



# Strengthening Land Titling to Enhance Farmers' Livelihoods and Credit Access

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## Background

Before independence, land in India was concentrated with landlords (zamindars), creating a system where tenants paid rent but lacked ownership rights. In the post-independence period, the states took over land administration, and maintained the manual land records. Efforts at introducing land reforms to redistribute land and secure tenant rights were largely ineffective, leading to informal tenancy. Land ownership is based on registered sale deeds, which lack government-guaranteed titles, resulting in disputes due to outdated records. The Digital India Land Records Modernization Programme (2008) sought to digitize land records and move towards conclusive land titling, a system that ensures ownership through verified records. The proposed draft model bill for conclusive titling involves state-level land authorities verifying claims and resolving disputes through land dispute resolution officers, with final titles being legally binding after three years.

Unclear land titles hinder farmers' ability to secure institutional credit, which is vital for agricultural growth. According to the NSSO's 70th round (2013), 52% of agricultural households were in debt, with 60% of loans sourced from institutional channels like banks, cooperatives, and government agencies. The Reserve Bank of India (RBI) mandates banks to allocate 18% of their adjusted net bank credit (ANBC) to agriculture, with 8% reserved for small and marginal farmers (SF/MF), including tenant farmers, oral lessees, and sharecroppers. Regional rural banks follow similar requirements. To promote credit access, the government offers an Interest Subvention Scheme for short-term crop loans of up to Rs. 3 lakh at a 7% interest rate, with a 3% rebate for timely repayment, effectively lowering the rate to 4%. This scheme also supports post-

harvest storage to discourage distress sales. The Kisan Credit Card (KCC) scheme enables farmers to access credit for inputs and operational needs, with flexible limits for marginal farmers. Loans under Rs. 1 lakh have relaxed margin and security norms, and loans under Rs. 50,000 require only a self-declaration. Joint liability groups (JLGs) are promoted to bring SF/MF, tenant farmers, and oral lessees into the institutional credit system. These efforts have significantly increased the share of SF/MF in agricultural credit, rising from 60.07% in 2015-16 to 72.06% in 2016-17, with credit disbursed growing from Rs. 3.80 lakh crore to Rs. 5.34 lakh crore.

The government implements social welfare initiatives through central sector schemes (CS) and centrally sponsored schemes (CSS). CS schemes are fully funded by the central government, while CSS involves partial state funding. Core CSS schemes like the Green Revolution and Swachh Bharat Mission focus on agriculture, infrastructure, and livelihoods, while core-of-core schemes, such as MGNREGS, prioritize social inclusion. In agriculture, CS schemes target modernization and support, including the Agriculture Infrastructure Fund, Pradhan Mantri Krishi Sinchayee Yojana (irrigation), Soil Health Card, and e-NAM (market connectivity). Other initiatives like the Dairy Entrepreneurship Development Scheme and National Livestock Mission support livestock and marketing infrastructure. By integrating land reform, digitization, and institutional credit, these policies aim to improve farmer welfare, reduce disputes, and promote rural development. Conclusive land titling, combined with credit and welfare schemes, offers a pathway to inclusive agricultural growth and rural prosperity.

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## Database and Methodology

The study covered 14 states: Himachal Pradesh, Punjab, Assam, Uttar Pradesh, Bihar, West Bengal, Andhra Pradesh, Madhya Pradesh, Karnataka, Tamil Nadu, Maharashtra, Haryana, Rajasthan, and Gujarat. It relied mainly on primary survey data, with 240 households surveyed in each state, totalling 3,240 households. In Madhya Pradesh, only households with clear titles were surveyed due to the unavailability of non-clear titles. Two districts from different agro-climatic zones were selected in each state, and 120 households were surveyed per district. The data was analysed using quantitative and qualitative techniques.

**Table 1: Sampling Design**

Name of the state	Districts	Taluk/Block	Clear land title	Non-clear land title sample size	Total
Andhra Pradesh	2	2	120	120	240
Assam	2	2	120	120	240
Bihar	2	2	120	120	240
Gujarat	2	2	120	120	240
Haryana	2	2	120	120	240
Himachal Pradesh	2	2	120	120	240
Karnataka	2	2	120	120	240
Madhya Pradesh	2	2	120	-	120
Maharashtra	2	2	120	120	240
Punjab	2	2	120	120	240
Rajasthan	2	2	120	120	240
Tamil Nadu	2	2	120	120	240
Uttar Pradesh	2	2	120	120	240
West Bengal	2	2	120	120	240
<b>Total</b>	<b>28</b>	<b>28</b>	<b>1680</b>	<b>1560</b>	<b>3240</b>

## Result and discussion

### Role of clear title of land ownership in accessing institutional and non-institutional loans

**Table 2** provides an overview of loan accessibility over the past five years from institutional and non-institutional sources, categorized by land security status. For institutional sources, 47.45% of households with clear titles and 7.83% with non-clear titles accessed credit. Crop loans averaged Rs. 2,10,941 for clear titles and Rs. 28,510 for non-clear titles. Agricultural machinery loans averaged Rs. 1,49,118 for clear titles and Rs. 77,406 for non-clear titles. The total sum of loans for clear titles was Rs. 7,79,011, with an outstanding amount of Rs. 84,393, while non-clear titles had a total sum of Rs. 1,68,963 and an outstanding amount of Rs. 67,594.

