

Women's Inheritance Rights Reforms and Impact on Women Empowerment: Evidence from India

Introduction

Women's empowerment has been a salient issue in developing countries, especially in South Asia, where there exist restrictive cultural norms and a patriarchal society. Apart from having intrinsic importance for individuals, women's empowerment also contributes to economic enhancement, better children-related outcomes (Duflo, 2003; Thomas, 1992), human capital investment (Luke & Munshi, 2005), productivity (Anik & Rahman, 2021), and other aspects. However, definition of female empowerment is largely abstract and multi-faceted as it is a sum of both the individual choices and how these individual choices are accepted by the society at large (Anderson, 2022; 2024; Kabeer, 1999). Thus, any attempt to empower women goes through various stages stemming from bargaining power within the household, choice over marriage, freedom over mobility, decision-making over financial matters, control over economic resources, and so on. Moreover, these indicators might not move in tandem that is, greater household autonomy does not necessarily lead to greater empowerment in public sphere and vice versa (Anderson, 2024). Past scholars (Kabeer, 1999) also demonstrate that empowering women is not a one-step process or outcome rather a “process of change” spanning through the accessibility of resources (pre-conditions) that translates to gaining agency (control) towards decision-making and finally, leading to outcomes (achievements) such as participation in the labour force, equal gender roles, reports of injustice, domestic violence, and so on. In a similar context, Kishor (2000) defines pre-conditions for women empowerment by identifying sources of empowerment that aid in improving their control or decision-making such as, education, assets owned, employment, control over earnings, and so on. Building on this view, providing property or inheritance rights through institutional changes that increases chances of land ownership can be a direct source of empowerment for women.

Our study is an extension of the extant studies exploring impact of inheritance law and indicators of women empowerment. The landmark amendment in the Hindu Succession Amendment Act (HSAA, 2005) provided all women with an equal right to inherit joint property in the absence of will. Before the federal amendment was passed, five states (Kerala, Andhra Pradesh, Tamil Nadu, Maharashtra, and Karnataka) amendments were implemented between 1976 and 1994 which extended equal inheritance rights for daughters. However, the reform was valid only for unmarried women at the time of reform was passed in their respective states. Thus, creating a quasi-natural experiment for scholars to explore. We attempt to incorporate this natural experiment in analysing its impact on women empowerment using different dimensions of women empowerment (Kabeer, 1999) starting from access to resources measured using household autonomy and marriage choice. Then, considering agency or control over physical mobility and participation in civil groups such as self-help groups. Ultimately, looking at outcomes or achievements using economic autonomy and intimate partner violence indicators. Thereby, adopting a triangulation approach which provides evidence for any impact of the inheritance law on women's empowerment through changes in the bargaining power. Furthermore, we explore the heterogeneity in the sample based on location, head of household, level of patriarchy in a state, and asset ownership, which are known to influence women's bargaining power.

Using the Indian Human Development Survey (IHDS-I) (2004–05) dataset and employing the difference-in-difference (DID) technique, the pivotal findings of the study are as follows. First, women exposed to the reform exhibit higher level of physical and civic autonomy with greater say in choosing a husband, but lower household autonomy and lower indicators of intimate partner violence. While post the inheritance reform there are indications of better say in marriage choice and physical mobility, there still exist some gap in realising this change in terms of intra-household bargaining power. Second, in terms of economic autonomy or participation, we found no significant as a result of HSAA. Even after bifurcating our results into agricultural and non-agricultural work, the results remain insignificant. These are in line with the past studies which provide mixed evidence for changes in labour supply (Heath & Tan, 2019; Suteau, 2020). The interaction between institutional legal rights and economic participation is multi-faceted and complex specially in developing countries where legal structures alter before there are changes in the societal and customary rights (Anderson, 2022).

Lastly, ascertaining the impact based on socio-economic status we found results are not uniform across quartiles; for instance, economic autonomy is valid only for the middle quartile group. Moreover, household autonomy decreases as we move up the asset quartiles. Further there are evidence that as the level of patriarchy increases in a state, some indicators such as, marriage choice, IPV, and civil autonomy decreases. To sum up, our study highlights the heterogeneity of the impact of inheritance law that are contingent on household and state-level factors.

