

Regional Differences in Economic Empowerment of Women in India and Its Relation to Economic Growth

By

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Abstract

The terms of 'Empowerment' and 'Economic Empowerment' of women are often used loosely in women related literature referring many interchangeable meanings. This study has expressed the term 'economic empowerment' in terms of accessibility to seven dimensions i.e. income, land, decision making, education, banking, health and organised sector employment. Women are continuously facing inequality in their economic possessions compared to men all over the world. In India, apart from gender inequality, differences can be seen in the economic statuses of women across the caste, religion, class and geographies. This study has investigated the regional differences existing in India in terms of economic empowerment of women across the states and union territories. The study has estimated a composite index of Women Economic Empowerment Index (WEEI) as a geometric mean of seven-dimension indices for twenty-eight states and seven union territories for three decadal years 1991, 2001 and 2011. The regions have been classified in four categories as "Very low", "Low", "Moderate" and "High" on the basis of index values. At all India level, WEEI values have been found ranging in between 'very low' and 'low' values during (1991-2011). Where, southern and western states of India have stood in the front positions in economic empowerment of women, leading by Tamil Nadu, Goa, and Kerala, women of some other states like Uttar Pradesh, Bihar, Orissa, Assam etc. are found striving to stand at par with women of former states. The study has also looked into the relation of economic growth with economic empowerment of women.

Keywords: Economic Empowerment of Women, Economic Growth, States and Union Territories of India, Women Economic Empowerment Index.

Introduction

'Women empowerment' encompasses an economic dimension since its origin, while, the term 'economic empowerment' has come much later. World Bank's definition of 'economic empowerment' given in 2006 was among the first ones in this regard (Kabeer 2012). World Bank (2006) in its 'Gender equality as smart economics: A World Bank Group Gender Action Plan (2007-2010)' mentions that 'economic empowerment' is about making markets (i.e. land, labour, financial and product) work for women (at the policy level) and empowering women to compete in markets (at the agency level). While, according to, United Nations Development Programme- "Economic empowerment of women comprises economic opportunities (e.g. expanding employment and entrepreneurship, promoting decent and productive work, improving access to finance); legal status and rights (e.g. improving women's property, inheritance and legal rights); and voice, inclusion and participation in decision-making (e.g. developing mechanisms to enhance women's involvement in decision-making bodies)" (UNDP 2008: 9).

Economic empowerment of women not only justifies equity and right based perspectives, but also it acts as a 'smart economics' to bring about economic growth. "Gender equality and empowered women are catalysts for multiplying development efforts. Investments in gender equality yield the highest returns of all development investments." (OECD 2010:8). United Kingdom Department for International Development (2010) mentions in 'Agenda 2010- The turning point on poverty: background paper on Gender' - "Higher female earnings and bargaining power translate into greater investment in children's education, health, and nutrition, which leads to economic growth in the long-term. In India, GDP could rise by 8% if the female/male ratio of workers went up by 10%. Total agricultural outputs in Africa could increase by up to 20% if women's access to agricultural inputs was equal to men's" [cited in DAC Network on Gender Equality (GENDERNET) 2011:7]. On the same line, (Kabeer 2012; World Bank 2012; Golla, et al. 2011) claim that the increase in women's share in the household income changes people's spending habits in favour of health and education of children providing a route to sustainable development.

In spite of that, all over the world, considerable pieces of evidence are found for poor economic possessions of women. Differences are not only existent in between men's and women's possessions, but also among the women themselves across the caste, religion, class, and geographies raising the issue of inequality amongst different sections of women.

Objectives

The present study aims

- (1) To assess the regional differences in terms of economic empowerment of women existing across states and union territories of India.
- (2) To find out the relation between economic status of the states and their women's economic empowerment.

Conceptual Frameworks

3.1 Dimensions of Economic Empowerment

This study considers 'Economic Empowerment of Women' in terms of women's access to seven dimensions i.e. access to income (economically productive work); access to land; access to decision making; access to education; access to banking (finance); access to health; access to employment in the organized sector.

Justifications for Dimensions of Economic Empowerment

Women can share the burden of household expenditure with their male counterpart when they have access to paid work, while, their access to land ownership claim their control on resources. Both these offer bargaining power to women in the household as well as in the community level. Women's power to make the decisions over purchases indicates their freedom to choose. On the other hand, access to education makes women rational enough in all the decisions of life including the economic ones and helps in capacity building for the job market as well. Women with bank account come closer to the financial services of savings and credit and thus in turn to capital formation and entrepreneurship. Health is a component of human capital, while, women are vulnerable to the risks of reproductive health, especially during motherhood. Therefore, women's access to health (reproductive health) has been taken as a dimension for their economic empowerment. On the other hand, women's engagement in organised sector job ensures them equal wage with men and breaks the phenomenon of wage

differences between male and female for equal work. So, women's access to organised sector job is a dimension of economic empowerment in the study. The teaching profession has been chosen to indicate organised sector job, as women have significant majority in the teaching workforce. A large body of literature devoted to women empowerment have been found using the above-mentioned dimensions to indicate economic empowerment (CIDA 1997; Soetan 1999; Cheston and Kuhn 2002; Malhotra, Schüler, Boender (2002); Global Fund for Women 2003; Kes, Grown and Gupta 2005; World Bank 2006; Centre for Economic and Business Research 2008; Törnqvist, Schmitz 2009; ASALA 2010; UNDP 2010; GENDERNET 2011; Golla et al. 2011; Golla et al. 2012; Kabeer 2012; Chani, et al. 2012; Wu 2013; ICRW 2014; Pereznieto, Taylor 2014).

Methodology

4.1 Estimation of Economic Empowerment of Women

In order to assess the economic empowerment of women, a composite index of Women Economic Empowerment (WEEI) has been constructed by estimating the geometric mean of dimension indices. Where the dimension indices have been estimated by using UNDP method of constructing the dimension indices of HDI as follows:

$$\text{Dimension index} = \frac{\text{Actual Value of the Indicator} - \text{Minimum Value of the indicator}}{\text{Maximum Value of the indicator} - \text{Minimum Value of the indicator}}$$

The study has estimated WEEI for twenty-eight states and seven union territories. The regions are being classified geographically as North, Central, East, North- East, West and South as is done in the NFHS reports. The national capital territory of Delhi has been included within North India, while, the other six union territories have been included in the category of 'other union territories'. The indices have been calculated for three periods T₁, T₂, and T₃. The three periods T₁, T₂ and T₃ have referred to three decadal years of 1991, 2001 and 2011 respectively. However, in case of some dimensions, as data are not available for all these years, then T₁, T₂, and T₃ have referred to some nearby years of 1991, 2001 and 2011 respectively, where data are available.¹ The values of the dimension indices fall within the range of 0 to 1. Since geometric mean cannot be calculated from '0' values, hence, the minimum values of all the dimension indices have been replaced by 0.001 (0. 1%) to make those values conformable for further calculation.² The states and union territories have been classified in four categories on the basis of index values(x) as "Very low" for index value less than equal to 0.25 (i.e. $x \leq 0.25$), "Low", for the index values from 0.26 to 0.50 (i.e. $0.26 \leq x \leq 0.50$), "Moderate" for the index values from 0.51 to 0.75 (i.e. $0.51 \leq x \leq 0.75$), "High" for the index values from 0.76 to 1 (i.e. $0.76 \leq x \leq 1$) respectively.

