# Urban-Rural Disparity in Family Planning Use in India, 1992-2021

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## Abstract

This paper analyses urban-rural disparity in family planning use in India and in its constituent states and Union Territories during 1992-1993 through 2019-2021. The analysis reveals that urban-rural disparity in family planning use in India has decreased significantly largely because of relatively slow increase in family planning use in the urban population of the country as compared to the rural population. The paper also reveals that urban-rural disparity in the use of traditional family planning methods has increased in recent years because of relatively more rapid increase in the use of traditional methods in the urban population as compared to the rural population. The paper calls for reinvigorating family planning services delivery system in the urban population of the country. The paper also reveals significant variation in urban-rural disparity in family planning use across states/Union Territories of the country.

## Introduction

The urban-rural disparity in family planning use in India is well-known. According to the latest National Family Health Survey 2019-2021 (NFHS-5), more than 69 per cent of the currently married women in the reproductive age group (15-49 years) in the urban population or their husband were practising a family planning method at the time of the survey compared to around 65 per cent currently married women in the reproductive age group in the rural population (Government of India, 2021). In 1992-1993, these proportions were 51 per cent and 37 per cent respectively (Government of India, 1997). The urban-rural disparity in use is also not the same for different family planning methods which can be grouped into two categories – modern family planning methods and traditional family planning methods. Modern family planning methods are defined as technological products or medical procedures that affect the natural reproduction process (Hubacher and Trussell, 2015) and include contraceptive pills, condoms (male and female), intrauterine device (IUD),

sterilisation (male and female), injectables, hormone implants, patches, diaphragms, spermicidal agents (foam/jelly), and emergency contraception. Modern family planning methods are further divided into permanent methods (male and female sterilisation) and modern spacing methods (all modern methods other than male and female sterilisation). Traditional family planning methods, on the other hand, include those methods that regularly track cervical mucus, such as the Billing's method, those that track a woman's body temperature, frequent and regular breastfeeding during the first six months after birth, and abstinence during certain times of the menstrual cycle. The context of the use of permanent methods, modern spacing methods and traditional family planning methods are different. Permanent methods are nearly cent per cent effective in preventing conception, but they are not reversible. Modern spacing methods are reversible but the effectiveness of different modern spacing methods in preventing conception is different for different methods. Traditional family planning methods are also reversible, but they are mostly considered less effective in preventing conception (International Institute for Population Sciences, 2010), although it is argued that they can be highly effective if used with dedication and proper knowledge (Johnson-Hanks, 2002). According to the National Family Health Survey, 58.5 per cent of the currently married women in the reproductive age group or their husband were using a modern family planning method in the urban population corresponding to 55.5 per cent in the rural population in 2019-2021. In 1992-1993, these proportions were 45 per cent and 33 per cent respectively. It is, however, not necessary that use of different family planning methods is always high either in the urban as compared to the rural or in the rural as compared to the urban population. There may be a possibility that use of a family planning method is higher in urban than in rural population, but use of other family planning method is higher in rural than in urban population. The sum of the urban-rural difference in the use of different family planning methods, therefore, may not reflect the true urban-rural disparity in family planning use. There is, therefore, the need to measure the urban-rural disparity in the use of different family planning methods separately, and then combine the method-specific urban-rural disparity in use into a single index of urban-rural disparity in family planning use. This paper is an attempt in this direction.

Reasons for urban-rural disparity in family planning use are not known. The literature is scanty on the urban–rural difference in the use of different family planning methods. The urban-rural disparity in the use of different family planning methods reflects the difference in the choices and preferences of urban couples as compared to choices and preferences of rural couples about different family planning methods. The urban-rural disparity in the use of different family planning methods may also reflect the difference in the availability and access to different family planning methods in urban and rural populations. There are some studies in India which have analysed the urban-rural difference in family planning use (Majumdar et al, 1972; Reddy, 1984; Gore and Katkuri, 2016; Nagdeve and Bharti, 2003). These studies, however, focus on either a specific population group or a specific family planning method. There is, to the best of our knowledge, no study which has analysed the urban-rural disparity in family planning use in India through a pan-India perspective. Such an analysis is relevant to understand the impact of official family planning

policies and programmes and for strengthening the family planning services delivery system. It can be conjectured that urban-rural disparity is different for different family planning methods and the contribution of the urban-rural disparity in use of different methods to the urban-rural disparity in family planning use may be different because of the proportionate share of different methods in total family planning use is different.

In this paper, we develop an index to measure the urban-rural disparity in family planning use that considers both urban-rural disparity in the use of different family planning methods and the proportionate share of different methods in total family planning use. We use the disparity index so developed to analyse urban-rural disparity in family planning use in India and in its constituent states/Union Territories during the period 1992-1993 through 2019-2021 using the data available through the National Family Health Survey. To the best of our knowledge, the present analysis is the first to highlight the urban-rural disparity in family planning use in India and has relevance to strengthening the family planning services delivery system which largely remains official in its organisation and implementation.

The paper is organised as follows. The next section of the paper develops the index of urban-rural disparity in family planning use. Section three describes the data source used in the analysis. The paper is based on the estimates of the prevalence of modern spacing methods, permanent methods, and traditional family planning methods available from the five rounds of the National Family Health Survey that have been carried out in 1992-1993; 1998-1999; 2005-2006; 2015-2016; and 2019-2021. Section four discusses patterns and trends in the prevalence of different family planning methods in urban and rural populations. The urban-rural disparity in family planning use is presented and discussed in section five of the paper. Section six decomposes the change in urban-rural disparity in family planning use into change in urban-rural disparity in different methods, and the change in family planning method mix. The last section of the paper summarises main findings of the analysis and discusses their relevance for improving the family planning services delivery system in the country in the context of meeting the family planning needs of the people.

## Urban-Rural Disparity in Family Planning Use

The measurement of urban-rural disparity in family planning use is essentially an arbitrary procedure. Ideally, there should be no urban-rural disparity in the use of different family planning methods. There are, however, both endogenous and exogenous factors because of which family planning use is different in urban and rural populations. The main endogenous factor is the organisation of family planning services in urban and rural populations. The delivery of family planning services in India is an integral component of the public health care delivery system. In the rural population of the country, a nested, three tier public health care delivery system is in place in which every rural habitation is nested into the health sub-centre; every health sub-centre is nested into the primary health centre;

and every primary health centre is nested into the community health centre. This nested system ensures, at least on paper, that every rural currently married woman of reproductive age is mapped into the family planning services delivery system. Moreover, an extension approach is adopted for the delivery of family planning services in the rural population. In the urban areas, nested public health care delivery system does not exist, and the delivery of family planning services is essentially clinic or hospital-based which does not ensure mapping of every currently married urban woman of reproductive age into the family planning services delivery system.

There are many exogenous factors also that are responsible for urban-rural disparity in the use of different family planning methods. The use of different family planning methods is found to be directly related to the educational status of women and the level of woman education is higher in urban than in rural population. The availability and access to different family planning methods, especially, modern spacing methods, is also better in urban than in rural population. It is also argued that urban-rural disparity in family planning use may be because of the difference in the number of children desired. Urban-rural disparity in the use of different family planning methods may be viewed as the inequality that reflects the inability of either urban or rural women in achieving their desired family size because of problems of availability and accessibility of family planning methods. Finally, a range of social and cultural factors also influence family planning use in urban and rural populations.

The urban-rural disparity in family planning use can be measured in both absolute and relative terms. In absolute terms, urban-rural disparity in family planning use is the sum of the arithmetic difference between the prevalence of different family planning methods in urban and rural populations. If $u_i$ is the prevalence of method $i$ in the urban population and $r_i$ is the prevalence in the rural population, then the absolute urban-rural disparity in family planning use is defined as

$$AD = \sum_{i=1}^{n} AD_i = \sum_{i=1}^{n}(u_i - r_i) \tag{1}$$

Where $n$ is the number of family planning methods available. The method-specific urban-rural difference in prevalence, $AD_i$, can be both positive and negative. When $u_i > r_i$, $AD_i > 0$. When $u_i < r_i$, $AD_i < 0$. When $u_i = r_i$, $AD_i = 0$. The larger the deviation of $AD_i$ from 0 the greater the urban-rural disparity in the use of family planning method $i$. $AD$ is the algebraic sum of method-specific $AD_i$. An advantage of $AD$ is that the change in $AD$ between two points in time can be decomposed into the change in $AD_i$ as follows

$$\nabla AD = AD^2 - AD^1 = \sum_{i=1}^{n}(u_i^2 - u_i^1) - (r_i^2 - r_i^1) = \sum_{i=1}^{n} \nabla u_i - \nabla r_i = \sum_{i=1}^{n} \nabla AD_i \tag{2}$$

On the other hand, in relative terms, urban-rural disparity in family planning use is defined as

$$RD = u/r \tag{3}$$

Where $u$ is the family planning prevalence in urban population and $r$ is the family planning prevalence in the rural population. When there is no disparity in family planning use, $RDI=1$. When $u>r$, $RD>1$. When $u<r$, $RD<1$. The larger the deviation of $RD$ from 1 the greater the urban-rural disparity in family planning use.

