definition of farmers moves away from land ownership and possession as dominant criteria, programmatic constructs barring a few rely on land as the defining feature of farmers. This in turn leads to systematic exclusion of large numbers of farmers and certainly of all agricultural workers.

Union Government	Telangana	Andhra Pradesh	Odisha	West Bengal
<b>Name of scheme</b>				
PM-KISAN	Rythu Bandhu	Rythu Barosa	KALIA	Krishak Bandhu
<b>Year</b>				
2019	2018	2019	2018	2018
<b>Basis of calculation</b>				
Per beneficiary	Per acre	Per beneficiary	Per beneficiary	Per beneficiary
<b>Annual amount</b>				
6000	10000	7500	4000	5,000
<b>Instalments</b>				
3	2	2	2	2
<b>Eligibility</b>				
Landowners	Landowners	Landowners/tenants	Landowners/tenants	Unclear
<b>Definition</b>				
A landholder farmer's family is defined as "a family comprising of husband, wife and minor children who own cultivable land as per land records of the concerned State/UT". The existing land-ownership system will be used for identification of Beneficiaries for calculation of benefit. Some exceptions - higher economic status, All Institutional Land holders, and others	Based on the updation and purification of land records, taken up by the Revenue Department, Actual numbers of farmers and extent owned by them in acres is determined. The amount of grant under Rythu Bandu Scheme is Rs 4000/- per acre per crop season	Landholder families collectively owning cultivable land; tenants who have leased in or been allotted land for agriculture and using it for that purpose. Farming family is husband, wife children, Married children can constitute separate eligible family. Land owner means owner or one authorized by owner. Ownership determined by existing land ownership records	A small farmer is cultivator who owns 1 hectare (2.5 acres) to 2 hectares (5 acres) of Agricultural land. A marginal farmer is a farmer who owns less than 1 hectare of Agricultural land. The farm family constitutes of the farmer and his or her spouse along with their dependent children. Landless agriculture households and labourer households will be identified by local authorities	Farmers with one or more acre landholding entitled for 5000/- per annum (Rabi & Kharif Season) assistance with minimum 2000/- per annum assistance pro rata basis. Linked to land records, farmers provided a digitized card-based identity

**Table 1. Select farmer-centric schemes in recent years and programmatic constructs.** Source: Adapted from Uday and Zaveri (2020).

Some states have sought to adhere to a more comprehensive definition of a farmer, aligned more closely with the NCF definition, although excluding sections such as agricultural workers. Odisha's KALIA scheme for example, includes tenant farmers, as does Andhra Pradesh's Rythu Barosa.

While there are a large number of other schemes, this subset was chosen just to illustrate that in designing programmes, often defining who can benefit is guided by expediency and verifiability even if it implies exclusion.

## Farmer as a statistical construct

We now turn to a key question of this paper. We first map the ways in which the notion of a farmer has been constructed for data collection. We then examine the ways in which these data can be utilized to shed light on the disjunct between programmatic constructs and the more complex reality implied by the definition proposed by the National Commission on Farmers.

India has had a long and rich history of nationally representative surveys on different aspects of society and economy. Among these we focus on those that aim to capture employment status, economic activity, occupation and/or livelihoods. The definitions of farmer vary across surveys, combining diverse notions of access to land and time spent on farming activities and/or income earned from these activities. We discuss these various data collection efforts. Much of our understanding of farmers and farm households come from two broad kinds of data: Census that completely enumerate the population and Surveys that focus on a representative sample. In this following section, we discuss these sources and for ease of reading we refer to these documents in the References rather than cite them in text.

### Census

Among the census, a decadal Population Census classifies individuals as cultivators, main or marginal agricultural workers; a quinquennial Agricultural Census focuses on operational holdings (or farms, as many countries do internationally) and on who owns them.

#### *Population Census*

The Population Census classifies adults into workers and non-workers. Workers are then distinguished as Main Workers (if worked for 6 months or more), Marginal worker (2 parts) (1- worked for 3 months or more but less than 6 months; 2- worked for less than 3 months). For each worker, the census captures the economic activity in which the individual engages in – classified as cultivator, agricultural labourer, worker in HH industry, other worker.

A person is classified as cultivator “if he or she is engaged in cultivation of land owned or held from Government or held from private persons or institutions for payment in money, kind or share. Cultivation includes effective supervision or direction in cultivation. A person who has given out her/his land to another person or persons or institution(s) for cultivation for money, kind or share of crop and who does not even supervise or direct cultivate on land, is not treated as cultivator.” “A person who works on another person’s land for wages in money or kind or share is regarded as an agricultural labourer. She or he has no risk in the cultivation, but merely works on another person’s land for wages. An agricultural labourer has no right of lease or contract on land on which she/he works.” The Census definition of cultivator is broad in terms of land relationship; yet the implicit focus is on growing field crops and it is not explicit whether those who depend on animals, fisheries, forests are counted as cultivators. The focus in the Population Census is on individuals.