In the study, the seven dimensions are being indicated by seven respective indicators. In order to calculate, Women's Access to Income Index (WAI) of a region, the indicator of percentage of female population as main workers has been used; similarly for Women's Access to Land Index (WALI), percentage of female land holdings in total individual land holdings has been used. The indicators of 'percentage of women having access to the decision of spending money', 'percentage of female population with the primary education', 'percentage of female accounts in total individual accounts in Scheduled Commercial Banks', 'percentage

¹ Ministry of Women and Child Development, Government of India (2009) in the Project Report under the MWCD-UNDP-IIPA Project for Preparation of Gender Development Index/Gender Empowerment Measure, 'Gendering Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India' used data of varying years closest to 1996, data of varying years closest to 2006 for the years of 1996 and 2006 respectively due to data unavailability (Table 6.1).

² "Because geometric mean cannot be computed from a zero value, a minimum of 0.1% is set for all component indicators." (Technical Notes, UNDP Human Development Report 2013.:5

of births delivered in medical institutions and in health facilities’, ‘percentage of female teachers in upper primary, secondary and higher secondary schools’ have been used to indicate Women’s Access to Decision Making Index(WADMI), Women’s Access to Education Index (WAEI), Women’s Access to Banking Index (WABI), Women’s Access to Health Index(WAHI) and Women’s Access to Organised Sector Job Index(WAOSJI) respectively. The maximum and minimum values of the indicators for the construction of dimension indexes have been selected in the study on the basis of the maximum and minimum values of indicators experienced by states and union territories in the three periods of T₁, T₂, and T₃.

Women Economic Empowerment Index has been estimated as follows:

$$WEEI = \sqrt[n]{\text{product of } n \text{ dimension indices}}$$

Here, ‘n’ can take any value from 2 to 7 for different regions at different time periods as per data availability.

4.2 Relation between Economic Status of the states and their Women’s Economic Empowerment

In order to assess whether there is any relation between economic status of the state and economic empowerment of its women or not, scatter plots are being used in the study for the variables of Per Capita Net State Domestic Product at Factor Cost (PCNSDP_{FC}) of 2010-11 at constant price of base year 2004-05 and Women Economic Empowerment Index (WEEI) at T₃. Similarly, between PCNSDP_{FC} and each of the dimension indices of WAI, WALI, WADMI, WAEI, WABI, WAHI and WAOSJI at T₃.

Regional Differences in Economic Empowerment of Women in India: Results and Analysis

5.1 Women’s Access to Income

It is found from Table 1A, that the values of WAI for all India are only 0.38, 0.34 and 0.36 in all the three years of 1991, 2001 and 2011 respectively indicating a pathetic status of India in terms of women’s access to paid work. Except the North –Eastern State, Nagaland, no other state has achieved the ‘high’ WAI in T₃. Andhra Pradesh, Maharashtra, Tamil Nadu, Karnataka, North Eastern States of Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim are the only states with ‘moderate’ WAI showing a hope of women’s economic independence over the decades. On the other hand, Delhi, Haryana, Jammu & Kashmir and Punjab from North, Uttar Pradesh from central India, Bihar, Odisha, West Bengal from Eastern part of India, Assam and Sikkim from North East are the regions that have been found with ‘very low’ WAI. Surprisingly, in spite of being a state with female favoured sex ratio (1084 females per 1000 males as per 2011 Population Census) and highest female literacy (93.91% as per 2011 Population Census) of India, women of Kerala have poor access to work participation with ‘low’ and ‘very low’ index values. There are studies that regard increased enrolment of young girls in educational institutions as one of the main factors behind the sharp decline in female labour force participation in India as it drives out a large portion of female labour force from the economy (Bourmpoula, Kapsos, Silberman 2014). The case of Kerala can be attributed to that phenomenon. It is important to note that during the first decade (1991-2001), the North – Eastern states have faced a downfall in their women’s access to income. The structural changes in the economy after the introduction of New Economic Policy might cause that downfall in the North East as globalisation shrank the dominance of household economy featured with low skilled productions dominated by women workers.

5.2 Women's Access to Land

It is revealed from Table 2A, that Women of India have insignificant access to land with the values of 0.25 and 0.3 in T₂ and T₃ respectively. Except Meghalaya, no other state has achieved 'high' index value of WALL. This special phenomenon of Meghalaya can be attributed to the customary law of matrilineal society in terms of inheritance. The tribes of Meghalaya i.e. Garo, Khasi, Jaintia are the matrilineal tribes where inheritance is carried through the mother. Except Goa, Delhi, Maharashtra and south Indian states and union territories, all other states have been found with 'very low' values.

5.3 Women's Access to Decision Making

It has been observed in Table 3A, that women in India have progressed over time during (2001-2011) in terms of their access to decision making over purchases. From the North India, except the women from Rajasthan, all other regions have shown improvement in this regard. Among the states from central India and Eastern part of India, it is seen that all the states have achieved 'moderate' to 'high' index values of WADMI especially in 2011. Similarly, all other North Eastern states except Tripura have achieved 'high' index values. Nagaland, Manipur, Mizoram, Arunachal Pradesh and Sikkim have stood at the top positions among all the regions in terms of decision making both in T₂ and T₃. From West and South, Andhra Pradesh and Karnataka are found at 'low' category, while other states are found at better positions in this aspect.

5.4 Women's Access to Education

It can be seen from Table 4A, that the WAEIs estimated for all India are 0.12, 0.25 and 0.30 in 1991, 2001 and 2011 respectively which signify not at all a satisfactory of Indian women. Except the state of Mizoram and the union territories of Andaman & Nicobar Islands, Daman and Diu, no other region has achieved the index value of greater than 0.5. It is interesting that in spite of having the highest female literacy of 91.98%; women of Kerala have not been found successful in continuing the education up to the primary level and it has achieved the index values of 'very low' and 'low' categories.

5.5 Women's Access to Banking

It is revealed from Table 5A, that at all India level, the values of WABI fall under 'low' category in both T₂ and T₃. While, except Delhi, Uttar Pradesh, Meghalaya, Mizoram, Goa, south Indian states, Lakshadweep and Puducherry, all other regions of India have achieved 'low' and 'very low' categories of index values of WABI even in T₃. Among the states from West, interestingly except Goa, the WABIs computed for the states of Gujarat and Maharashtra are low. While, women from all the Southern states of India have accessed bank account to a great extent and the growth of micro finance services in these southern states might be attributed to this case.

5.6 Women's Access to Health

It has been found from Table 6A, that Indian women are far behind from the satisfactory state in case of their access to reproductive health as index values belong to 'very low' and 'low' categories only. Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Assam, Meghalaya, Nagaland are some of the worst performing states in terms of women's access to institutional delivery. While, Kerala, Goa are two best performing states in this regard followed by Tamil Nadu. Besides, regions like Delhi, Mizoram, Maharashtra, Andhra Pradesh, Karnataka have achieved 'moderate' values of WAHI, especially in T₃.

5.7 Women's Access to Organised Sector Job

The estimated values of WAOSJI for all India are 0.38 and 0.37 in 2001 and 2011 respectively (Ref. Table 7A). It is seen that Kerala, Tamil Nadu, Goa, Punjab have relatively

more women in the organised sector job (teaching job). Where, Kerala has achieved ‘high’ values in both the periods, Tamil Nadu, Goa, Punjab have achieved ‘moderate’ values. On the other hand, Rajasthan, Uttarakhand, Uttar Pradesh, Bihar, Odisha, Arunachal Pradesh, Assam, Tripura are the states that have achieved ‘very low’ index values.