The use of the arithmetic difference between or the ratio of urban to rural family planning prevalence to measure urban-rural disparity in family planning use is, however, hazardous because both are highly influenced by the level of family planning use and the two tend to change in opposite directions with the change in the level of use often leading to contradictory evidence of the trend in urban-rural disparity (Preston and Weed, 1976). The magnitude of both arithmetic difference and ratio is necessarily limited by the magnitude of family planning prevalence in urban and rural areas since the prevalence ranges between 0 and 1. The limitations of the arithmetic difference and the ratio in measuring urban-rural disparity can be circumvented by using the logit transformation of the prevalence. The logit of the prevalence $p$ is defined as

$$logit(p) = ln\left(\frac{p}{1-p}\right) \; for \; p \in (0,1) \tag{4}$$

The logit transformation maps probability or prevalence which range between 0 and 1 to real numbers which range between $-\infty$ and $+\infty$. On the other hand, square of the logit transformation maps probability The urban-rural disparity in the use of the family planning method $i$, $D_i$, may now be defined as

$$D_i = logit(u_i) - logit(r_i) = ln\left(\frac{u_i}{1-u_i}\right) - ln\left(\frac{r_i}{1-r_i}\right) = ln\left[\frac{u_i/(1-u_i)}{r_i/(1-r_i)}\right] \tag{5}$$

When $u_i=r_i$, $D_i=0$ and there is no urban-rural disparity in the use of method $i$. It may be noticed that $D_i$ can be both positive and negative. When $D_i$ is positive, use of method $i$ is higher in urban population compared to rural population. When $D_i$ is negative, use of method $i$ is higher in rural population compared to urban population and the larger the deviation of $D_i$ from 0, the larger the urban-rural disparity in the use of method $i$. The advantage of using the logit transformation in defining the index $D_i$ is that $D_i$ is invariant to the level of use. For example, if the prevalence of method $i$ in urban and rural population is 0.400 and 0.300 respectively, then $D_i =0.442$. On the other hand, if the prevalence in the urban population is 0.600 while that in rural population is 0.700, $D_i =-0.442$. The negative value indicates that the prevalence is higher in rural than in urban population.

The urban-rural disparity in family planning use may now be constructed as the algebraic sum of method-specific urban-rural disparity in use, $D_i$. This sum, however, may not reflect the true urban-rural disparity in family planning use as $D_i$ may be positive for some methods, but negative for others so that the sum of $D_i$ of different methods may be equal to either zero or close to zero. To circumvent this problem, we construct the urban-rural disparity index in terms of the square of $D_i$ values. Constructing the urban-rural disparity index as the sum of square of $D_i$ values gives more weight to that method in which

urban-rural disparity in use is high compared to that method in which the urban-rural disparity in use is low. This implies that the decrease in urban-rural disparity in the use of those methods in which the disparity in use is high leads to a faster decrease in urban-rural disparity in family planning use compared to those methods in which the disparity in use is low. This is a desirable property of the disparity index.

The sum of square of $D_i$ values, however, gives equal weight to all family planning methods irrespective of their proportionate share in total family planning use. It is logical to argue that more weight should be given in the construction of the disparity index to that method which has a high proportionate share in total family planning use compared to that method which has low proportionate share. If $w_i$ is the proportionate share of method $i$ in total family planning use, then the index $D$ of urban-rural disparity in family planning use may be constructed as

$$D = \sqrt{\sum_{i=1}^{n} w_i * D_i^2}$$ (6)

When there is no urban-rural disparity in the use of all family planning method $D=0$ and the $D$ the larger the disparity. The index $D$ is a composite measure of urban-rural disparity in the use of individual family planning methods.

Calculation of $D$ requires calculation of $Di$ which may be calculated separately for different family planning methods or different family planning methods may be grouped into modern spacing methods, permanent methods, and traditional methods. The reason for grouping different family planning methods into modern spacing methods, permanent methods, and traditional methods is that the context of using modern family planning methods, permanent methods, and traditional methods is different. Permanent methods are irreversible so that they are used only when the family formation process is complete, or the desired family size is achieved. These methods are used only for limiting births and cannot be used for spacing births. Modern spacing methods are reversible and are used primarily to delay the first birth and to space successive births. Traditional methods are also reversible and are used for spacing births, but their use is generally argued to reflect the unmet need of modern spacing methods. Unlike most of the modern spacing methods, traditional methods do not require any supply system. They are, however, not supported by the official family planning efforts.

In the present analysis, we have grouped different family planning methods into modern spacing methods, permanent methods, and traditional methods. We have calculated the prevalence of permanent methods as the proportion of currently married women aged 15-49 years who or whose husband is using any permanent family planning method. On the other hand, prevalence of modern spacing methods is calculated as the difference between the prevalence of modern family planning methods prevalence and the prevalence of permanent methods. Finally, prevalence of traditional methods is calculated as the difference between the prevalence of all methods and the prevalence of modern family planning methods.

# Data

The analysis is built upon the estimates of the prevalence of different family planning methods in urban and rural populations available through different rounds of the National Family Health Survey (NFHS). The National Family Health Survey programme was instituted by the Government of India in 1992 to generate key indicators of health and family planning based on the statistically representative household survey. Five rounds of the survey have so far been carried out (Government of India, 1995; 2000; 2007; 2017; 2021). The first three rounds of the NFHS provided estimates of the prevalence of different family planning methods in urban and rural populations for the country and for the constituent states and Union Territories of the country. The fourth and the fifth rounds of the NFHS provided estimates of method-specific prevalence rates for the districts of the country for the total population but not for urban and rural populations because of sample size restrictions so that district level analysis of the urban-rural disparity in family planning use is not possible. Details about the organisation of NFHS are given elsewhere (Government of India, 2021) and not repeated here. The population of the country has been divided into urban and rural populations according to the criteria of classifying a settlement as an urban settlement adopted at the time of 2011 population census. The population of all urban settlements constitutes the urban population. Settlements which are not classified as urban settlement are rural settlements and the total population of all rural settlements constitutes the rural population of the country.

# Family Planning Use in Urban and Rural Population

Estimates of the prevalence of modern spacing methods, permanent methods, and traditional methods in urban and rural populations of the country and in its constituent states and Union Territories, as derived from the data available from different rounds of the National Family Health Survey, are presented in Appendix table 1. At the national level, the prevalence of modern spacing methods and the prevalence of traditional methods has always been higher in urban as compared to rural population. However, the prevalence of permanent family planning methods was higher in the urban population up to 2005-2006 only. After 2005-2006, prevalence of permanent methods has become higher in the rural population of the country relative to the urban population. Combining the prevalence of modern spacing methods, permanent methods and traditional methods, family planning use has always been higher in the urban population of the country as compared to its rural population. Among the constituent states and Union Territories of the country, Maharashtra is the only state/Union Territory where family planning use has always been higher in the rural population. On the other hand, there are 17 states/Union Territories where family planning use has always been higher in the urban population. This leaves 16 states/Union Territories where family planning use has been higher in urban population at one time but in rural population at the other time.

Table 1: Increase in the prevalence of family planning methods in urban and rural populations in India and states/Union Territories between 1992-1993 and 2019-2021.

| | Increase in urban population | | | | Increase in rural population | | | | Urban-Rural difference in increase | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $p_s$ | $p_p$ | $p_t$ | $p$ | $p_s$ | $p_p$ | $p_t$ | $p$ | $p_s$ | $p_p$ | $p_t$ | $p$ |
| India (IN) | 0.103 | 0.029 | 0.050 | 0.182 | 0.131 | 0.091 | 0.063 | 0.285 | -0.028 | -0.062 | -0.013 | -0.103 |
| Andaman & Nicobar Islands (AN) | na | na | na | na | na | na | na | na | na | na | na | na |
| Andhra Pradesh (AP) | -0.029 | 0.176 | -0.005 | 0.142 | -0.024 | 0.302 | -0.002 | 0.276 | -0.005 | -0.126 | -0.003 | -0.134 |
| Arunachal Pradesh (AR) | 0.154 | 0.004 | 0.017 | 0.175 | 0.212 | 0.088 | 0.087 | 0.387 | -0.058 | -0.084 | -0.070 | -0.212 |
| Assam (AS) | 0.220 | -0.133 | -0.096 | -0.009 | 0.321 | -0.043 | -0.072 | 0.206 | -0.101 | -0.090 | -0.024 | -0.215 |
| Bihar (BI) | 0.065 | 0.013 | 0.120 | 0.198 | 0.066 | 0.188 | 0.094 | 0.348 | -0.001 | -0.175 | 0.026 | -0.150 |
| Chandigarh (CD) | na | na | na | na | na | na | na | na | na | na | na | na |
| Chhattisgarh (CH) | na | na | na | na | na | na | na | na | na | na | na | na |
| Daman & Diu (DD) | na | na | na | na | na | na | na | na | na | na | na | na |
| Dadra & Nagar Haveli and Daman & Diu (DN) | na | na | na | na | na | na | na | na | na | na | na | na |
| Delhi (DE) | 0.078 | -0.051 | 0.131 | 0.158 | 0.122 | -0.031 | 0.069 | 0.160 | -0.044 | -0.020 | 0.062 | -0.002 |
| Dadra and Nagar Haveli (DA) | na | na | na | na | na | na | na | na | na | na | na | na |
| Goa (GO) | 0.225 | 0.058 | -0.072 | 0.211 | 0.221 | -0.087 | 0.033 | 0.167 | 0.004 | 0.145 | -0.105 | 0.044 |
| Gujarat (GU) | 0.139 | -0.089 | 0.118 | 0.168 | 0.092 | -0.016 | 0.071 | 0.147 | 0.047 | -0.073 | 0.047 | 0.021 |
| Haryana (HA) | 0.138 | -0.035 | 0.052 | 0.155 | 0.181 | 0.004 | 0.077 | 0.262 | -0.043 | -0.039 | -0.025 | -0.107 |
| Himachal Pradesh (HP) | 0.108 | -0.145 | 0.085 | 0.048 | 0.135 | -0.029 | 0.064 | 0.170 | -0.027 | -0.116 | 0.021 | -0.122 |
| Jammu & Kashmir (JA) | 0.089 | -0.055 | -0.086 | -0.052 | 0.235 | -0.089 | -0.008 | 0.138 | -0.146 | 0.034 | -0.078 | -0.190 |
| Jharkhand (JH) | na | na | na | na | na | na | na | na | na | na | na | na |
| Karnataka (KA) | 0.049 | 0.148 | -0.021 | 0.176 | 0.059 | 0.154 | -0.008 | 0.205 | -0.010 | -0.006 | -0.013 | -0.029 |
| Kerala (KE) | 0.001 | -0.068 | -0.001 | -0.068 | -0.004 | 0.020 | -0.029 | -0.013 | 0.005 | -0.088 | 0.028 | -0.055 |
| Ladakh (LA) | na | na | na | na | na | na | na | na | na | na | na | na |
| Lakshadweep (LK) | na | na | na | na | na | na | na | na | na | na | na | na |