#### *Agricultural census*

In contrast to the Population Census, the Agricultural Census focusses on counting farms rather than and before farmers, and focusses on operational holdings as a way to identify the operational holder. This practice conforms to the approach of the OECD and FAO, discussed earlier. As per the Agricultural census 2015-16, “All land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location.” “A person who has the responsibility for the operation of the agricultural holding and who

exercises the technical initiative and is responsible for its operation. He may have full economic responsibility or may share it with others. The operational holder may be Individual/Joint/ Institutional. **Individual:** If the holding is being operated either by one person or by a group of persons who are the members of the same household, such holding will be considered as an individual holding. **Joint:** If two or more persons belonging to different households, share jointly as partners in the economic and technical responsibility for the operation of an agricultural holding, such holding will be considered as joint holding. 2.2, p. 6-7.

## Surveys

### NSS-Situation Assessment Surveys (SAS)

Among various nationally representative surveys, two decadal surveys focus on farm households, explicitly to gauge incomes of these households. Called the Situation Assessment surveys, these have been conducted twice so far in 2002-03 and 2013 and sample agricultural/farm households. These surveys however do not delve into the role of individuals other than a brief question on whether or not the individual participated in agriculture a year preceding the survey.

The 2002-03 was collected for “farmers” and the 2013 data were collected for “agricultural households”. For the 2013 survey, NSSO defined an agricultural household “as a household receiving some value of produce more than INR 3000 from agricultural activities (e.g., cultivation of field crops, horticultural crops, fodder crops, plantation, animal husbandry, poultry, fishery, piggery, bee- keeping, vermiculture, sericulture etc.) and having at least one member self-employed in agriculture either in the principal status or in subsidiary status during last 365 days” (Gol 2014, 3). The income cut-off was not applied as a criterion for sampling in 2002-03 but was introduced for the 2013 to exclude those for whom agriculture was of peripheral importance for their livelihoods. Thus, households with at least one member self-employed in agriculture either in the principal status or in subsidiary status and having total value of produce more than or equal to ₹3000/- during the last 365 days will only be considered for being selected for this survey.

Further, the definition used for ‘farmer household’ in 2002-03 made possession of agricultural land as a necessary condition for inclusion whereas it was dispensed with in the 2013 survey’s definition for an ‘agricultural household’. As per NSS SAS 2012-13, land, with permanent heritable possession, with or without right to transfer the title, was considered as owned land. Any land held in “owner-like possession”, for example, a long-term lease or allotment (e.g. village land possessed by a tribal household as per traditional tribal rights or community land customarily operated by a tenant for a long period) was also treated as land owned. Further, a household’s holding includes all plots (or parts of plot) of land owned by any member of the household, whether the land is cultivatable or not, and hence includes besides cultivatable land, areas that might be under forest, barren and uncultivable land, cultivatable waste land, land put to non-agricultural uses (viz. house sites, roads etc.), land growing miscellaneous tree crops, etc. The 2012-13 NSS SAS defined an agricultural household as one “receiving some value of produce from agriculture activities (e.g. cultivation of field crops, horticultural crops, fodder crops, plantation, animal husbandry, poultry, fishery, piggery, bee-keeping, vermiculture, sericulture, etc.) during last 365 days”. Households that are entirely agricultural labour households were excluded by the survey. Households receiving income entirely from coastal fishing, activity of rural artisans and agricultural services will not be considered as agricultural household and they will be kept out of the scope of the survey. The NSS SAS 2012-13 thus envisaged a broad scope of economic activity (albeit not fishing)<sup>1</sup> as well as a broad notion of the household’s relationship with land.

<sup>1</sup> These activities include cultivation, livestock but also activities of growing of plantation, orchard, forestry, logging, fishery, etc.

### *NSS Unemployment-Employment Surveys*

Despite the attractiveness of a farmer focussed survey, the main source for capturing specific trends in employment and labour force participation has been the various rounds of the National Sample Statistics Unemployment-Employment Survey. Every five years, thick rounds of the NSS cover a large sample of households and capture detailed information on employment status, sector of employment, spells of unemployment and a 7-day recall of tasks undertaken. In the intervening years of the quinquennial thick rounds a thinner sample captures the same information from a limited number of households.