5.8 Economic Empowerment of Women

Table 8A shows that at ‘All India’ level, WEEI ranges around values belong to ‘very low’ to ‘low’ category only. From the northern regions, Punjab, Rajasthan, Jammu & Kashmir, from central and Eastern part of India Uttar Pradesh, Bihar, Odisha, West Bengal, from North East India Assam are the states with ‘very low’ WEEI for all the three decadal years. While, Kerala, Tamil Nadu, Goa, Mizoram are relatively better performing states in economic empowerment of women.

Where, there is one argument that economic empowerment of women brings economic growth; one may expect that the case can be other way round too and many studies are there which speak for the counter direction from economic growth to women empowerment (Duflo, 2012; Haan, 2017). The benefits of macro economic growth of nation and regions can rightfully be expected to percolate to all the agents of the economy including women. Therefore to check the relationship between economic growth of the states with their women’s economic empowerment, study has used data of 32 states and union territories³ and India itself.

Economic Growth and Economic Empowerment of Women

In the study, the economic growth of the states has been indicated by the variable of Per Capita Net State Domestic Product at Factor Cost (PCNSDP_{FC}) of 2010-11 at constant price of base year 2004-05 collected from <https://www.indiastat.com> [Source: Reserve Bank of India. (ON848)& Past Issues]. While, for economic empowerment, WEEI and its dimension indices of T₃ (2011) have been taken. In order to identify the nature of the relations between PCNSDP_{FC} and economic empowerment indexes, method of scatter plot has been used in the paper.

6.1 PCNSDP_{FC} and Women’s Access to Income Index

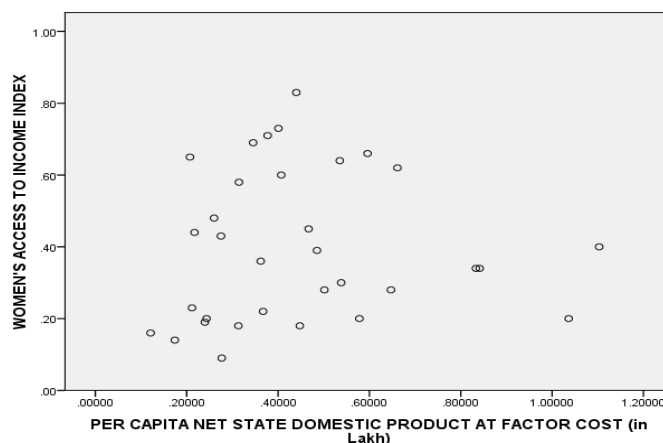


Figure 1: The Relation between PCNSDP_{FC} (2010-11) at constant price and WAI (2011)
Source: Author’s Estimation

³ The thirty two states and union territories are Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Jharkhand, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Chhattisgarh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, Andaman and Nicobar islands, Chandigarh, Delhi, Puducherry. However, in case of finding the relation between PCNSDP_{FC} and WADMI, WAI, due to data unavailability, variables of only 28 states, Delhi and India itself have been used excluding A&N Islands, Chandigarh and Puducherry.

Figure 1 does not depict any distinct relation between per capita income of the states and women's access to income, however, it seems to have an inverted U relation in a weak manner. This behaviour may be substantiated by the argument of negative effect of income on female labour force participation. Literature (Tzannotes 1998; Schulz 1991, Goldin 1994, Lincove 2008, Mammen and Paxson 2000) shows that along the process of development the female labour force participation rate declines. The common explanation for this structure in all the literature is that as the economy develops, the increase in household income leads to a decline in female labour force participation through the effect of household income. As households become wealthier, a large section of women move out of the labour force since they now do not want to be a part of low productivity, subsistence employment. Only after attaining a certain point of development when an economy becomes able to create a large number of employment opportunities and which are acceptable for the women with higher household income, then again the female labour force participation starts to increase with development. Besides, as economy grows, the manufacturing and service sector start to contribute more in comparison to agriculture sector, as results women who generally participate more in agricultural activities may face structural unemployment.

6.2 PCNSDPFC and Women's Access to Land Index

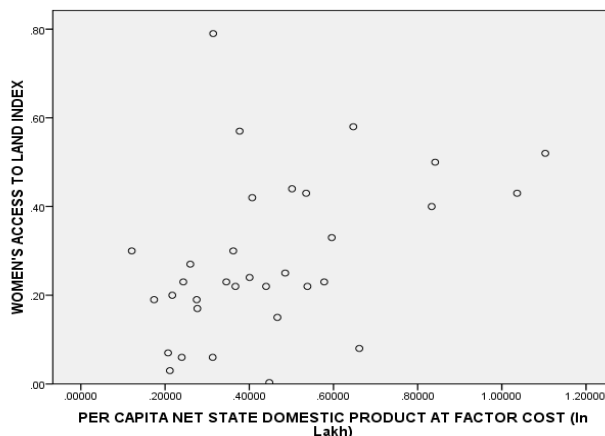


Figure 2: Relation between PCNSDP_{FC} (2010-11) at constant price and WALI (2011)
Source: Author's Estimation

Figure 2 also shows a weak positive correlation between per capita net state domestic product and women's access to land holdings indicating that in case of comparatively wealthier regions as well as households, women have more chance of getting the land ownership.

6.3 PCNSDPFC and Women's Access to Decision Making Index

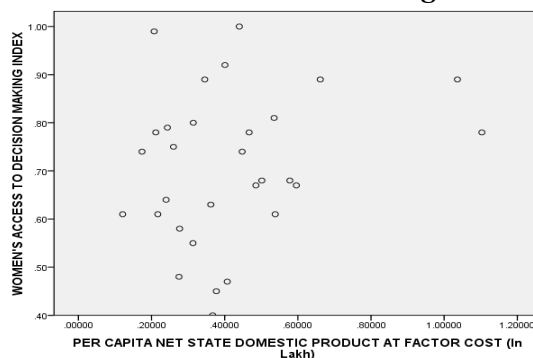


Figure 3: Relation between PCNSDP_{FC} (2010-11) at constant price and WADMI (2011)
Source: Author's Estimation

Figure 3 has not shown a very distinct relation between per capita income of the states and states' women's power to take decisions on household purchases. In other words, it signifies that women's autonomy to take decisions is not primarily related to the economic status of women and their households, rather it depends on socio-cultural factors.

6.4 PCNSDPFC and Women's Access to Education Index

Figure 4 shows a positive relation between Per Capita Net Domestic Product of the states and their women's access to education (primary education) if the outliers are ignored. It indicates that in economically developed states the awareness for women's education is high or in the opposite line, it may be said that educated women can contribute in higher economic growth.