| | Increase in urban population | | | | Increase in rural population | | | | Urban-Rural difference in increase | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $p_s$ | $p_p$ | $p_t$ | $p$ | $p_s$ | $p_p$ | $p_t$ | $p$ | $p_s$ | $p_p$ | $p_t$ | $p$ |
| Madhya Pradesh (MA) | 0.099 | 0.077 | 0.061 | 0.237 | 0.063 | 0.440 | -0.118 | 0.385 | 0.036 | -0.363 | 0.179 | -0.148 |
| Maharashtra (MH) | -0.257 | 0.376 | 0.010 | 0.129 | 0.078 | 0.031 | 0.013 | 0.122 | -0.335 | 0.345 | -0.003 | 0.007 |
| Manipur (MN) | -0.023 | -0.100 | 0.295 | 0.172 | 0.072 | -0.102 | 0.339 | 0.309 | -0.095 | 0.002 | -0.044 | -0.137 |
| Meghalaya (MY) | 0.061 | -0.128 | 0.007 | -0.060 | 0.132 | -0.024 | -0.010 | 0.098 | -0.071 | -0.104 | 0.017 | -0.158 |
| Mizoram (MZ) | 0.053 | -0.325 | -0.008 | -0.280 | 0.138 | -0.307 | -0.001 | -0.170 | -0.085 | -0.018 | -0.007 | -0.110 |
| Nagaland (NG) | 0.267 | 0.012 | 0.125 | 0.404 | 0.229 | 0.100 | 0.119 | 0.448 | 0.038 | -0.088 | 0.006 | -0.044 |
| Odisha (OD) | 0.147 | -0.126 | 0.274 | 0.295 | 0.179 | -0.015 | 0.230 | 0.394 | -0.032 | -0.111 | 0.044 | -0.099 |
| Puducherry (PD) | na | na | na | na | na | na | na | na | na | na | na | na |
| Punjab (PU) | 0.070 | -0.119 | 0.105 | 0.056 | 0.103 | -0.094 | 0.073 | 0.082 | -0.033 | -0.025 | 0.032 | -0.026 |
| Rajasthan (RA) | 0.190 | -0.026 | 0.107 | 0.271 | 0.150 | 0.197 | 0.088 | 0.435 | 0.040 | -0.223 | 0.019 | -0.164 |
| Sikkim (SI) | na | na | na | na | na | na | na | na | na | na | na | na |
| Tamil Nadu (TA) | -0.015 | 0.210 | -0.028 | 0.167 | 0.035 | 0.178 | -0.010 | 0.203 | -0.050 | 0.032 | -0.018 | -0.036 |
| Telangana (TE) | na | na | na | na | na | na | na | na | na | na | na | na |
| Tripura (TR) | 0.253 | -0.112 | -0.083 | 0.058 | 0.300 | -0.085 | -0.050 | 0.165 | -0.047 | -0.027 | -0.033 | -0.107 |
| Uttar Pradesh (UP) | 0.212 | -0.022 | 0.166 | 0.356 | 0.217 | 0.057 | 0.167 | 0.441 | -0.005 | -0.079 | -0.001 | -0.085 |
| Uttarakhand (UT) | na | na | na | na | na | na | na | na | na | na | na | na |
| West Bengal (WB) | 0.230 | 0.015 | -0.088 | 0.157 | 0.249 | -0.019 | -0.057 | 0.173 | -0.019 | 0.034 | -0.031 | -0.016 |

$p$    Prevalence of all family planning methods
$p_s$    Prevalence of modern spacing methods
$p_p$    Prevalence of permanent methods
$p_t$    Prevalence of traditional methods
na    Not available
Source: Authors' calculations

The prevalence of different family planning methods has varied widely in both urban and rural populations across states and Union Territories. During 2019-2021, prevalence of permanent methods was higher in the rural population in 26 states/Union Territories whereas prevalence of modern spacing methods was higher in rural population in only 7 states/Union Territories and prevalence of traditional methods in 6 states/Union Territories. There are only two states/Union Territories – Andaman and Nicobar Islands and Sikkim - where family planning use has been higher in the rural population throughout the period under reference. Similarly, there are only two states – Jharkhand and Tripura – where family planning use has always been higher in the urban population. In remaining states/Union Territories, urban-rural difference in the use of modern spacing methods permanent methods and traditional methods has been in different direction.

In 1992-1993, 1998-1999 and 2005-2006, there was no state/Union Territory in the country where the prevalence of modern spacing methods was higher in the rural population as compared to that in the urban population. However, in 2015-2016 and 2019-2021, there were 7 states/Union Territories where use of modern spacing methods was higher in the rural population as compared to the urban population. Similarly, there were 10 states where use of permanent methods was relatively higher in the rural population as compared to the urban population in 1992-1993. This number decreased to 9 in 1998-1999 but increased to 17 in 2005-2006 and 22 in 2015-2016. On the other hand, the number of states/Union Territories where use of traditional methods was relatively higher in the rural population as compared to the urban population decreased from 3 in 1992-1993 to 1 in 1998-1999 but increased to 5 in 2005-2006 and 7 in 2015-2016. In 2019-2021, the use of traditional methods was higher in the rural population as compared to the urban population in 6 states/Union Territories.

The change in the urban-rural difference in family planning prevalence is the result of the change in the urban-rural difference in the prevalence of three categories of family planning methods - modern spacing methods, permanent methods, and traditional family planning methods. In India, the increase in the use of all three categories of family planning methods has been more rapid in the rural population as compared to the increase in the urban population (Table 1). The urban-rural difference in family planning use in the country decreased by more than 10 per cent points between 1992-1993 and 2019-2021 and most of this decrease is attributed to the decrease in the urban-rural difference in the use of permanent family planning methods as the increase in the use of permanent methods in the urban population of the country has been very slow relative to the increase in the rural population during this period. Among different states, there is only 8 states – Andhra Pradesh, Arunachal Pradesh, Assam, Haryana, Karnataka, Mizoram, Tripura, and Uttar Pradesh – where the increase in use of all the three categories of family planning methods has been more rapid in the rural population as compared to the increase in the urban population between 1993-1993 and 2019-2021. On the other hand, there is no state in the country where the increase in the use of all the three categories of family planning methods has been more rapid in the urban population as compared to the increase in the rural

population. As such, in all but three states, urban-rural difference in family planning use has narrowed down over time. The three states where urban-rural difference in family planning use has widened between 1992-1993 and 2019-2021 are Goa, Gujarat, and Maharashtra. Table 1 suggests that the trend in the use of modern spacing methods, permanent methods and traditional family planning methods has been different in different states. Table 1 also suggests that, within each state, the trend in the use of modern spacing methods, permanent methods and traditional methods has, in general, been different.

Table 2 presents urban-rural odds ratio in family planning use. In India, the odd of using a family planning method in the urban population was 77 per cent higher than the odd of using a family planning method in the rural population in 1992-1993 which reduced to around 18 per cent in 2019-2021 (Figure 1). On the other hand, the odd of using a modern spacing method in the urban population was 3.76 times higher than that in the rural population in 1992-1993 but 1.43 times in 2019-2021 whereas the odd of using a permanent method in the urban population was 1.19 times higher than that in the rural population which means that the probability of using a permanent method in the urban population was about 19 per cent higher than the probability of using a permanent method in the rural population. The odds ratio of the use of permanent methods in urban and rural populations reduced to 1.03 in 2005-2006 which means that probability of using a permanent method in the urban population was only 3 per cent higher than that in the rural population. In 2015-2016, the urban-rural odds ratio in the use of permanent methods decreased to 0.98 and to almost 0.90 in 2019-2021. An odds ratio of 0.90 implies that the probability of using a permanent method in the urban population is 10 per cent lower than that in the rural population. In other words, the prevalence of permanent family planning methods in India is now higher in the rural population as compared to the urban population.