Data and Identification Strategy

The prime objective of the study is to unveil the impact of Hindu Succession (Amendment) Act (HSAA) on women's empowerment. To do so, the study uses the first round of India Human Development Survey (IHDS-I) conducted in 2004-05¹ which is a nationally representative dataset for India. The survey consists of 41,554 households and 215,754 individuals from all states except Andaman and Nicobar and the Lakshadweep thereby, covering 382 districts as per the 2001 national census from a total of 612 districts in India. The dataset covers several dimensions of human development such as education, health, gender relations, fertility, social capital, marriage relations, child-related outcomes, and so on. The questions related to gender relations, health, marital and fertility history were answered by ever-married women (which the survey termed as 'eligible women' aged 15-49 years). Moreover, the time of the survey provides a suitable time frame for analysing the impact of state amendments of the inheritance law before the HSAA was implemented nationwide in 2005.

The paper intends to identify the casual impact of inheritance law on women's empowerment in India using the difference-in-difference (DID) technique. Since inheritance law was implemented in some states before it was federally implemented, we can categorize states into reform and non-reform states. Moreover, within the reform states, the state amendments were only applicable to the unmarried women at the time of the reform year. As a result, the control cohort comprises two groups. First, women residing in the non-reform states which are not impacted by the state amendments of the law. Second, women residing in the reform state but are married at the time of the reform year. Meanwhile, the treatment variable in this case is the exposure to the state reform. Therefore, the treatment group comprises women residing in the reform state and unmarried at the time of reform in their respective states. For instance, unmarried women in Tamil Nadu (reform state) in 1989 (the reform year) formed the treatment group whereas married women were part of the control group. It is important to note that law was only valid for households belonging to the religion Hindu, Buddhist, Sikh, and Jain. We consider 16 states for our analysis. A similar DID methodology has been employed by past studies (Bose & Das, 2017; Rosenblum, 2014; Tandel et al., 2023, among others) to ascertain the inheritance law impact.

Next coming to the dependent variables, women's empowerment, we follow Kabeer's (1999) seminal work on defining women's empowerment by identifying three related dimensions namely, resources (pre-conditions), agency (process), and achievements (outcomes). First, access to resources is measured using the intra-household decision making (Sathar & Kazi, 1997; Kishor, 2000) and choice over choosing the spouse. Household autonomy is an index containing household decision-making for cooking, purchasing expensive items, and getting cash-in-hand to spend. The choice over choosing the partner is measures using "Who chose your husband?".

Second, agency or control explicitly focuses on physical mobility of the women and their presence in the public sphere. We measure agency using freedom over physical mobility and civic participation which exhibits control over the self-reliance of the respondent. The physical autonomy considers whether women are allowed to venture out to social places (health center, family/friend house, kirana store) without taking permission from husbands or other household members and whether there exists ghunghat (or purdah/pallu/veil) practice. The civic autonomy variable considers whether women are part of any self-help group (Chatterjee & Desai, 2021). While the household autonomy measures the within household decision making (private sphere), the physical autonomy looks at the

¹ There are two rounds of IHDS survey, 2004-05 and 2011-12. However, since the first-round year coincides with the federal amendment therefore, in line with the past studies, we also employ the first round.

decision making outside the home boundaries thereby, measuring control over mobility for women (public sphere).

Lastly, outcomes or achievements is the last leg of women empowerment which consists of both positive and negative outcomes. Within this dimension, we attempt to measure direct evidence of empowerment using paid employment and indicator of intimate partner violence (IPV). The IPV is a reflection over conflict within the household which is an important indicator to indicate backlash effect of a policy change. Past study analysing institutional changes shows substantial evidence for backlashing through increase in domestic violence (Amaral, 2017; Calvi & Keshar, 2023). Overall, by employing three different dimensions of women empowerment and considering a host of indicators, we attempt to access whether influence of inheritance law was uniform across the dimensions.