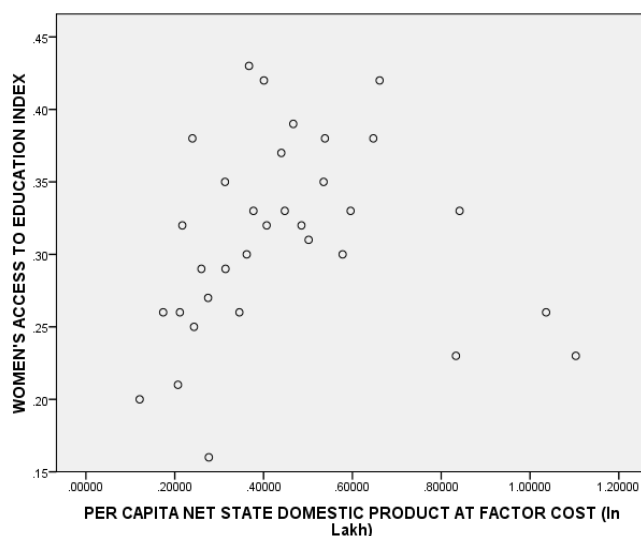


Figure 4: Relation between $PCNSDP_{FC}$ (2010-11) at constant price and WAEI (2011)
 Source: Author's Estimation

6.5 PCNSDPFC and Women's Access to Banking Index

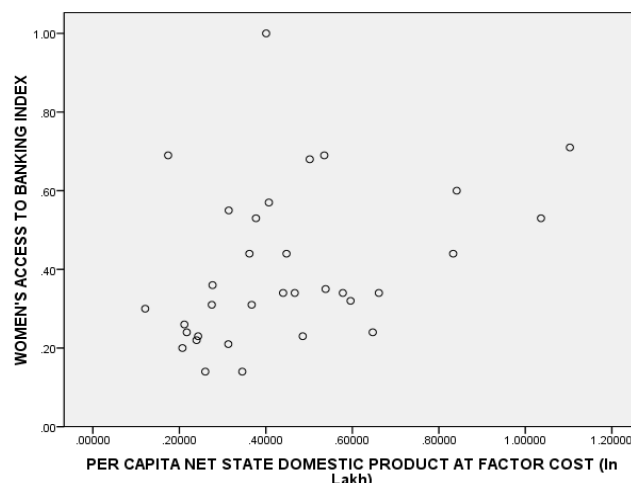


Figure 5: Relation between $PCNSDP_{FC}$ (2010-11) at constant price and WABI (2011)
 Source: Author's Estimation

Figure 5 indicates a positive correlation between per capita net state domestic product at factor cost and WABI, although a weak one. It implies that economic growth has helped the states in financial inclusion.

6.6 PCNSDPFC and Women's Access to Health Index

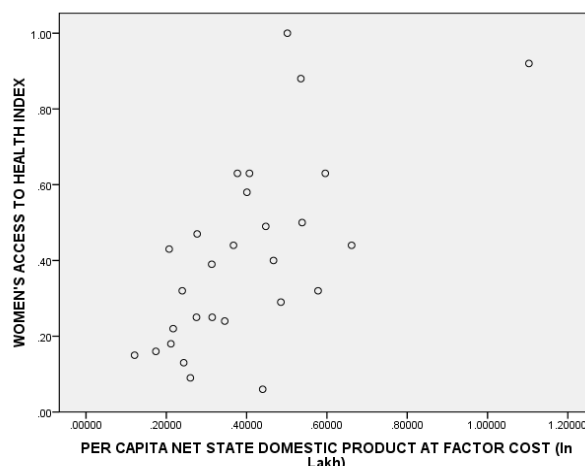


Figure 6: Relation between PCNSDP_{FC} (2010-11) at constant price and WAHI (2011)
Source: Author's Estimation

As expected, a positive correlation is found between state's per capita income and its women's access to health (Ref. Figure 6). Higher standard of living of a state's population increases its women's access to the institutional deliveries.

6.7 PCNSDPFC and Women's Access to Organised Sector Job Index

Figure 7 also shows a weak positive relation between state's per capita income and its women's access to organised sector job if the outliers are ignored. Higher economic growth of a state is related with higher number of skilled women (refer to 6.4 section) and higher employment opportunities in the state, which ultimately results in higher number of women in teaching jobs in the state.

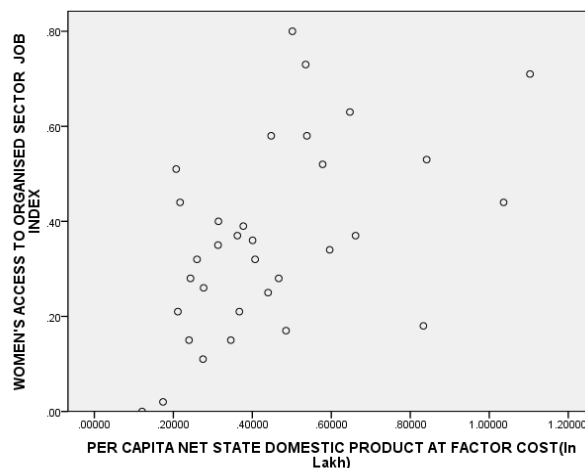


Figure 7: Relation between PCNSDP_{FC} (2010-11) at constant price and WAOSJI (2011)
Source: Author's Estimation

6.8 PCNSDPFC and Women Economic Empowerment Index

Figure 8 depicts the relation between per capita net state domestic product at factor cost and women economic empowerment as whole, where it seems to have a weak positive correlation between the variables.

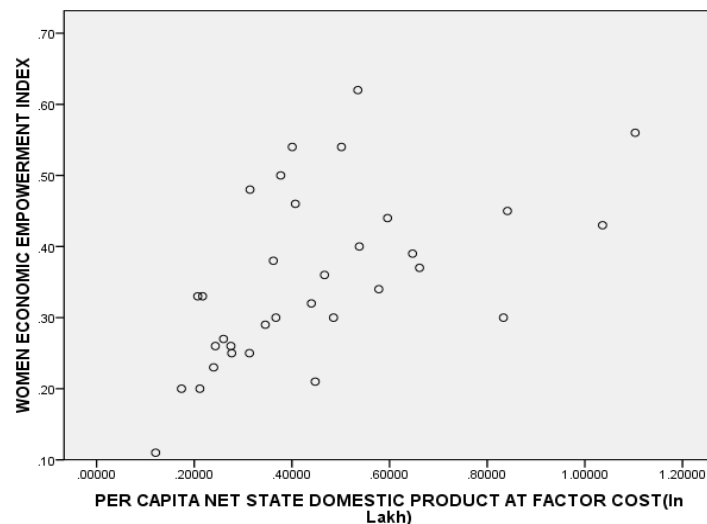


Figure 8: Relation between PCNSDP_{FC} (2010-11) at constant price and WEEI (2011)
Source: Author's Estimation

Apparently, from the above discussion, it has been found that the usual relationship of economic development of the states with the better status of women holds in most of the dimensions, however, in case of women's employment and decision making, the effect of economic development has been peculiar.

Conclusions

The paper reveals an unsatisfactory stance of women in India in terms of economic empowerment. Although, estimates reveal that Indian women are progressing with time, the pace must be fast. The whole picture of economic empowerment of women is very depressing one for the states like Bihar, Uttar Pradesh, Orissa, Assam. Where globally, the main slogan is to acquire gender equality, women of those states of India are striving for the status of fellow women of the neighbouring states. The requirement is to articulate the factors responsible for this region specific poor status of women based on proper justifications and consider the region-specific needs in the formulation of development policies. The indefinite relations between per capita income of the states and their performance on economic empowerment of women and the outliers signify the scope of other socio cultural factors apart from the economic ones in bringing up economic independence of women.