As regards the use of traditional family planning methods, the odds of using a traditional method in the urban population was 1.56 times the odds of using a traditional method in the rural population in 1992-1993 which means that the probability of using a traditional family planning method in the urban population was almost 56 per cent higher than the probability of using a traditional family panning method in the rural population. However, the urban-rural difference in the prevalence of traditional family planning methods decreased quite rapidly after 1992-1993 so that, by 2015-2016, the probability of using a traditional family planning method in the urban population was less than 4 per cent higher than the probability of using a traditional family planning method in the rural population. However, after 2015-2016, there has been more rapid increase in the prevalence of traditional methods in the urban population as compared to that in the rural population so that, in 2019-2021, the probability of using a traditional family planning method in the urban population was almost 8 per cent higher than the probability of using a traditional family planning method in the rural population of the country. It appears that the increase in the use of modern spacing methods and permanent family planning methods in the urban population of the country has not been able to keep pace with the increase in the use of these methods in the rural population of the country in the last 30 years.
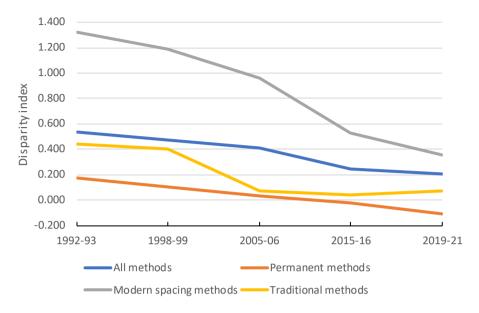
Figure 1: Urban-Rural odds ratio in the use of all methods, modern spacing methods, permanent methods, and traditional family planning use in India, 1992-1993 through 2019-2021.
Source: Authors

In many states/Union Territories, urban-rural odds ratio in family planning use was less than 1 in 2019-2021 meaning that family panning use in the urban population of these states/Union Territories was lower than that in the rural population. The most notable of these states/Union Territories is Sikkim where odds of family planning use in the urban population was more than 63 per cent lower than that in the rural population. In Dadra & Nagar Haveli and Daman & Diu also, odds of family planning use in the urban population are almost 33 per cent lower than that in the rural population. By contrast, odds of family planning use in the urban population are more than 66 per cent higher than that in the rural population in Goa and 50 per cent in Tripura.

There is high degree of volatility in the urban-rural odds ratio in family planning use over time and across states/Union Territories and considerable inconsistency in the trend in this ratio in many states/Union Territories. There appear state/Union Territory specific factors that may be responsible for the observed volatility in the urban-rural disparity in the use of different family planning methods. These factors are largely unknown. One of these factors may be the difference in the organisation of family planning delivery services in urban and rural populations in different states/Union Territories. There may also be exogenous factors such as the degree of urbanisation, composition of the urban population by size class of urban settlements and the difference in the level of social and economic development in urban and rural areas in different states/Union Territories.

Table 2: Urban-rural odds ratio in family planning use in India and states/Union Territories, 1992-1993 through 2019-2021.

| Country/State/Union Territory | Period | Urban-Rural odds ratio in | | | |
|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| India | 1992-1993 | 3.765 | 1.186 | 1.559 | 1.772 |
| | 1998-1999 | 3.284 | 1.109 | 1.493 | 1.723 |
| | 2005-2006 | 2.621 | 1.034 | 1.071 | 1.577 |
| | 2015-2016 | 1.701 | 0.983 | 1.037 | 1.249 |
| | 2019-2021 | 1.427 | 0.899 | 1.078 | 1.184 |
| Andaman & Nicobar Islands | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 0.556 | 0.708 | 0.508 | 0.569 |
| | 2019-2021 | 0.904 | 0.551 | 0.597 | 0.432 |
| Andhra Pradesh | 1992-1993 | 1.504 | 1.554 | 3.357 | 1.687 |
| | 1998-1999 | 5.673 | 1.021 | 2.213 | 1.239 |
| | 2005-2006 | 4.597 | 0.919 | 0.832 | 1.005 |
| | 2015-2016 | 7.085 | 0.867 | na | 0.928 |
| | 2019-2021 | 2.826 | 0.923 | 5.020 | 0.981 |
| Arunachal Pradesh | 1992-1993 | 1.903 | 1.644 | 3.549 | 2.486 |
| | 1998-1999 | 1.366 | 1.576 | 2.048 | 1.798 |
| | 2005-2006 | 1.734 | 0.771 | 1.564 | 1.260 |
| | 2015-2016 | 0.985 | 0.651 | 0.512 | 0.722 |
| | 2019-2021 | 1.010 | 0.810 | 1.029 | 0.902 |
| Assam | 1992-1993 | 2.481 | 1.914 | 1.419 | 2.468 |
| | 1998-1999 | 1.318 | 1.118 | 1.551 | 1.563 |
| | 2005-2006 | 2.199 | 1.127 | 0.957 | 1.621 |
| | 2015-2016 | 1.056 | 1.058 | 1.102 | 1.124 |
| | 2019-2021 | 0.842 | 1.049 | 1.348 | 1.030 |
| Bihar | 1992-1993 | 4.796 | 2.226 | 2.591 | 2.994 |
| | 1998-1999 | 4.419 | 1.661 | 1.777 | 2.144 |
| | 2005-2006 | 2.700 | 1.559 | 2.127 | 2.238 |
| | 2015-2016 | 2.609 | 1.474 | 4.074 | 1.804 |
| | 2019-2021 | 1.900 | 0.859 | 1.508 | 1.374 |
| Chandigarh | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | na | na | na | na |
| | 2019-2021 | na | na | na | na |
| Chhattisgarh | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | 5.418 | 1.076 | 1.917 | 1.898 |
| | 2015-2016 | 2.404 | 0.869 | 1.598 | 1.245 |
| | 2019-2021 | 1.481 | 0.968 | 1.071 | 1.235 |

| Country/State/Union Territory | Period | Urban-Rural odds ratio in | | | |
|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| Dadra & Nagar Haveli | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 1.847 | 0.658 | 0.098 | 0.728 |
| | 2019-2021 | na | na | na | na |
| Dadra & Nagar Haveli and Daman & Diu | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | na | na | na | na |
| | 2019-2021 | 1.925 | 0.401 | 1.589 | 0.663 |
| Daman & Diu | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 3.112 | 0.420 | na | 0.608 |
| | 2019-2021 | na | na | na | na |
| Delhi | 1992-1993 | 1.165 | 1.065 | 1.248 | 1.248 |
| | 1998-1999 | 1.567 | 0.713 | 1.470 | 1.146 |
| | 2005-2006 | 1.924 | 0.548 | 1.276 | 1.127 |
| | 2015-2016 | 1.085 | 0.739 | 1.019 | 0.868 |
| | 2019-2021 | 0.951 | 0.942 | 1.776 | 1.310 |
| Goa | 1992-1993 | 1.796 | 0.746 | 2.971 | 1.314 |
| | 1998-1999 | 1.710 | 1.109 | 1.308 | 1.424 |
| | 2005-2006 | 1.924 | 0.864 | 1.489 | 1.335 |
| | 2015-2016 | 1.838 | 4.098 | 1.068 | 3.185 |
| | 2019-2021 | 1.229 | 1.499 | 0.826 | 1.662 |
| Gujarat | 1992-1993 | 3.824 | 0.829 | 2.096 | 1.231 |
| | 1998-1999 | 3.912 | 0.672 | 2.418 | 1.220 |
| | 2005-2006 | 2.842 | 0.678 | 0.947 | 1.080 |
| | 2015-2016 | 2.532 | 0.601 | 2.923 | 1.016 |
| | 2019-2021 | 2.351 | 0.593 | 1.878 | 1.385 |
| Haryana | 1992-1993 | 4.162 | 0.672 | 2.527 | 1.576 |
| | 1998-1999 | 3.370 | 0.536 | 2.033 | 1.343 |
| | 2005-2006 | 2.903 | 0.395 | 2.473 | 1.217 |
| | 2015-2016 | 1.325 | 0.600 | 1.237 | 0.762 |
| | 2019-2021 | 1.655 | 0.552 | 1.292 | 1.031 |
| Himachal Pradesh | 1992-1993 | 4.400 | 0.723 | 2.080 | 1.787 |
| | 1998-1999 | 4.741 | 0.533 | 1.670 | 1.424 |
| | 2005-2006 | 3.619 | 0.403 | 1.684 | 1.063 |
| | 2015-2016 | 1.612 | 0.668 | 1.633 | 1.033 |
| | 2019-2021 | 2.123 | 0.411 | 1.683 | 1.060 |