These surveys outline a household type distinguishing self-employed in agriculture or casual labour in agriculture. The household type is thus based on the “means of livelihood of a household” and is based sources of income household's income during the 365 days preceding the date of survey. For this purpose, only the household's income (net income and not gross income) from economic activities is to be considered; but the incomes of servants and paying guests are not to be taken into account.

However, the survey also captures engagement in economic activity. This is the main source for generating unemployment and employment figures and focuses on the individual. Workers are classified in the NSS based on usual principal status (UPS), that is the status of a person engaged in any one of the activities mentioned above for 183 days or more (a majority of time) during the reference period and Usual subsidiary status (USS) that relates to the activity status of that person during the minor time (183 days or less) during the reference period, if the person was engaged in work during the minor time period. The USS of a person is recorded only if the person was engaged in that activity for at least 30 days.

The NSS Unemployment-Employment Survey offers detailed information on both the household and the individual in terms of activity and dominant source of earnings. It also records a household's relationship with land based on a broad notion of possession that goes beyond ownership. These data can therefore be used to generate a variety of estimates relating to both identifying farmers/cultivators, agricultural labourers and agricultural households based on multiple criteria.

For the purpose of this work, we classify a worker as being involved in agriculture based on a concept called Usual status that considers principal and subsidiary status taken together (PS+SS). According to the usual status (PS+SS), workers are those who are accounted for as workers by either the UPS or USS criteria. We then designate them as cultivators if the household they belong to report having cultivated some land (irrespective of how they accessed that land) in the 365 days preceding the survey. Further, the survey also captures time disposition during the week preceding the date of interview represented by a concept called Current daily activity status. The rationale is that for many, particularly in the unorganised sector, during a week, and sometimes, even during a day, a person can pursue more than one activity. These may be both economic and non-economic activities on the same day of a reference week. The current daily activity status for a person is thus determined on the basis of his/ her activity status on each day of the reference week using a priority-cum-major time criterion (day to day labour time disposition). While we do not use this here, it is possible to examine the tasks within agriculture that people are engaged in.<sup>2</sup>

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<sup>2</sup> The NSS Unemployment and Employment Rounds are for both rural and urban areas. Manual labour working in agricultural and/ or non-agricultural occupations in return for wages paid either in cash or in kind (excluding exchange labour) and living in rural areas, will be taken as rural labour. A person will be considered to be engaged as agricultural labour, if he/ she follows one or more of the following agricultural occupations in the capacity of a wage paid manual labour, whether paid in cash or kind or both: farming, dairy farming, production of any horticultural commodity, raising of livestock, bees or poultry, any practice performed on a farm as incidental to or in conjunction with farm operations (including forestry and timbering) and the preparation for market and delivery to storage or to market or to carriage for transportation to market of farm produce. Further, 'carriage for transportation' refers only to the first stage of the transport from farm to the first place of disposal. However as with the NSS SAS working in fisheries is excluded from agricultural labour.

## Comparing datasets

The Indian statistical system and government machinery thus generates rich data on those working in agriculture. Yet the different departments have their own institutional mandate, priorities and purpose, that in turn shapes their data collection efforts. Further, many of these surveys pay scant direct attention to qualities that would distinguish a farmer from an agricultural worker, an aspect important for policy making. For example, some surveys focus on household as the unit, identifying agricultural households rather than individual farmers. In contrast, those surveys that focus on activities do not dwell directly on the nature of relationship of agricultural workers to land or other resources such as livestock. Despite the apparently rich sources of data available in India, there is a lack of concordance across datasets also because the definition of what constitutes work differs across these datasets.

Serial no.	Data Source	Identification level	Definition	Estimates
1	Census (rural and urban)	Individual	<i>Economic Activity</i> Cultivator, Agricultural Labourer Worker	(2011) 118.8 mill. cultivators, 144.4 mill. labourers; 11.4 mill. Plantation, forestry, fisheries. 36 million women cultivators
2	Agricultural Census	Household/Operational Holdings	<i>Operational holdings and holders</i>	(2015-16) 146.5 mill. Operational holdings; 20.44 mill. women holders
3	NSS Situation Assessment & Land and livestock holdings (rural)	Household	Economic activity (Cultivation, livestock, other agricultural activity)	(2012-3) 90.2 mill. agricultural households; 108.78 mill operational holdings
4	NSS Employment Unemployment	Individual & Household	<i>Economic activity and land possession /ownership</i> Can identify farmers, based on a combination of activity status and operation code for reference period.	(2011-12) 110 mill. cultivators; 38.3 million women cultivators; ~34.3 mill. cultivator households
5	PLFS (rural)	Individual & Household	<i>Economic activity and land possession/ ownership</i> Can identify if household is self-employed in agriculture or works as casual labour in agriculture. For individuals, can identify farmers based on a combination of activity status code and operation code for reference period.	(2017-18) 37.8 mill. households

**Table 2. Statistical Construct of Farmers and Estimates.** Source: Authors' calculations from unit level data; see references for details on these surveys.