References

- Bourmpoula, E., Kapsos, S. & Silberman, A. (2014). Why is female labour force participation declining so sharply in India. ILO Research Paper No. 10. Geneva: International Labour Organization. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/-inst/.../wcms_250977.pdf
- Chani, M. I., Chaudhary, A. R. & Pervaiz, Z. (2012). An analysis of different approaches to women empowerment: A case study of Pakistan. MPRA Paper No.37784. Retrieved from <http://mpa.ub.uni-muenchen.de/37784/>
- Canadian International Development Agency (CIDA). (1997). The Guide to Gender-sensitive Indicators. CIDA Project Report. Retrieved from http://eugender.itcilo.org/toolkit/online/story_content/external_files/TA_Edu_CIDA.pdf

- Centre for Economic and Business Research. (2008). Economic Empowerment of Women. Evaluation Department, Ministry of Foreign Affairs/Danida, Denmark. Retrieved from <https://www.oecd.org/derec/denmark/42211306.pdf>
- Cheston, S. & Kuhn, L. (2002). Empowering women through microfinance, United Nations Development Fund for Women (UNIFEM), New York. Retrieved, from http://www.genfinance.info/documents/Gender%20Impact/ChestonandKuhn_2002.pdf
- DAC Network on Gender Equality (GENDERNET). (2011). Women's Economic Empowerment. Issues paper. Retrieved from <http://www.oecd.org/dac/gender>
- Department of Trade and Industry, Republic of South Korea. (2011). Towards an enabling environment for women economic empowerment in South Africa," a status quo report. Retrieved from http://www.dti.gov.za/economic_empowerment/.../women_empowerment/Towards_E_nablin
- Eyben, R., Naila, K.& Cornwall, A. (2008). Conceptualising empowerment and the implications for pro-poor growth. Paper for Dac Poverty Network on empowerment, Institute of Development Studies. Retrieved from <https://www.ids.ac.uk/files/dmfile/conceptualisingempowermentpaperforPOVNET.pdf>
- Esther, D. (2012). Women Development and Economic Development. Journal of Economic Literature,50(4), 1051–1079. Retrieved from <http://dx.doi.org/10.1257/jel.50.4.1051>
- Global Fund for Women. (2003). More than money: strategies to build women's economic power. Impact Report No.1: Economic Opportunity Initiative.
- Goldin, C. (1994). The u-shaped female labour force function in economic development and economic history. Working Paper No. 4707. Cambridge, MA: National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w4707>
- Golla, A. M., Malhotra, A., Nanda, P., & Mehra, R. (2011). Understanding and Measuring Women's Economic Empowerment. Definition, Framework and Indicators. Washington, DC: International Centre for Research on Women.
- Golla, A., Mehra, R. Patel, P. & Shetty, A. (2012). Financial services for low-income women: opportunities for economic empowerment?. Revised Final Report, International Center for Research on Women, North Washington, DC
- Haan, A. D.(2017). The win-win case for women's economic empowerment and growth : Review of the literature. GrOW Working Paper Series, Concept Paper, International Development Research Centre.
- International Center for Research on Women (2014). The Business Case for Women's Economic Empowerment: An Integrated Approach. Oak Foundation, Dalberg and Witter Ventures. Retrieved from <https://www.icrw.org/.../strengthening-the-business-case-for-womens-economic-emp...>
- Kabeer, N. (2012). Women' s economic empowerment and inclusive growth: labour markets and enterprise development. SIG Working Paper. Retrieved from <https://www.idrc.ca/sites/default/.../Documents%20EN/NK-WEE-Concept-Paper.pdf>
- Kaur, A. (2007). Women's Economic Empowerment: Meeting the Needs of Impoverished Women. Workshop Report, UNFPA, the United Nations Population Fund, New York. Retrieved from <http://www.unfpa.org/.../women's-economic-empowerment-meeting-needs-impoverished-w...>
- Klasen, S., Francesca L. (2009). The impact of gender inequality in education and employment on economic growth: New evidence for a panel of countries. Feminist Economics, 15(3), 91-132.
- Lincove, J. (2008). Growth, girls' education, and female labor: A longitudinal analysis. The Journal of Developing Areas, 41(2), 45-68.
- Malhotra, A., Schuler, S. R. & Boender, C. (2002). Measuring Women's Empowerment as a

- Variable in International Development. Unpublished paper prepared for the World Bank workshop on poverty and gender: New perspectives. Retrieved from http://hdr.undp.org/docs/network/hdr_net/GDI_GEM_Measuring_Womens_Empowerment.pdf
- Mammen, K., Paxson, C. (2000). Women's work and economic development. *Journal of Economic Perspectives*, 14(4), 141-164.
- OECD. (2010). Accelerating progress towards the MDGs through pro-poor growth: policy messages from the DAC Network on Poverty Reduction. Paris. Retrieved from [http://www.oecd.org/.../publicdisplaydocumentpdf/?cote=DCD/DAC/POVNET\(2010\)1...](http://www.oecd.org/.../publicdisplaydocumentpdf/?cote=DCD/DAC/POVNET(2010)1...)
- OECD. (2012). Gender equality in education, employment, and entrepreneurship. Final Report to the MCM. Retrieved from <http://www.oecd.org/employment/50423364.pdf>. p. 17
- ASALA (2010). Women's economic empowerment in the West Bank Palestine," Retrieved from <http://www.asala.ps/wp-content/.../The-Economic-empowerment-of-women-in-Palestine.pdf>
- Pereznieto, P., Taylor, G. (2014). A review of approaches and methods to measure economic empowerment of women and girls. *Gender & Development*, 22 (2), 233-25. Retrieved from <http://dx.doi.org/10.1080/13552074.2014.920976> accessed on 22 December 2014
- Planning Commission, Government of India. (2005). Gender Empowerment. Chapter 10, Himachal Pradesh Development Report. Retrieved from http://planningcommission.nic.in>sdr_hpch10
- Soetan, F. (1999). The economic empowerment of Nigerian women: Some determinants of access to resources. *African Economic History*, (27), 117-135.
- Sweden Ministry for Foreign Affairs. (2010). On equal footing: policy for gender equality and the rights and role of women in Sweden's international development cooperation 2010-2015.MfA, Stockholm. Retrieved from <http://www.government.se/.../on-equal-footing-policy-for-gender-equality-and-the-rights-a...>
- Törnqvist, A., Schmitz, C. (2009). Women's Economic Empowerment: Scope for Sida's Engagement. Working Paper, Swedish International Development Agency (SIDA). Retrieved from https://www.enterprise-development.org/.../SidaEngagement_WomensEconomicEmp
- Tzannatos, Z. (1998). Women and labor market changes in the global economy: Growth helps, inequalities hurt and public policy matters. Social Protection Unit, Human Development Network, The World Bank. Retrieved from <https://siteresources.worldbank.org/.../tradezafiris.pdf>
- UNDP. (2008). Innovative approaches to promoting women's economic empowerment," Paper for the partnership event on September 25, 2008: MDG3- gender equality and empowerment of women- a prerequisite for achieving all the MDGs by 2015. New York. Retrieved from <http://www.undp.org/.../womens-empowerment/innovative-approaches-to-promoting-wome...>
- World Bank (2006). Gender Equality as Smart Economics: A World Bank Group Gender Action Plan (Fiscal years 2007-10). Retrieved from <https://siteresources.worldbank.org/INTGENDER/Resources/GAPNov2.pdf>
- Wu, D. (2013). Measuring Change in Women Entrepreneurs Economic Empowerment: A Literature Review. Working Paper, Women's Entrepreneurship Working Group (WEDWG) of the Donor Committee for Enterprise Development (DCED). Retrieved from https://www.enterprise-development.org/wp-content/uploads/Measuring_Change_in_Women_Entrepreneurs_Economic_Empowerment.pdf