| Country/State/Union Territory | Period | Urban-Rural odds ratio in | | | |
|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| Jammu and Kashmir | 1992-1993 | 3.654 | 0.881 | 1.751 | 2.107 |
| | 1998-1999 | 1.924 | 2.001 | 1.184 | 2.716 |
| | 2005-2006 | 1.361 | 1.683 | 2.320 | 2.509 |
| | 2015-2016 | 1.349 | 1.567 | 0.725 | 1.576 |
| | 2019-2021 | 1.028 | 1.048 | 0.705 | 0.967 |
| Jharkhand | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | 3.130 | 2.188 | 3.633 | 3.819 |
| | 2015-2016 | 1.976 | 1.107 | 1.710 | 1.411 |
| | 2019-2021 | 1.246 | 1.004 | 1.316 | 1.273 |
| Karnataka | 1992-1993 | 3.191 | 0.880 | 2.268 | 1.188 |
| | 1998-1999 | 4.077 | 0.774 | 4.497 | 1.109 |
| | 2005-2006 | 3.857 | 0.613 | 2.307 | 0.821 |
| | 2015-2016 | 2.879 | 0.672 | 4.532 | 0.771 |
| | 2019-2021 | 1.631 | 0.860 | 1.605 | 1.068 |
| Kerala | 1992-1993 | 1.226 | 1.123 | 1.370 | 1.348 |
| | 1998-1999 | 1.340 | 1.008 | 1.087 | 1.105 |
| | 2005-2006 | 1.739 | 0.869 | 0.949 | 1.019 |
| | 2015-2016 | 1.179 | 0.996 | 1.000 | 1.024 |
| | 2019-2021 | 1.345 | 0.789 | 2.163 | 1.056 |
| Ladakh | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | na | na | na | na |
| | 2019-2021 | 0.901 | 0.979 | 1.559 | 0.965 |
| Lakshadweep | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 2.603 | 0.613 | 4.837 | 1.642 |
| | 2019-2021 | 1.074 | 1.232 | 0.665 | 0.865 |
| Madhya Pradesh | 1992-1993 | 3.728 | 3.737 | 0.071 | 1.819 |
| | 1998-1999 | 6.538 | 1.135 | 1.954 | 1.795 |
| | 2005-2006 | 6.195 | 0.673 | 1.889 | 1.333 |
| | 2015-2016 | 3.590 | 0.654 | 1.822 | 1.016 |
| | 2019-2021 | 2.550 | 0.567 | 1.336 | 0.976 |
| Maharashtra | 1992-1993 | 25.716 | 0.067 | 4.269 | 0.945 |
| | 1998-1999 | 2.547 | 0.615 | 3.037 | 0.839 |
| | 2005-2006 | 4.308 | 0.534 | 2.107 | 0.982 |
| | 2015-2016 | 2.281 | 0.625 | 2.510 | 0.932 |
| | 2019-2021 | 1.887 | 0.675 | 1.745 | 0.969 |

| Country/State/Union Territory | Period | Urban-Rural odds ratio in | | | |
|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| Manipur | 1992-1993 | 2.760 | 1.078 | 1.339 | 1.830 |
| | 1998-1999 | 1.449 | 1.415 | 1.092 | 1.474 |
| | 2005-2006 | 1.048 | 1.160 | 1.414 | 1.406 |
| | 2015-2016 | 0.932 | 1.371 | 1.225 | 1.142 |
| | 2019-2021 | 1.058 | 1.349 | 0.941 | 1.013 |
| Meghalaya | 1992-1993 | 1.795 | 3.021 | 0.699 | 2.134 |
| | 1998-1999 | 3.170 | 8.687 | 1.522 | 5.173 |
| | 2005-2006 | 3.124 | 3.341 | 1.319 | 3.442 |
| | 2015-2016 | 0.955 | 2.807 | 2.992 | 1.691 |
| | 2019-2021 | 0.751 | 1.393 | 1.000 | 0.908 |
| Mizoram | 1992-1993 | 1.390 | 1.138 | 3.280 | 1.305 |
| | 1998-1999 | 1.640 | 1.562 | 0.398 | 1.888 |
| | 2005-2006 | 1.225 | 1.310 | 1.502 | 1.486 |
| | 2015-2016 | 1.196 | 1.353 | na | 1.356 |
| | 2019-2021 | 0.663 | 1.132 | 1.670 | 0.815 |
| Nagaland | 1992-1993 | 1.375 | 2.807 | na | 2.121 |
| | 1998-1999 | 1.917 | 2.078 | 1.781 | 2.481 |
| | 2005-2006 | 1.668 | 2.029 | 1.760 | 2.187 |
| | 2015-2016 | 1.496 | 1.236 | 1.191 | 1.434 |
| | 2019-2021 | 1.313 | 0.906 | 1.058 | 1.244 |
| Odisha | 1992-1993 | 3.999 | 1.343 | 1.546 | 1.734 |
| | 1998-1999 | 3.617 | 0.868 | 1.460 | 1.384 |
| | 2005-2006 | 2.354 | 0.861 | 1.796 | 1.523 |
| | 2015-2016 | 1.518 | 0.864 | 1.128 | 1.220 |
| | 2019-2021 | 1.168 | 0.795 | 1.302 | 1.194 |
| Puducherry | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 0.521 | 1.163 | 1.605 | 1.061 |
| | 2019-2021 | 1.626 | 0.772 | 2.248 | 0.974 |
| Punjab | 1992-1993 | 1.808 | 0.797 | 1.234 | 1.263 |
| | 1998-1999 | 2.543 | 0.408 | 1.826 | 1.407 |
| | 2005-2006 | 1.542 | 0.487 | 1.852 | 0.898 |
| | 2015-2016 | 1.449 | 0.670 | 1.393 | 1.068 |
| | 2019-2021 | 1.334 | 0.646 | 1.406 | 1.145 |
| Rajasthan | 1992-1993 | 4.552 | 1.852 | 0.271 | 2.267 |
| | 1998-1999 | 3.360 | 1.171 | 1.979 | 1.723 |
| | 2005-2006 | 4.664 | 1.448 | 1.498 | 2.814 |
| | 2015-2016 | 2.798 | 0.739 | 1.000 | 1.283 |
| | 2019-2021 | 1.852 | 0.684 | 1.125 | 1.135 |

| Country/State/Union Territory | Period | Urban-Rural odds ratio in | | | |
|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| Sikkim | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | 1.142 | 1.070 | 1.403 | 1.322 |
| | 2015-2016 | 0.718 | 0.550 | 2.012 | 0.551 |
| | 2019-2021 | 0.503 | 0.835 | 0.736 | 0.366 |
| Tamil Nadu | 1992-1993 | 3.184 | 0.728 | 1.780 | 1.070 |
| | 1998-1999 | 4.552 | 1.041 | 2.634 | 1.461 |
| | 2005-2006 | 2.588 | 0.800 | 1.235 | 0.951 |
| | 2015-2016 | 1.901 | 1.000 | 1.000 | 1.079 |
| | 2019-2021 | 1.241 | 0.838 | 1.346 | 0.916 |
| Telangana | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | na | na | na | na |
| | 2015-2016 | 4.061 | 1.041 | na | 1.130 |
| | 2019-2021 | 2.148 | 0.925 | 1.929 | 1.067 |
| Tripura | 1992-1993 | 1.784 | 1.594 | 1.293 | 2.235 |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | 1.031 | 0.921 | 1.119 | 1.060 |
| | 2015-2016 | 0.787 | 1.509 | 1.220 | 1.182 |
| | 2019-2021 | 1.039 | 1.653 | 1.122 | 1.503 |
| Uttar Pradesh | 1992-1993 | 4.549 | 1.326 | 2.708 | 2.347 |
| | 1998-1999 | 5.720 | 1.361 | 1.506 | 2.584 |
| | 2005-2006 | 3.092 | 1.211 | 0.960 | 1.957 |
| | 2015-2016 | 2.681 | 0.805 | 1.245 | 1.722 |
| | 2019-2021 | 1.607 | 0.712 | 1.098 | 1.345 |
| Uttarakhand | 1992-1993 | na | na | na | na |
| | 1998-1999 | na | na | na | na |
| | 2005-2006 | 2.859 | 0.496 | 2.100 | 1.408 |
| | 2015-2016 | 2.052 | 0.477 | 1.705 | 1.029 |
| | 2019-2021 | 1.978 | 0.496 | 1.150 | 1.217 |
| West Bengal | 1992-1993 | 2.323 | 0.707 | 1.533 | 1.287 |
| | 1998-1999 | 1.632 | 0.714 | 1.806 | 1.519 |
| | 2005-2006 | 1.404 | 0.794 | 1.411 | 1.352 |
| | 2015-2016 | 1.206 | 0.616 | 1.275 | 0.874 |
| | 2019-2021 | 1.207 | 0.835 | 1.396 | 1.274 |

Remarks: na - Data not available
Source: Authors' calculations

# Urban-Rural Disparity in Family Planning Use

The urban-rural disparity in family planning use in India and in its constituent states and Union Territories is presented in table 3 for the period 1992-1993 through 2019-2021. The table also presents urban-rural disparity in the use of modern spacing methods, permanent methods, and traditional family planning. In India, the urban-rural disparity in family planning use has decreased very sharply during the period 1992-1993 through 2019-2021. The decrease in the urban-rural disparity in use of modern spacing methods, as measured by the index $D_s$, decreased from 1.326 in 1992-1993 to 0.356 in 2019-2021. On the other hand, the urban-rural disparity in the use of permanent methods turned negative in 2015-2016 suggesting that the use of permanent methods became higher in the rural population as compared to the urban population of the country and the rural-urban gap widened further in 2019-2021. By contrast, the urban-rural disparity in the use of traditional family planning methods decreased up to 2015-16 but increased in 2019-2021 because of the increase in the use of traditional family planning methods in the urban population has been more rapid than the increase in the use of these methods in the rural population.

Urban-rural disparity in family planning use varies widely across states/Union Territories (Figure 2). In 2019-2021, this disparity was the highest in the Union Territory of Dadra & Nagar Haveli and Daman and Diu, closely followed by Himachal Pradesh. In these states/Union Territories, the urban-rural gap in family planning use is very wide. The urban-rural disparity in family planning use has also been found to be very substantial in Gujarat, Madhya Pradesh, and Uttarakhand. On the other hand, in most of the states/Union Territories of the country, the urban-rural disparity in family planning use has been found to be either very low or low with the lowest in Manipur. There are 10 states/Union Territories where the urban-rural disparity in family planning use is found to be lower than the national average.