Empirical Approach

Using the difference-in-difference strategy followed by the past studies (Bose & Das, 2020; Tandel et al., 2023, among others), the study measures the impact of state amendments passed in Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu on women's empowerment. To do so, we form the treatment group as unmarried women in the reform state at the corresponding year of the state amendment. Meanwhile, the control group consists of women in the non-reform states and married women in the reform states at the time of reform year. We estimate the following equation using logit regression.

$$Y_{ist} = \beta_0 + \beta_1 HSAA_{ist} + \beta_2 Hindu_{ist} + \beta_3 HSAA_{ist} \times Hindu_{ist} + \beta_4 X_n + \epsilon_{ist} \dots (1)$$

where i , s , and t represents individual, state, and year respectively. Y_{ist} represents the set of variables measuring women's empowerment described in the last sub-section. $HSAA_{ist}$ is a dummy variable equal to 1 if women i is unmarried at the time of reform year and resides in reform state s and 0 otherwise. Since state amendments were only valid for Hindu religion (treated religion), we interact $HSAA_{ist}$ and $Hindu_{ist}$ variables to analyze our difference-in-difference estimator denoted by β_3 . Therefore, our coefficient of interest is β_3 which depicts the impact of inheritance law on women's empowerment indicators. X_n is a vector of control variables². Further, we explore our results based on several heterogeneities in the Indian context such as, sector (urban and rural), socio-economic status (asset quartiles), patriarchy level (Singh et al., 2021), and female-headed households.

To further test the robustness of our results we include two checks. First, considering influence of inheritance rights on non-Hindu which were not part of the inheritance law. Second, checking our results by considering random year of reform before any of the state amendment were passed.

Regression Results and Robustness Checks

The access to resources is measured using index for household autonomy and say in choosing one's husband (marriage choice). *Table 1*, indicates, women exposed to state reform are 47 percent more likely to have a say in choosing her husband than women in the control group. Thus, the analysis highlights that, post the reform, women have gained bargaining power in having some say choosing their partner. Moreover, the pattern persists across urban and rural sectors. The second indicator, the household autonomy index which comprises of indicators related to intra-household decision making; indicates that treated women are likely to have low household autonomy as a result of inheritance rights. Therefore, while marriage choice has substantially increased post the reform, intra-household decision making which interacts with relationship with spouse and in-laws are unchanged.

Coming to the next dimension of women empowerment, agency or control over movement which is measured using physical autonomy index and civil indicator (part of self-help group (SHG)). The result indicates post the reform, women in the treatment group are significantly more likely to gain physical autonomy irrespective of living in urban or rural area and are a part of a SHG. The results

² The controls include such as education, household size, log of monthly per capita expenditure (MPCE), marriage age, sector, women's age, reform state, caste, year of marriage dummies, and state dummies.

are in line with the past studies (see for example, Mookerjee, 2019, Roy, 2008) that indicates positive impact of HSAA on freedom in mobility for the treated cohort.

Lastly, looking at the outcomes or achievements indicates using economic participation and indicator for intimate partner violence (IPV). The results indicate a significant decrease in IPV as a result of the reform thereby, providing evidence against backlashing effect in terms of domestic violence. However, the pattern is observed only for the urban sector. In terms of economic autonomy, there exists a positive but insignificant increase in paid work for women in the treated group. Further exploring if there exist any differences when we bifurcate paid work into agricultural and non-agricultural work³, we still do not find any evidence for increase in labour supply. Past studies exhibit mixed evidence for changes in labor supply. For instance, on one hand Suteau's (2020) analysis indicate no significant increase in labour supply for women exposed to the reform whereas Heath & Tan (2019) show increase in professional jobs. The intersection of institutional changes and economic change is webbed into complex structures which are further hindered by restrictive social norms. Therefore, the channel through which institutional change such as inheritance rights could impact economic autonomy can be twofold. First, post the inheritance rights, women outside options increases thereby, leading to rise in non-labor income which could decrease willingness to participate in the labor force. Secondly, according to bargaining model, a rise in women outside option increases her bargaining power thus, could provide her with greater control to participate in the labor market. Therefore, a favorable institutional amendment towards women can both increase and decrease the economic participation for women and is contingent upon several unknown factors.