Appendix

Table 1A: *Values of Women's Access to Income Index (WAI) by All India, States and Union Territories (1991-2011) and their categories*

India	T₁ (1991)	Category	T₂(2001)	Category	T₃(2011)	Category
	0.38	Low	0.34	Low	0.36	Low
NORTH						
Delhi	0.13	Very Low	0.16	Very Low	0.2	Very Low
Haryana	0.09	Very Low	0.31	Low	0.2	Very Low
Himachal Pradesh	0.48	Low	0.53	Moderate	0.45	Low
Jammu & Kashmir	NA	NA	0.15	Very Low	0.09	Very Low
Punjab	0	Very Low	0.28	Low	0.18	Very Low
Rajasthan	0.3	Low	0.41	Low	0.43	Low
Uttarakhand ¹	NA	NA	0.39	Low	0.39	Low
Central						
Chhattisgarh	NA	NA	0.57	Moderate	0.48	Low
Madhya Pradesh	0.58	Moderate	0.42	Low	0.44	Low
Uttar Pradesh	0.13	Very Low	0.1	Very Low	0.14	Very Low
EAST						
Bihar	0.21	Very Low	0.18	Very Low	0.16	Very Low
Jharkhand	NA	NA	0.21	Very Low	0.2	Very Low
Odisha ¹	0.25	Very Low	0.17	Very Low	0.19	Very Low
West Bengal	0.15	Very Low	0.18	Very Low	0.18	Very Low
NORTH-EAST						
Arunachal Pradesh	0.95	High	0.74	Moderate	0.69	Moderate
Assam	0.28	Low	0.2	Very Low	0.23	Very Low
Manipur	0.86	High	0.54	Moderate	0.65	Moderate
Meghalaya	0.81	High	0.61	Moderate	0.58	Moderate
Mizoram	0.9	High	0.84	Moderate	0.73	Moderate
Tripura	0.21	Very Low	0.24	Very Low	0.22	Very Low
Nagaland	1	High	0.78	Moderate	0.83	High
Sikkim	0.75	Moderate	0.68	Moderate	0.62	Moderate
West						
Goa	0.4	Low	0.35	Low	0.4	Low
Gujarat	0.32	Low	0.34	Low	0.3	Low
Maharashtra	0.69	Moderate	0.56	Moderate	0.66	Moderate
SOUTH						
Andhra Pradesh	0.79	High	0.66	Moderate	0.71	Moderate
Karnataka	0.58	Moderate	0.53	Moderate	0.6	Moderate
Kerala	0.29	Low	0.23	Very Low	0.28	Low
Tamil Nadu	0.65	Moderate	0.62	Moderate	0.64	Moderate
Other Union Territories						
Andaman & Nicobar Islands	0.15	Very Low	0.21	Very Low	0.28	Low
Chandigarh	0.22	Very Low	0.3	Low	0.34	Low
D & N Haveli	0.82	High	0.65	Moderate	0.33	Low
Daman & Diu	0.27	Low	0.3	Low	0.29	Low
Lakshadweep	0.09	Very Low	0.06	Very Low	0.07	Very Low
Puducherry ¹	0.33	Low	0.35	Low	0.34	Low

Source: *Author's Estimation from Census data of India, 1991, 2001, 2011*

Table 2A: *Values of Women's Access to Land Index (WALI) by All India, States and Union Territories (2001-2011) and their categories*

All India	T₂(2001)	Category	T₃(2011)	Category
	0.25	Very Low	0.3	Low
NORTH				
Delhi	0.39	Low	0.43	Low
Haryana	0.15	Very Low	0.23	Very Low
Himachal Pradesh	0.14	Very Low	0.15	Very Low
Jammu & Kashmir	0.16	Very Low	0.17	Very Low
Punjab	0	Very Low	0.003	Very Low
Rajasthan	0.08	Very Low	0.19	Very Low
Uttarakhand	0.16	Very Low	0.25	Very Low
CENTRAL				
Chhattisgarh	0.23	Very Low	0.27	Low
Madhya Pradesh	0.13	Very Low	0.2	Very Low
Uttar Pradesh	0.16	Very Low	0.19	Very Low
EAST				
Bihar	0.21	Very Low	0.3	Low
Jharkhand	NA	NA	0.23	Very Low
Odisha	0.05	Very Low	0.06	Very Low
West Bengal	0.06	Very Low	0.06	Very Low
NORTH EAST				
Arunachal Pradesh	0.22	Very Low	0.23	Very Low
Assam	0.03	Very Low	0.03	Very Low
Manipur	0.05	Very Low	0.07	Very Low
Meghalaya	0.51	Moderate	0.79	High
Mizoram	0.19	Very Low	0.24	Very Low
Tripura	0.22	Very Low	0.22	Very Low
Nagaland	0.16	Very Low	0.22	Very Low
Sikkim	0.01	Very Low	0.08	Very Low
WEST				
Goa	0.5	Low	0.52	Moderate
Gujarat	0.2	Very Low	0.22	Very Low
Maharashtra	0.34	Low	0.33	Low
South				
Andhra Pradesh	0.46	Low	0.57	Moderate
Karnataka	0.36	Low	0.42	Low
Kerala	0.47	Low	0.44	Low
Tamil Nadu	0.4	Low	0.43	Low
OTHER UNION TERRITORIES				
Andaman & Nicobar Islands	0.48	Low	0.58	Moderate
Chandigarh	0.32	Low	0.4	Low
D & N Haveli	0.25	Very Low	0.26	Low
Daman & Diu	0.38	Low	0.44	Low
Lakshadweep	0.74	Moderate	1	High
Puducherry	0.49	Low	0.5	Low

Source: *Author's Estimation from Agricultural Census 2000-2001 and 2010-11*

Table 3A: Values of Women's Access to Decision Making Index by All India, States and Delhi (2001-2011) and Ranks

	T₂(2001)	Category	T₃(2011)	Category
All India	0.21	Very Low	0.63	Moderate
NORTH				
Delhi	0.32	Low	0.89	High
Haryana	0.69	Moderate	0.68	Moderate
Himachal Pradesh	0.98	High	0.78	High
Jammu & Kashmir	0.32	Low	0.58	Moderate
Punjab	0.64	Moderate	0.74	Moderate
Rajasthan	0.02	Very Low	0.48	Low
Uttarakhand	NA	NA	0.67	Moderate
CENTRAL				
Chhattisgarh	NA	NA	0.75	Moderate
Madhya Pradesh	0.05	Very Low	0.61	Moderate
Uttar Pradesh	0	Very Low	0.74	Moderate
EAST				
Bihar	0.03	Very Low	0.61	Moderate
Jharkhand	NA	NA	0.79	High
Odisha	0.25	Very Low	0.64	Moderate
West Bengal	0.13	Very Low	0.55	Moderate
NORTH EAST				
Arunachal Pradesh	0.66	Moderate	0.89	High
Assam	0.24	Very Low	0.78	High
Manipur	0.47	Low	0.99	High
Meghalaya	0.55	Moderate	0.8	High
Mizoram	0.69	Moderate	0.92	High
Tripura	NA	NA	0.4	Low
Nagaland	0.68	Moderate	1	High
Sikkim	0.31	Low	0.89	High
WEST				
Goa	0.4	Low	0.78	High
Gujarat	0.61	Moderate	0.61	Moderate
Maharashtra	0.17	Very Low	0.67	Moderate
SOUTH				
Andhra Pradesh	0.38	Low	0.45	Low
Karnataka	0.11	Very Low	0.47	Low
Kerala	0.42	Low	0.68	Moderate
Tamil Nadu	0.49	Low	0.81	High