Table 3 also suggests that, in general, urban-rural disparity in family planning use has decreased in 2019-2021 compared to 1992-1993 in most of the states and Union Territories of the country with the decrease in disparity being the most marked in Maharashtra and Madhya Pradesh. There are, however, five states – Delhi, Gujarat, Himachal Pradesh, Kerala, and Mizoram – where the urban-rural disparity in family planning use has increased in 2019-2021 as compared to the urban-rural disparity in family planning use in 1992-1993 with the increase being the most marked in Himachal Pradesh followed by Gujarat. On the other hand, in the recent period, between 2015-2016 and 2019-2021, the urban-rural disparity in family planning use has increased in 11 states/Union Territories of the country with the increase in disparity being the most marked in Himachal Pradesh followed by Kerala. The increase in the urban-rural disparity in family planning use is the net result of the increase in the urban-rural disparity in modern spacing methods, permanent methods, and traditional family planning methods. There is, however, lot of volatility in the trend in urban-rural disparity in the use of three categories of family planning methods.
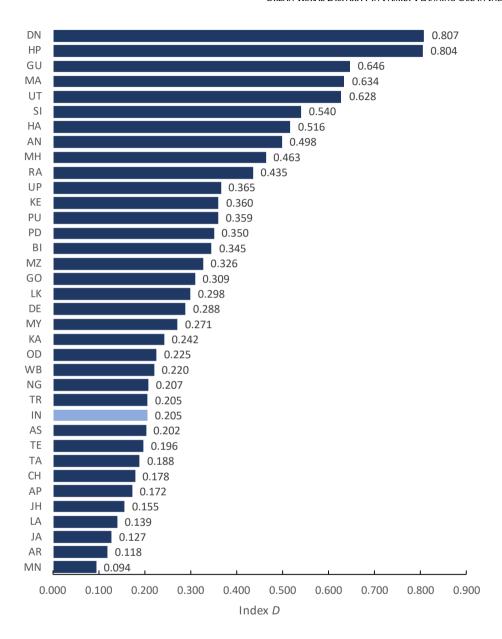
Figure 2: Urban-Rural disparity in family planning use in states/Union Territories in India, 2019-2021.

Remarks: There is no rural population in Chandigarh (CD). Dadra and Nagar Haveli (DA) and Daman and Diu (DD) are merged into Dadra & Nagar Haveli and Daman and Diu (DN)

Source:   Authors

Table 3: Urban-rural disparity in the use of family planning methods, 1992-2021.

| Country/State/Union Territory | Period | | | | |
|---|---|---|---|---|---|
| | 1992-1993 | 1998-1999 | 2005-2006 | 2015-2016 | 2019-2021 |
| | All family planning methods (Index $D$) | | | | |
| India | 0.533 | 0.475 | 0.412 | 0.245 | 0.205 |
| Andaman and Nicobar Islands | na | na | na | 0.420 | 0.498 |
| Andhra Pradesh | 0.452 | 0.322 | 0.220 | 0.233 | 0.172 |
| Arunachal Pradesh | 0.745 | 0.438 | 0.407 | 0.370 | 0.118 |
| Assam | 0.557 | 0.310 | 0.395 | 0.069 | 0.202 |
| Bihar | 0.945 | 0.663 | 0.599 | 0.548 | 0.345 |
| Chandigarh | na | na | na | na | na |
| Chhattisgarh | na | na | 0.557 | 0.359 | 0.178 |
| Daman & Nagar Haveli | na | na | na | 0.953 | na |
| Dadra & Nagar Haveli and Daman & Diu | na | na | na | na | 0.807 |
| Daman & Diu | na | na | na | 0.554 | na |
| Delhi | 0.135 | 0.395 | 0.589 | 0.194 | 0.288 |
| Goa | 0.595 | 0.266 | 0.385 | 1.161 | 0.309 |
| Gujarat | 0.521 | 0.670 | 0.559 | 0.674 | 0.646 |
| Haryana | 0.771 | 0.788 | 0.971 | 0.431 | 0.516 |
| Himachal Pradesh | 0.665 | 0.796 | 0.996 | 0.433 | 0.804 |
| Jammu & Kashmir | 0.641 | 0.633 | 0.531 | 0.375 | 0.127 |
| Jharkhand | na | na | 0.943 | 0.316 | 0.155 |
| Karnataka | 0.415 | 0.524 | 0.608 | 0.472 | 0.242 |
| Kerala | 0.168 | 0.088 | 0.226 | 0.046 | 0.360 |
| Ladakh | na | na | na | na | 0.139 |
| Lakshadweep | na | na | na | 1.177 | 0.298 |
| Madhya Pradesh | 1.371 | 0.636 | 0.761 | 0.622 | 0.634 |
| Maharashtra | 2.748 | 0.578 | 0.838 | 0.565 | 0.463 |
| Manipur | 0.577 | 0.296 | 0.258 | 0.179 | 0.094 |
| Meghalaya | 0.842 | 1.462 | 1.034 | 0.631 | 0.271 |
| Mizoram | 0.233 | 0.464 | 0.254 | 0.262 | 0.326 |
| Nagaland | na | 0.671 | 0.596 | 0.306 | 0.207 |
| Odisha | 0.493 | 0.449 | 0.457 | 0.255 | 0.225 |
| Puducherry | na | na | na | 0.223 | 0.350 |
| Punjab | 0.372 | 0.861 | 0.614 | 0.382 | 0.359 |
| Rajasthan | 0.779 | 0.507 | 0.764 | 0.537 | 0.435 |
| Sikkim | na | na | 0.164 | 0.480 | 0.540 |
| Tamil Nadu | 0.512 | 0.473 | 0.337 | 0.151 | 0.188 |
| Telangana | na | na | na | 0.286 | 0.196 |
| Tripura | 0.404 | na | 0.079 | 0.276 | 0.205 |
| Uttar Pradesh | 0.862 | 0.884 | 0.600 | 0.582 | 0.365 |
| Uttarakhand | na | na | 0.847 | 0.716 | 0.628 |
| West Bengal | 0.460 | 0.456 | 0.296 | 0.348 | 0.220 |

| Country/State/Union Territory | Period | | | | |
|---|---|---|---|---|---|
| | 1992-1993 | 1998-1999 | 2005-2006 | 2015-2016 | 2019-2021 |
| | Modern spacing methods (Index $D_s$) | | | | |
| India | 1.326 | 1.189 | 0.964 | 0.527 | 0.356 |
| Andaman and Nicobar Islands | na | na | na | -0.600 | -0.101 |
| Andhra Pradesh | 0.408 | 1.736 | 1.525 | 1.958 | 1.039 |
| Arunachal Pradesh | 0.643 | 0.312 | 0.551 | -0.015 | 0.010 |
| Assam | 0.908 | 0.276 | 0.788 | 0.055 | -0.172 |
| Bihar | 1.568 | 1.486 | 0.993 | 0.950 | 0.642 |
| Chandigarh | na | na | na | na | na |
| Chhattisgarh | na | na | 1.690 | 0.871 | 0.393 |
| Dadra & Nagar Haveli | na | na | na | 1.134 | na |
| Dadra & Nagar Haveli and Daman & Diu | na | na | na | na | 0.655 |
| Daman & Diu | na | na | na | 0.614 | na |
| Delhi | 0.152 | 0.449 | 0.654 | 0.078 | -0.050 |
| Goa | 0.586 | 0.537 | 0.655 | 0.608 | 0.206 |
| Gujarat | 1.341 | 1.364 | 1.045 | 0.933 | 0.855 |
| Haryana | 1.426 | 1.215 | 1.066 | 0.282 | 0.504 |
| Himachal Pradesh | 1.482 | 1.556 | 1.286 | 0.478 | 0.753 |
| Jammu & Kashmir | 1.296 | 0.654 | 0.308 | 0.299 | 0.028 |
| Jharkhand | na | na | 1.141 | 0.681 | 0.220 |
| Karnataka | 1.160 | 1.405 | 1.350 | 1.048 | 0.489 |
| Kerala | 0.204 | 0.293 | 0.553 | 0.155 | 0.296 |
| Ladakh | na | na | na | na | -0.104 |
| Lakshadweep | na | na | na | 0.945 | 0.071 |
| Madhya Pradesh | 1.316 | 1.878 | 1.824 | 1.289 | 0.936 |
| Maharashtra | 3.247 | 0.935 | 1.461 | 0.819 | 0.635 |
| Manipur | 1.015 | 0.371 | 0.047 | -0.073 | 0.056 |
| Meghalaya | 0.585 | 1.154 | 1.139 | -0.046 | -0.287 |
| Mizoram | 0.329 | 0.494 | 0.203 | 0.177 | -0.412 |
| Nagaland | 0.318 | 0.651 | 0.511 | 0.399 | 0.272 |
| Odisha | 1.386 | 1.286 | 0.856 | 0.415 | 0.155 |
| Puducherry | na | na | na | -0.647 | 0.486 |
| Punjab | 0.592 | 0.933 | 0.433 | 0.370 | 0.288 |
| Rajasthan | 1.516 | 1.212 | 1.540 | 1.030 | 0.616 |
| Sikkim | na | na | 0.132 | -0.331 | -0.687 |
| Tamil Nadu | 1.158 | 1.516 | 0.951 | 0.616 | 0.216 |
| Telangana | na | na | na | 1.485 | 0.765 |
| Tripura | 0.579 | na | 0.030 | -0.241 | 0.038 |
| Uttar Pradesh | 1.515 | 1.744 | 1.129 | 0.985 | 0.474 |
| Uttarakhand | na | na | 1.050 | 0.721 | 0.682 |
| West Bengal | 0.843 | 0.490 | 0.339 | 0.188 | 0.188 |