In the above results, we look at the impact on an average household. However, the impact of the reform could vary based household factors such as, the socio-economic status of the family or gender of the head of the household; and the state-level factors such as restrictive social norms indicated through level of patriarchy (Singh et al., 2021). We attempt to further analysis our results based on these heterogeneities.

In a nutshell, our analysis highlights how institutional amendments impact different dimensions of women empowerment. As highlighted by Anderson (2022; 2024) different indicators of women empowerment might not move in tandem with each other which is highlighted in this case, where there exists evidence for improvement in physical and civil autonomy that is, part of public sphere but not within the household which is part of private sphere. While not all dimensions move in concert however, as a result of HSAA, indicators such as physical, civil, marriage choice, and IPV exhibit favorable changes.

The first robustness check (*Table 2*) considers estimating the same analysis for non-Hindus. For the dimensions of women empowerment, the results indicate either an insignificant relationship or a negative impact on non-Hindus. For instance, say in choosing husband, physical, civil, and IPV indicates opposite impact on non-Hindus. The result could also be driven by the religion group included in the category of non-Hindus which might have low women empowerment levels. The second robustness checks consider a random reform year that is, 1975 when no state amendment was passed. Overall, there exists insignificant impact on the indicators of women empowerment with random year of reform.

Table 1: Regression estimates of impact of HSAA on women's empowerment indicators

Dependent Variable	Access to Resources		Agency		Outcomes	
	(1) Household	(2) Marriage Choice	(3) Physical	(4) Civil	(5) Economic	(6) IPV
HSAA*Hindu	-0.870*** (0.335)	0.388*** (0.0821)	2.219*** (0.102)	0.417*** (0.130)	0.140 (0.104)	-0.632*** (0.160)
HSAA	0.119 (0.354)	-0.534*** (0.0825)	-1.594*** (0.0918)	-0.368*** (0.132)	-0.219** (0.104)	0.697*** (0.160)

³ The estimation results for agricultural and non-agricultural work are available in the annexure.

Hindu	0.252** (0.106)	-0.101*** (0.0353)	0.533*** (0.0361)	0.0835 (0.0699)	0.361*** (0.0379)	-0.0919 (0.0607)
Observations	55,452	56,402	56,419	56,361	56,431	56,360

Note: (i) All regression includes reform state, education, age, marriage age, household size, log of MPCE, urban dummy, caste, year of marriage dummies, and state dummies as control variables. (ii) Standard errors in parentheses. (iii) *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculation using IHDS - I (2004-05)

Table 2: Robustness Checks: Regression estimates of impact of HSAA on women's empowerment indicators

Dependent Variable	(1) Household	(2) Marriage Choice	(3) Physical	(4) Civil	(5) Economic	(6) IPV
Robustness Check 1 (Only Non-Hindus)						
HSAA	-14.03 (515.2)	-0.518*** (0.119)	-0.310** (0.125)	-0.468** (0.237)	0.0443 (0.145)	0.460** (0.223)
Observations	3,489	6,343	6,397	5,804	6,397	5,844
Robustness Check 2 (Reform Year 1975)						
HSAA*Hindu	-1.213*** (0.330)	- (0.325)	2.743*** (0.0744)	-0.0459 (0.131)	0.0822 (0.0735)	-0.206* (0.115)
HSAA	1.188** (0.531)	0.527 (0.325)	-1.635*** (0.136)	0.227 (0.172)	-0.0959 (0.107)	0.181 (0.197)
Hindu	0.321*** (0.107)	- (0.325)	0.131*** (0.0376)	0.241** (0.112)	0.351*** (0.0430)	-0.118* (0.0696)
Observations	55,452	6,343	56,419	56,361	56,431	56,360

Note: All regression includes reform state, education, age, marriage age, household size, log of MPCE, urban dummy, caste, year of marriage dummies, and state dummies as control variables. Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculation using IHDS - I (2004-05)

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