Source: Author's Estimation from NFHS-2(1998-99) & NFHS-3(2005-06) data

Table 4A: *Values of Women's Access to Education Index by All India, States and Union Territories (1991-2011) and their Categories*

	T₁(1991)	Category	T₂(2001)	Category	T₃(2011)	Category
All India	0.12	Very Low	0.25	Very Low	0.3	Low
NORTH						
Delhi	0.11	Very Low	0.29	Low	0.26	Low
Haryana	0.18	Very Low	0.29	Low	0.3	Low
Himachal Pradesh	0.24	Very Low	0.42	Low	0.39	Low
Jammu & Kashmir	NA	NA	0.13	Very Low	0.16	Very Low
Punjab	0.15	Very Low	0.34	Low	0.33	Low
Rajasthan	0.02	Very Low	0.14	Very Low	0.27	Low
Uttarakhand	NA	NA	0.29	Low	0.32	Low
CENTRAL						
Chhattisgarh	NA	NA	0.23	Very Low	0.29	Low
Madhya Pradesh	0.27	Low	0.2	Very Low	0.32	Low
Uttar Pradesh	0.03	Very Low	0.15	Very Low	0.26	Low
EAST						
Bihar	0	Very Low	0.11	Very Low	0.2	Very Low
Jharkhand	NA	NA	0.14	Very Low	0.25	Very Low
Odisha	0.18	Very Low	0.29	Low	0.38	Low
West Bengal	0.19	Very Low	0.26	Low	0.35	Low
NORTH-EAST						
Arunachal Pradesh	0.24	Very Low	0.16	Very Low	0.26	Low
Assam	0.1	Very Low	0.19	Very Low	0.26	Low
Manipur	0.12	Very Low	0.21	Very Low	0.21	Very Low
Meghalaya	0.27	Low	0.2	Very Low	0.29	Low
Mizoram	0.62	Moderate	0.43	Low	0.42	Low
Tripura	0.4	Low	0.42	Low	0.43	Low
Nagaland	0.24	Very Low	0.33	Low	0.37	Low
Sikkim	0.26	Low	0.3	Low	0.42	Low
WEST						
Goa	0.18	Very Low	0.28	Low	0.23	Very Low
Gujarat	0.15	Very Low	0.3	Low	0.38	Low
Maharashtra	0.17	Very Low	0.36	Low	0.33	Low
SOUTH						
Andhra Pradesh	0.13	Very Low	0.31	Low	0.33	Low
Karnataka	0.19	Very Low	0.31	Low	0.32	Low
Kerala	0.22	Very Low	0.41	Low	0.31	Low
Tamil Nadu	0.22	Very Low	0.38	Low	0.35	Low
OTHER UNION TERRITORIES						
Andaman & Nicobar Islands	0.61	Moderate	0.42	Low	0.38	Low
Chandigarh	0.32	Low	0.24	Very Low	0.23	Very Low
D & N Haveli	0.04	Very Low	0.12	Very Low	0.26	Low
Daman & Diu	1	High	0.36	Low	0.37	Low
Lakshadweep	0.36	Low	0.48	Low	0.47	Low
Puducherry	0.49	Low	0.43	Low	0.33	Low

Source: *Author's Estimation from Census of India, 1991, 2001 and 2011*

Table 5A: *Values of Women's Access to Banking Index and Decadal Change by All India, States and Union Territories (2001-2011) and their Categories*

All India	T ₂ (2001)	Category	T ₃ (2011)	Category
	0.35	Low	0.44	Low
NORTH				
Delhi	0.46	Low	0.53	Moderate
Haryana	0.38	Low	0.34	Low
Himachal Pradesh	0.51	Moderate	0.34	Low
Jammu & Kashmir	0.36	Low	0.36	Low
Punjab	0.51	Moderate	0.44	Low
Rajasthan	0.23	Very Low	0.31	Low
Uttarakhand	0.32	Low	0.23	Very Low
CENTRAL				
Chhattisgarh	0.17	Very Low	0.14	Very Low
Madhya Pradesh	0.24	Very Low	0.24	Very Low
Uttar Pradesh	0.28	Low	0.69	Moderate
EAST				
Bihar	0.20	Very Low	0.30	Low
Jharkhand	0.18	Very Low	0.23	Very Low
Odisha	0.11	Very Low	0.22	Very Low
West Bengal	0.26	Low	0.21	Very Low
NORTH-EAST				
Arunachal Pradesh	0.21	Very Low	0.14	Very Low
Assam	0.23	Very Low	0.26	Low
Manipur	0.10	Very Low	0.20	Very Low
Meghalaya	0.79	High	0.55	Moderate
Mizoram	0.48	Low	1.00	High
Tripura	0.32	Low	0.31	Low
Nagaland	0.28	Low	0.34	Low
Sikkim	0.47	Low	0.34	Low
WEST				
Goa	0.71	Moderate	0.71	Moderate
Gujarat	0.31	Low	0.35	Low
Maharashtra	0.30	Low	0.32	Low
SOUTH				
Andhra Pradesh	0.37	Low	0.53	Moderate
Karnataka	0.49	Low	0.57	Moderate
Kerala	0.61	Moderate	0.68	Moderate
Tamil Nadu	0.47	Low	0.69	Moderate
OTHER UNION TERRITORIES				
Andaman & Nicobar Islands	0.49	Low	0.24	Very Low
Chandigarh	0.41	Low	0.44	Low
D & N Haveli	0.29	Low	0.00	Very Low
Daman & Diu	0.34	Low	0.19	Very Low
Lakshadweep	0.33	Low	0.59	Moderate
Puducherry	0.47	Low	0.60	Moderate

Source: *Author's Estimation from RBI data of Basic Statistical Returns of SCBs*

Table 6A: Values of Women's Access to health Index by All India, States, and Delhi (1991-2011) and their Categories