| Country/State/Union Territory | Period | | | | |
|---|---|---|---|---|---|
| | 1992-1993 | 1998-1999 | 2005-2006 | 2015-2016 | 2019-2021 |
| | Permanent methods (Index $D_p$) | | | | |
| India | 0.171 | 0.103 | 0.034 | -0.019 | -0.106 |
| Andaman and Nicobar Islands | na | na | na | -0.344 | -0.595 |
| Andhra Pradesh | 0.441 | 0.020 | -0.084 | -0.143 | -0.081 |
| Arunachal Pradesh | 0.497 | 0.455 | -0.261 | -0.429 | -0.211 |
| Assam | 0.649 | 0.111 | 0.119 | 0.055 | 0.048 |
| Bihar | 0.800 | 0.507 | 0.444 | 0.390 | -0.152 |
| Chandigarh | na | na | na | na | na |
| Chhattisgarh | na | na | 0.073 | -0.142 | -0.032 |
| Dadra & Nagar Haveli | na | na | na | -0.868 | na |
| Dadra & Nagar Haveli and Daman & Diu | na | na | na | na | -0.913 |
| Daman & Diu | na | na | na | -0.420 | na |
| Delhi | 0.063 | -0.339 | -0.601 | -0.307 | -0.059 |
| Goa | -0.293 | 0.103 | -0.146 | 1.407 | 0.405 |
| Gujarat | -0.187 | -0.398 | -0.389 | -0.512 | -0.522 |
| Haryana | -0.397 | -0.623 | -0.930 | -0.508 | -0.594 |
| Himachal Pradesh | -0.324 | -0.629 | -0.908 | -0.405 | -0.888 |
| Jammu & Kashmir | -0.127 | 0.694 | 0.521 | 0.449 | 0.047 |
| Jharkhand | na | na | 0.783 | 0.101 | 0.004 |
| Karnataka | -0.127 | -0.256 | -0.490 | -0.398 | -0.151 |
| Kerala | 0.116 | 0.008 | -0.140 | -0.008 | -0.237 |
| Ladakh | na | na | na | na | -0.021 |
| Lakshadweep | na | na | na | -0.483 | 0.209 |
| Madhya Pradesh | 1.318 | 0.127 | -0.397 | -0.427 | -0.568 |
| Maharashtra | -2.698 | -0.487 | -0.627 | -0.467 | -0.393 |
| Manipur | 0.075 | 0.347 | 0.148 | 0.296 | 0.299 |
| Meghalaya | 1.105 | 2.162 | 1.206 | 1.033 | 0.332 |
| Mizoram | 0.130 | 0.446 | 0.270 | 0.304 | 0.124 |
| Nagaland | 1.032 | 0.731 | 0.708 | 0.206 | -0.099 |
| Odisha | 0.295 | -0.142 | -0.149 | -0.146 | -0.230 |
| Puducherry | na | na | na | 0.150 | -0.259 |
| Punjab | -0.227 | -0.896 | -0.720 | -0.403 | -0.437 |
| Rajasthan | 0.616 | 0.158 | 0.370 | -0.307 | -0.380 |
| Sikkim | na | na | 0.067 | -0.600 | -0.180 |
| Tamil Nadu | -0.318 | 0.040 | -0.223 | 0.002 | -0.176 |
| Telangana | na | na | na | 0.041 | -0.078 |
| Tripura | 0.466 | na | -0.082 | 0.414 | 0.503 |
| Uttar Pradesh | 0.282 | 0.308 | 0.192 | -0.221 | -0.339 |
| Uttarakhand | na | na | -0.700 | -0.737 | -0.702 |
| West Bengal | -0.347 | -0.337 | -0.231 | -0.482 | -0.181 |

| Country/State/Union Territory | Period | | | | |
|---|---|---|---|---|---|
| | 1992-1993 | 1998-1999 | 2005-2006 | 2015-2016 | 2019-2021 |
| | Traditional methods (Index $D_t$) | | | | |
| India | 0.444 | 0.401 | 0.068 | 0.040 | 0.075 |
| Andaman and Nicobar Islands | na | na | na | -0.699 | -0.515 |
| Andhra Pradesh | 1.211 | 0.795 | -0.183 | 2.122 | 1.613 |
| Arunachal Pradesh | 1.267 | 0.717 | 0.447 | -0.670 | 0.028 |
| Assam | 0.350 | 0.439 | -0.043 | 0.094 | 0.299 |
| Bihar | 0.952 | 0.575 | 0.754 | 1.473 | 0.410 |
| Chandigarh | na | na | na | na | na |
| Chhattisgarh | na | na | 0.651 | 0.481 | 0.069 |
| Dadra & Nagar Haveli | na | na | na | 5.168 | na |
| Dadra & Nagar Haveli and Daman & Diu | na | na | na | na | 0.463 |
| Daman & Diu | na | na | na | -2.117 | na |
| Delhi | 0.222 | 0.385 | 0.244 | 0.021 | 0.574 |
| Goa | 1.089 | 0.268 | 0.398 | 0.066 | -0.191 |
| Gujarat | 0.740 | 0.883 | -0.055 | 1.061 | 0.630 |
| Haryana | 0.927 | 0.709 | 0.905 | 0.206 | 0.256 |
| Himachal Pradesh | 0.732 | 0.513 | 0.521 | 0.487 | 0.520 |
| Jammu & Kashmir | 0.560 | 0.169 | 0.842 | -0.321 | -0.350 |
| Jharkhand | na | na | 1.290 | 0.536 | 0.274 |
| Karnataka | 0.819 | 1.504 | 0.836 | 1.393 | 0.473 |
| Kerala | 0.314 | 0.083 | -0.053 | -0.026 | 0.772 |
| Ladakh | na | na | na | na | 0.444 |
| Lakshadweep | na | na | na | 1.562 | -0.407 |
| Madhya Pradesh | -2.641 | 0.670 | 0.636 | 0.601 | 0.290 |
| Maharashtra | 1.451 | 1.111 | 0.745 | 0.916 | 0.557 |
| Manipur | 0.292 | 0.088 | 0.347 | 0.198 | -0.061 |
| Meghalaya | -0.358 | 0.420 | 0.277 | 1.123 | 0.000 |
| Mizoram | 1.188 | -0.922 | 0.406 | 1.610 | 0.513 |
| Nagaland | na | 0.577 | 0.565 | 0.175 | 0.056 |
| Odisha | 0.436 | 0.378 | 0.586 | 0.127 | 0.264 |
| Puducherry | na | na | na | 0.518 | 0.810 |
| Punjab | 0.210 | 0.602 | 0.616 | 0.325 | 0.341 |
| Rajasthan | -1.307 | 0.682 | 0.404 | -0.007 | 0.118 |
| Sikkim | na | na | 0.339 | 0.776 | -0.306 |
| Tamil Nadu | 0.576 | 0.968 | 0.211 | -0.032 | 0.297 |
| Telangana | na | na | na | 3.118 | 0.657 |
| Tripura | 0.257 | na | 0.113 | 0.198 | 0.115 |
| Uttar Pradesh | 0.996 | 0.409 | -0.041 | 0.219 | 0.094 |
| Uttarakhand | na | na | 0.742 | 0.523 | 0.140 |
| West Bengal | 0.427 | 0.591 | 0.345 | 0.239 | 0.334 |

Remarks: na – data not available
Source:   Authors' calculations

# Discussion and Conclusions

The present analysis is probably the first to analyse the urban-rural disparity in family planning use in India. The available evidence suggests that family planning use has always been higher in the urban population as compared to the rural population of the country but the urban-rural disparity in family planning use has decreased rapidly over time. The primary reason behind the decrease in the urban-rural disparity in family planning use has been the slow increase in family planning use in the urban population relative to the rural population of the country. There has, however, been little attempt to measure the urban-rural disparity in family planning use and to explore the factors responsible for the disparity in the urban-rural disparity in family planning use in the country. The evidence world over suggests that family planning use in the urban population is higher than the family planning use in the rural population because of a number of factors. An important factor that contributes to higher family planning use in the urban population is the easy availability and access to a range of family planning methods, especially modern spacing methods. In addition, higher level of education, especially of women, and better life-style factors in the urban population as compared to the rural population are also responsible for relatively higher family planning use in the urban population. However, the reasons behind relatively slow increase in family planning use in India, as revealed through the present analysis are not known at present. The family planning use in India remains low by international standards and one possible reason may be the slow increase in the use of family planning methods in the urban population of the country.