Non-institutional sources showed that 33.75% of households with clear titles and 24.26% with non-clear titles accessed credit. Crop loans averaged Rs. 1,45,009 for clear titles and Rs. 73,213 for non-clear titles. Agricultural machinery loans averaged Rs. 20,106 for clear titles and Rs. 10,427 for non-clear titles. The total sum of loans for clear titles was Rs. 2,87,402, with an outstanding amount of Rs. 1,25,638, while non-clear titles had a total sum of Rs. 2,88,449 and an outstanding amount of Rs. 2,90,901. This data highlights significant differences in loan accessibility and amounts based on land title clarity and loan source.

**Table 2: Loan Accessibility in Past Five Years from Banks on Land Security (Institutional Sources and Non-Institutional ) for Different Purposes**

(Average Amount Rs.)

Particulars	Institutional Sources		Non-Institutional	
	Clear	Non-Clear	Clear	Non-Clear
<b>Per cent of HH availing institutional credit</b>	<b>47.45</b>	<b>7.83</b>	<b>33.75</b>	<b>24.26</b>
Crop loan	2,10,941	28,510	1,45,009	73,213
Agriculture machinery loan	1,49,118	77,406	20,106	10,427
Agriculture equipment loan	1,41,355	24,834	2,346	4,858
Land development (fencing, land levelling, bunds formation, farm building, etc.)	1,43,160	18,565	12,820	78,510
Irrigation	14,770		8,449	29,397
Animal husbandry	23,696		6,733	11,607
Consumption purpose	33,419	5,361	38,551	70,669
Other purposes	62,552	14,286	53,387	9,769
<b>Total</b>	<b>7,79,011</b>	<b>1,68,963</b>	<b>2,87,402</b>	<b>2,88,449</b>
<b>Total outstanding amount</b>	<b>84,393</b>	<b>67,594</b>	<b>1,25,638</b>	<b>2,90,901</b>

Source: Primary data (authors calculation)

### Government Schemes Benefits Availed by Households during Last Five Years

Table 3 shows the benefits availed by households under various government schemes over the last five years, distinguishing between those with clear and non-clear land titles. Households with clear titles received significant benefits, including Rs. 5,861 from PM-KISAN, Rs. 4,729 from Chief Minister Raitha Vidya Nidhi, Rs. 5,258 from Krushi Bhagya, Rs. 2,371 from seed

distribution under subsidy, Rs. 18,386 from farm mechanization and micro-irrigation, Rs. 5,474 from Atal Bhoojal Yojana, Rs. 358 from Soil Health Card and Soil Health Management, Rs. 1,296 from ATMA, Rs. 3,40,223 from other schemes, Rs. 10,117 as compensation for crop failure, Rs. 1,494 from Thengal Kachari Autonomous Council (Agricultural & Allied), Rs. 12,750 from non-agriculture department benefits, and Rs. 28,700 from old age & widow pensions. The total benefits for clear title households amounted to Rs. 4,37,018. In contrast, households with non-clear titles received fewer benefits, totalling Rs. 72,535. This data highlights the disparity in benefits based on land title clarity.

**Table 3: Government Schemes Benefits Availed by Households during Last Five Years**

(Average amount Rs.)

Schemes	Clear title	Non-Clear
Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)	5,861	-
Chief Minister Raitha Vidya Nidhi	4,729	-
Krushi Bhagya	5,258	-
Seed Distribution under Subsidy/Inputs	2,371	-
Farm Mechanization and Micro Irrigation	18,386	-
Atal Bhoojal Yojana	5,474	-
Soil Health Card (SHC) and Soil Health Management	358	-
ATMA	1,296	-
Other Schemes	3,40,223	16,875
Compensation for Crop Failure	10,117	-
Thengal Kachari Autonomous Council (Agricultural & Allied)	1,494	687
Non-Agriculture Department	12,750	17,538
Old Age & Widow Pension	28,700	37,436
<b>Total</b>	<b>4,37,018</b>	<b>72,535</b>

Source: Primary data (author's calculation)

## Sudden Shock faced by the Households in Past Five Years

Table 4 highlights significant differences in how households with clear and non-clear land titles manage sudden shocks and access support. Households with clear titles generally report fewer incidences of sudden shocks (57.01%) compared to those without clear titles (52.76%). For instance, Gujarat saw all households reporting sudden shocks, while Uttar Pradesh had a much lower percentage among clear title holders (10%) compared to non-clear holders (4.16%). Crop failure was reported by 38.53% of clear title holders and 33.51% of non-clear households. Annual income shortages affected 22.51% of clear and 21.53% of non-clear households. Family illness and death

of family members also varied, with clear title holders reporting slightly higher incidences. Loan instalment burdens were more significant among clear title holders (4.15%) compared to non-clear households (2.46%). Clear titles were notably more helpful in overcoming shocks, with 23.12% of clear title holders using their titles for this purpose compared to just 0.53% of non-clear households. Clear title holders also made use of their land for pledging (4.17%), claiming crop insurance, and accessing government subsidies. Conversely, non-clear title holders had minimal access to these benefits. Overall, clear land titles provide substantial advantages in accessing government schemes and financial resources, underscoring their critical role in managing and recovering from shocks.