	T ₁ (1991)	Category	T ₂ (2001)	Category	T ₃ (2011)	Category
All India	0.21	Very Low	0.3	Low	0.35	Low
NORTH						
Delhi	0.41	Low	0.57	Moderate	0.57	Moderate
Haryana	0.11	Very Low	0.18	Very Low	0.32	Low
Himachal Pradesh	0.11	Very Low	0.25	Very Low	0.4	Low
Jammu & Kashmir	0.17	Very Low	0.32	Low	0.47	Low
Punjab	0.2	Very Low	0.34	Low	0.49	Low
Rajasthan	0.06	Very Low	0.17	Very Low	0.25	Very Low
Uttarakhand	NA	NA	NA	NA	0.29	Low
CENTRAL						
Chhattisgarh	NA	NA	NA	NA	0.09	Very Low
Madhya Pradesh	0.11	Very Low	0.15	Very Low	0.22	Very Low
Uttar Pradesh	0.06	Very Low	0.1	Very Low	0.16	Very Low
EAST						
Bihar	0.07	Very Low	0.09	Very Low	0.15	Very Low
Jharkhand	NA	NA	NA	NA	0.13	Very Low
Odisha	0.09	Very Low	0.18	Very Low	0.32	Low
West Bengal	0.27	Low	0.37	Low	0.39	Low
NORTH EAST						
Arunachal Pradesh	0.15	Very Low	0.27	Low	0.24	Very Low
Assam	0.05	Very Low	0.12	Very Low	0.18	Very Low
Manipur	0.18	Very Low	0.31	Low	0.43	Low
Meghalaya	0.25	Very Low	0.12	Very Low	0.25	Very Low
Mizoram	0.46	Low	0.55	Moderate	0.58	Moderate
Tripura	0	Very Low	NA	NA	0.44	Low
Nagaland	0.26	Low	0.07	Very Low	0.06	Very Low
Sikkim	NA	NA	0.27	Low	0.44	Low
WEST						
Goa	0.87	High	0.9	High	0.92	High
Gujarat	0.32	Low	0.43	Low	0.5	Low
Maharashtra	0.41	Low	0.5	Low	0.63	Moderate
SOUTH						
Andhra Pradesh	0.29	Low	0.47	Low	0.63	Moderate
Karnataka	0.34	Low	0.48	Low	0.63	Moderate
Kerala	0.88	High	0.93	High	1	High
Tamil Nadu	0.62	Moderate	0.72	Moderate	0.88	High

Source: Author's Estimation from NFHS-1(1992-93), NFHS-2(1998-99) &NFHS 3(2005-06) data

Table 7A: *Values of Women's Access to Organised Sector Job Index by All India, States and Union Territories (2001-2011) and their Categories*

	T₂(2001)	Category	T₃(2011)	Category
All India	0.38	Low	0.37	Low
NORTH				
Delhi	0.8	High	0.44	Low
Haryana	0.47	Low	0.52	Moderate
Himachal Pradesh	0.35	Low	0.28	Low
Jammu & Kashmir	0.42	Low	0.26	Low
Punjab	0.63	Moderate	0.58	Moderate
Rajasthan	0.21	Very Low	0.11	Very Low
Uttarakhand	0.23	Very Low	0.17	Very Low
CENTRAL				
Chhattisgarh	0.27	Low	0.32	Low
Madhya Pradesh	0.35	Low	0.44	Low
Uttar Pradesh	0.21	Very Low	0.02	Very Low
EAST				
Bihar	0.11	Very Low	0	Very Low
Jharkhand	0.29	Low	0.28	Low
Odisha	0.15	Very Low	0.15	Very Low
West Bengal	0.25	Very Low	0.35	Low
NORTHEAST				
Arunachal Pradesh	0.15	Very Low	0.15	Very Low
Assam	0.18	Very Low	0.21	Very Low
Manipur	0.39	Low	0.51	Moderate
Meghalaya	0.43	Low	0.4	Low
Mizoram	0.26	Low	0.36	Low
Tripura	0.22	Very Low	0.21	Very Low
Nagaland	0.36	Low	0.25	Very Low
Sikkim	0.44	Low	0.37	Low
WEST				
Goa	0.66	Moderate	0.71	Moderate
Gujarat	0.45	Low	0.58	Moderate
Maharashtra	0.33	Low	0.34	Low
SOUTH				
Andhra Pradesh	0.37	Low	0.39	Low
Karnataka	0.49	Low	0.32	Low
Kerala	0.78	High	0.8	High
Tamil Nadu	0.72	Moderate	0.73	Moderate
OTHER UNION TERRITORIES				
Andaman & Nicobar Islands	0.52	Moderate	0.63	Moderate
Chandigarh	1	High	0.18	Very Low
D & N Haveli	0.56	Moderate	0.37	Low
Daman & Diu	0.46	Low	0.52	Moderate
Lakshadweep	0.27	Low	0.27	Low
Puducherry	0.57	Moderate	0.53	Moderate

Source: *Author's Estimation from the data of DISE state report card, 2010-11 and 7th All India Education Survey*

Table 8: *Values of Women Economic Empowerment Index by All India, States and Union Territories (1991-2011) and their Categories*

All India	T ₁ (1991) ¹ 0.21	Category Very Low	T ₂ (2001) ¹ 0.29	Category Low	T ₃ (2011) ¹ 0.38	Category Low
North						
Delhi	0.18	Very Low	0.38	Low	0.43	Low
Haryana	0.12	Very Low	0.31	Low	0.34	Low
Himachal Pradesh	0.23	Very Low	0.39	Low	0.36	Low
Jammu & Kashmir	NA	NA	0.24	Very Low	0.25	Very Low
Punjab	0.03	Very Low	0.18	Very Low	0.21	Very Low
Rajasthan	0.07	Very Low	0.13	Very Low	0.26	Low
Uttarakhand	NA	NA	0.27	Low	0.3	Low
CENTRAL						
Chhattisgarh	NA	NA	0.27	Low	0.27	Low
Madhya Pradesh	0.26	Low	0.18	Very Low	0.33	Low
Uttar Pradesh	0.06	Very Low	0.08	Very Low	0.2	Very Low
EAST						
Bihar	0.02	Very Low	0.11	Very Low	0.11	Very Low
Jharkhand	NA	NA	0.2	Very Low	0.26	Low
Odisha	0.16	Very Low	0.15	Very Low	0.23	Very Low
West Bengal	0.2	Very Low	0.19	Very Low	0.25	Very Low
Northeast						
Arunachal Pradesh	0.32	Low	0.28	Low	0.29	Low
Assam	0.11	Very Low	0.15	Very Low	0.2	Very Low
Manipur	0.26	Low	0.23	Very Low	0.33	Low
Meghalaya	0.38	Low	0.39	Low	0.48	Low
Mizoram	0.64	Moderate	0.44	Low	0.54	Moderate
Tripura	0.04	Very Low	0.27	Low	0.3	Low
Nagaland	0.4	Low	0.3	Low	0.32	Low
Sikkim	0.31	Low	0.23	Very Low	0.37	Low
WEST						
Goa	0.4	Low	0.5	Low	0.56	Moderate
Gujarat	0.25	Very Low	0.36	Low	0.4	Low
Maharashtra	0.36	Low	0.34	Low	0.44	Low
SOUTH						
Andhra Pradesh	0.31	Low	0.42	Low	0.5	Low
Karnataka	0.33	Low	0.36	Low	0.46	Low
Kerala	0.38	Low	0.5	Low	0.54	Moderate
Tamil Nadu	0.45	Low	0.53	Moderate	0.62	Moderate
Other Union Territories						
Andaman & Nicobar Islands	0.3	Low	0.4	Low	0.39	Low
Chandigarh	0.27	Low	0.39	Low	0.3	Low
D & N Haveli	0.18	Very Low	0.32	Low	0.1	Very Low
Daman & Diu	0.52	Moderate	0.36	Low	0.34	Low
Lakshadweep	0.18	Very Low	0.29	Low	0.35	Low
Puducherry	0.4	Low	0.46	Low	0.45	Low

Source: *Author's Estimation*