## Counting Farmers: How many farmers are there in India?

Given the range of definitions that exist and multiple sources of data, how can we ascertain how many farmers are really there in India? Table 2 presents a summary of the various estimates.

As per the Census 2011, total number of cultivators was 118.8 million, 30 % of whom were women. Of the 118.8 million cultivators, 80% identified themselves as main workers. In the population census of 2001, 33% of all cultivators were women, it is 30% in 2011; only main workers, 24.5% of cultivators were women, now 23.8%. The NSS Survey on Unemployment-Employment is not far and suggests there are 110 million cultivators, 38.3 million of whom are women. As for operational holdings, estimates vary between 108 million and 146.5 million.<sup>3</sup> As per the Agricultural Census, the percentage of operational holdings held by women has increased from 9.5% to 14% over the period 1995-96 to 2015-16; it was 10.8% in 2000-01- increase is steady. The estimates of households that are cultivator or agricultural seem to differ widely.

It is apparent that each of these surveys yields different estimates but are of comparable magnitudes for the most part. It is our submission that many of the surveys do not readily capture the definitions of farmer, farm household or farm in the way that the National Commission on Farmers had conceived. Nor is it the case that in their current form, surveys can easily feed into planning and designing policy for agriculture. There are compelling reasons that we need to devote attention to these data.

First, as the Indian government attempts to move away from price based to income-based support, it is imperative to have a better and broader understanding of farmers, in ways that go beyond mere ownership of land. Which farmers? Hobby farmers/geographic concentration

Second, different programmes may have different goals – some might target specific incentives that promote responsible or sustainable agricultural practices and others might seek to support farmers themselves or incentivize specific sub-groups such as youth or women or young women, for example. This makes it important for a shared understanding of the distinctions (statistically and conceptually) between farm, farm household and farmer.

Third, hitherto surveys have often excluded households and individual from certain subsectors from consideration as agricultural households (e.g. fishing). Some of these are rapidly growing subsectors within agriculture. Here the broader definition suggested by the NCF needs to be considered.

Fourth, as discussed already, the functionally landless depend on poultry and livestock, those with tenancy rights/ communal rights without ownership and women or younger members of the household run the risk of being rendered invisible when counting farmers. To redress this, there has to a systematic attempt to report these different categories explicitly in reports on these surveys. Several advocates for women farmers, for example, have consistently urged the Government to operationalize the NCF definition of farmer and specifically recognize women farmers both those who own land and those working on others' lands with a special focus on most marginalized. Capturing these data in statistical reports can feed into key decisions of this nature.

## Conclusion

This paper aimed to scrutinize the challenging task of defining and counting farmers. We noted that in the Indian context, as perhaps in other countries as well, there is a disjunct between the complex reality of who farms and constructs of farmers as envisaged by the government on the one hand and statistical agencies that focus on data collection, on the other. This disconnect undermines the ability of governments to plan and prioritize policy especially in a context where direct transfers to farmers is being contemplated.

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<sup>3</sup> Another source of operational holdings, not discussed in the paper is the Land and Livestock holdings that is conducted contemporaneously with the 70<sup>th</sup> Round. The operational holdings as per this is close to that documented by the Agricultural Census.

One valuable approach would be for the government to adopt consistent definitions of farmer, farm household and farm/operational holding, so that the three strands of lived experience, programme design and data collection efforts are aligned to one another. India already has a structure that allows for the department that collects agricultural data to lead in the establishment of a definition that can serve as a shared official definition across all data collection agencies.

Too often, researchers call for collection of more or better data in response to the limitations of existing surveys. While we identify data gaps and the varieties in which different surveys capture the three aspects – farmer, farm household and operational holding – we believe that existing surveys too can be leveraged effectively with minimal additional resources. There is much to learn from using existing data with some specific and deliberate efforts at harmonizing definitional issues across statistical bodies and the surveys they implement.

We believe such efforts, even if limited can yield estimates, as attempted in this paper, can form the basis for earmarking funds for farmers in general, but for specific marginalized groups – such as women, tenant farmers, etc. – who tend to be overlooked in statistics as well as programme design and aid in efforts to explicitly recognizing the rights of women farmers, tenants and those who may depend on communal resources for agriculture-based livelihoods.

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