**Table 4: Sudden Shock Faced by the Households in Past Five Years (Percentage of HH)**

Sudden Shocks details	Clear	Non-Clear
Households faced sudden shock (%)	57.01	52.76
<b>Type of sudden shock faced</b>		
Crop failure (%)	35.11	22.51
Annual income shortage	22.51	21.53
Family member sick	15.80	14.66
Death of any family member	5.26	5.16
Livestock ill or death	9.1	7.75
Loan instalment burden	4.15	2.46
COVID-19	2.46	15.9
Any other	1.3	1.62
Land title help to overcome shock (%)	23.12	0.49
a. Pledged the land	4.17	0.12
b. Sold the land	0.13	0.01
c. Claiming crop insurance	1.13	-
d. Availing government subsidies	6.21	-
e. Government compensation	4.29	-
Helped in leasing-out land	0.33	-
Crop production	0.80	-
Loan on KCC	5.00	-
PM Kisan	35.00	-
Loan waiver	2.86	-
Availing loan facilities	20	-
Bank finance and crop loss settlement	37.35	2.74

Source: Primary Data

## Constraints Faced by Households in Availing Government Benefits/ Subsidies if Land is Not in Their Name

Households with non-clear land titles face challenges in accessing government benefits and subsidies. About 75% of these farmers are not eligible for subsidies on seeds, machinery,

and micro-nutrients, forcing them to purchase inputs at full price. Additionally, 40% did not receive any government compensation. Other issues include the inability to sell produce at minimum support price (MSP) in regulated markets and being deprived of loan waivers. These challenges hinder their access to important government schemes aimed at improving farmers' income and livelihoods.

**Table 5: Constraints Faced by Households in Availing Government Benefits/Subsidies if Land Is Not in Their Name**

(Percentage of HHs Not Having Clear Title)

Constraints	Per cent
Not eligible for any government subsidies scheme	75.71
Not eligible for getting institutional credit/loan	22.76
Didn't receive any kind of compensation from government for crop loss	40.97
Not able to pledge the land	5.83
Not eligible for any government loan waiver	21.39
Not eligible to sell their produce in government procurement programme for paddy	8.33
Not information technology enabled.	1.67
Desired lease agreement documents are generally not provided by the landowner.	1.67

Source: Primary Data and authors' calculation

## Conclusions and Policy Recommendations:

The study highlights significant socioeconomic differences between households with and without clear land titles. Households with clear land titles have more farming experience, higher engagement in agriculture, and greater access to institutional credit. They receive larger loans and benefits from government schemes, which significantly contribute to their financial stability.

### The following are a few policy suggestions:

**Fast-Track Dispute Resolution:** Establish a special program at the Gram Panchayat level to resolve land disputes and discrepancies quickly, leveraging the Digital India Land Records Modernization Programme (DILRMP) with local representation.

**Legal Registration for Leased-In Lands:** Implement legal registration for leased-in lands to make cultivators eligible for government subsidies and benefits, addressing the gap where

non-clear land title holders are excluded from agriculture schemes.

**Support for Marginal Farmers:** Provide financial aid and streamlined credit and insurance facilities to all farmers, including those with non-clear land titles, based on crop type and productivity rather than just land ownership.

## References

- Besley, T. (1995). Property rights and investment incentives: Theory and evidence from Ghana. *Journal of Political Economy*, 103(5), 903-937.
- Burman Anirudh (2019), "Making land titles in India marketable: using Title insurance as a viable alternative to conducive titling" *Washington International Law Journal* 28(1): 109-136.
- Cordoba, G. I. (2017, March). Land property rights and agricultural productivity: Evidence from Panama. In *Responsible Land Governance: Towards an Evidence Based Approach. Annual World Bank Conference on Land and Poverty*. Sendai, Japan: Center for Data Science and Service Research.
- Feder, G., and D. Feeny. 1991. "Land tenure and property rights: Theory and implications for development policy." *The World Bank Economic Review* 5(1): 135-153. doi:10.1093/wber/5.1.135. [Analytical Reports \(prsindia.org\)](https://www.prsindia.org/)
- Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of Political Economy*, 116(6), 981-1022.
- Payne, G., Durand-Lasserve, A., & Rakodi, C. (2009). Social and economic impacts of land titling programs in urban and periurban areas: A short review of the literature. *Urban land markets: Improving land management for successful urbanization*, 133-161. [https://link.springer.com/chapter/10.1007/978-1-4020-8862-9\\_6](https://link.springer.com/chapter/10.1007/978-1-4020-8862-9_6)

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