The relatively higher family planning use in the urban population in India is primarily due to higher use of modern spacing methods. This is expected as the availability and access to modern family planning methods is generally better in the urban population as compared to the rural population. However, the urban-rural gap in the use of modern spacing methods has narrowed down considerably in the country because of the faster increase in the use of these methods in the rural population relative to the urban population. It appears that the family planning services delivery system in the urban population is not able to meet the need of modern spacing methods of the urban population. The use of traditional methods has also increased recently more rapidly in the urban population as compared to the rural population which also supports the view that the family planning services delivery system is not able to meet the need of modern spacing methods of the urban population as the use of traditional methods is seen as a reflection of the unmet need for modern spacing methods. It appears that the availability of and access to modern spacing methods is not uniform in different sub-groups of the urban population and there are sub-groups where availability of and access to modern spacing methods is compromised. The urban population of the country is highly heterogenous. Urban settlements in India are divided into six categories based on their population size: 1) urban settlements having at least 100 thousand population; 2) urban settlements having population in the range of 50000-99999; 3) urban settlements having population in the range of 20000-49999; 4) urban settlements having population in the range 10000-19999;

5) urban settlements having population in the range 5000-9999; and 6) urban settlements with a population of less than 5000 (Government of India, 2001). There is little information about the variation in family planning use across different size class of urban settlements. At the same time, within the same urban settlement, family planning use may be different in different population sub-groups, especially urban poor, and urban non-poor. The increase in the urban population in the country has primarily been the result of large rural to urban migration in search of better livelihood opportunities. It appears that this migrant population remains devoid of the access to modern family planning methods.

The use of permanent family planning methods in India is now higher in the rural population as compared to the urban population which also indicates that the family planning services delivery system in the urban population is not in good shape. One reason is that the family planning services delivery system is a part of the public health care system in the country and the presence of the public health care system in the urban population, especially, the primary health care system, may be termed as notional, at best. There is heavy concentration of private health care facilities in the urban population, especially in large, metropolitan urban settlements. The services available from these private health facilities are costly and beyond the reach of the urban poor. Under the National Health Mission, there are attempts to strengthen urban primary health care services including family planning services but there remains substantial scope for improvement.

The urban-rural disparity in family planning use is found to be exceptionally high in four states - Himachal Pradesh, Gujarat, Madhya Pradesh, and Telangana - and in the Union Territory of Dadra & Nagar Haveli and Daman & Diu. The high urban-rural disparity in family planning use in these states and Union Territories is the result of the low family planning use in the rural population. On the other hand, the urban-rural disparity in family planning use is found to be low in most of the states and Union Territories. It appears that there are state-specific factors that influence the urban-rural disparity in family planning use. An understanding of state-specific factors responsible for the prevailing urban-rural disparity in family planning use may help in reducing the urban-rural disparity in family planning use at the state/Union Territory level.

From the policy perspective, the present analysis calls for reinvigorating the family planning services delivery system in the urban population of the country. The current policy of family planning services delivery in India does not distinguish between family planning services delivery in the urban population and family planning services delivery in the rural population. We recommend that the approach for the delivery of family planning services in the country should be different for urban and rural populations because the organisation of the family planning services delivery in the urban population is different from the organisation of family planning services delivery in the rural population. The recent increase in the use of traditional family planning methods in the urban population of the country also justifies adopting such a stratified approach for the delivery of family planning services delivery in urban and rural populations. Although India has now achieved the replacement

fertility, yet role of family planning in India's development is going to remain crucial because of health and other benefits of family planning and because of the important role of family planning in managing the future population growth in the country.

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Appendix table 1: Prevalence of modern spacing methods, permanent methods, and traditional methods of family planning in urban and rural areas of India and states/Union Territories, 1992-2021.

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| India | 1992-93 | 0.117 | 0.336 | 0.058 | 0.511 | 0.034 | 0.299 | 0.038 | 0.371 |
| | 1998-99 | 0.134 | 0.378 | 0.07 | 0.582 | 0.045 | 0.354 | 0.048 | 0.447 |
| | 2005-06 | 0.169 | 0.389 | 0.082 | 0.640 | 0.072 | 0.381 | 0.077 | 0.530 |
| | 2015-16 | 0.153 | 0.360 | 0.059 | 0.572 | 0.096 | 0.364 | 0.057 | 0.517 |
| | 2019-21 | 0.220 | 0.365 | 0.108 | 0.693 | 0.165 | 0.390 | 0.101 | 0.656 |
| Andaman & Nicobar Islands | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.060 | 0.352 | 0.016 | 0.428 | 0.103 | 0.434 | 0.031 | 0.568 |
| | 2019-21 | 0.175 | 0.310 | 0.059 | 0.544 | 0.190 | 0.449 | 0.095 | 0.734 |
| Andhra Pradesh | 1992-93 | 0.043 | 0.513 | 0.010 | 0.566 | 0.029 | 0.404 | 0.003 | 0.436 |
| | 1998-99 | 0.049 | 0.574 | 0.011 | 0.634 | 0.009 | 0.569 | 0.005 | 0.583 |
| | 2005-06 | 0.027 | 0.645 | 0.005 | 0.677 | 0.006 | 0.664 | 0.006 | 0.676 |
| | 2015-16 | 0.014 | 0.667 | 0.003 | 0.684 | 0.002 | 0.698 | 0 | 0.700 |
| | 2019-21 | 0.014 | 0.689 | 0.005 | 0.708 | 0.005 | 0.706 | 0.001 | 0.712 |
| Arunachal Pradesh | 1992-93 | 0.137 | 0.153 | 0.105 | 0.395 | 0.077 | 0.099 | 0.032 | 0.208 |
| | 1998-99 | 0.152 | 0.275 | 0.046 | 0.473 | 0.116 | 0.194 | 0.023 | 0.333 |
| | 2005-06 | 0.200 | 0.194 | 0.079 | 0.473 | 0.126 | 0.238 | 0.052 | 0.416 |
| | 2015-16 | 0.152 | 0.083 | 0.030 | 0.265 | 0.154 | 0.122 | 0.057 | 0.333 |
| | 2019-21 | 0.291 | 0.157 | 0.122 | 0.570 | 0.289 | 0.187 | 0.119 | 0.595 |
| Assam | 1992-93 | 0.109 | 0.227 | 0.287 | 0.623 | 0.047 | 0.133 | 0.221 | 0.401 |
| | 1998-99 | 0.124 | 0.182 | 0.228 | 0.534 | 0.097 | 0.166 | 0.160 | 0.423 |
| | 2005-06 | 0.229 | 0.143 | 0.288 | 0.660 | 0.119 | 0.129 | 0.297 | 0.545 |
| | 2015-16 | 0.283 | 0.101 | 0.165 | 0.549 | 0.272 | 0.096 | 0.152 | 0.520 |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 2019-21 | 0.329 | 0.094 | 0.191 | 0.614 | 0.368 | 0.090 | 0.149 | 0.607 |
| Bihar | 1992-93 | 0.085 | 0.307 | 0.033 | 0.425 | 0.019 | 0.166 | 0.013 | 0.198 |
| | 1998-99 | 0.071 | 0.283 | 0.035 | 0.389 | 0.017 | 0.192 | 0.020 | 0.229 |
| | 2005-06 | 0.094 | 0.319 | 0.093 | 0.506 | 0.037 | 0.231 | 0.046 | 0.314 |
| | 2015-16 | 0.053 | 0.268 | 0.024 | 0.345 | 0.021 | 0.199 | 0.006 | 0.226 |
| | 2019-21 | 0.150 | 0.320 | 0.153 | 0.623 | 0.085 | 0.354 | 0.107 | 0.546 |
| Chandigarh | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | na | na | na | na | na | na | na | na |
| | 2019-21 | 0.365 | 0.193 | 0.217 | 0.775 | na | na | na | na |
| Chhattisgarh | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | 0.135 | 0.454 | 0.065 | 0.654 | 0.028 | 0.436 | 0.035 | 0.499 |
| | 2015-16 | 0.131 | 0.442 | 0.044 | 0.617 | 0.059 | 0.477 | 0.028 | 0.564 |
| | 2019-21 | 0.172 | 0.477 | 0.064 | 0.713 | 0.123 | 0.485 | 0.060 | 0.668 |
| Dadra & Nagar Haveli | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.068 | 0.234 | 0.002 | 0.304 | 0.038 | 0.317 | 0.020 | 0.375 |
| | 2019-21 | na | na | na | na | na | na | na | na |
| Dadra & Nagar Haveli and Daman & Diu | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | na | na | na | na | na | na | na | na |
| | 2019-21 | 0.228 | 0.309 | 0.098 | 0.635 | 0.133 | 0.527 | 0.064 | 0.724 |
| Daman & Diu | 1992-93 | na | na | na | na | na | na | na | na |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.096 | 0.220 | 0.003 | 0.319 | 0.033 | 0.402 | 0 | 0.435 |
| | 2019-21 | na | na | na | na | na | na | na | na |
| Delhi | 1992-93 | 0.316 | 0.233 | 0.058 | 0.607 | 0.284 | 0.222 | 0.047 | 0.553 |
| | 1998-99 | 0.284 | 0.28 | 0.076 | 0.640 | 0.202 | 0.353 | 0.053 | 0.608 |
| | 2005-06 | 0.337 | 0.228 | 0.106 | 0.671 | 0.209 | 0.350 | 0.085 | 0.644 |
| | 2015-16 | 0.277 | 0.196 | 0.057 | 0.530 | 0.261 | 0.248 | 0.056 | 0.565 |
| | 2019-21 | 0.394 | 0.182 | 0.189 | 0.765 | 0.406 | 0.191 | 0.116 | 0.713 |
| Goa | 1992-93 | 0.093 | 0.274 | 0.145 | 0.512 | 0.054 | 0.336 | 0.054 | 0.444 |
| | 1998-99 | 0.100 | 0.294 | 0.133 | 0.527 | 0.061 | 0.273 | 0.105 | 0.439 |
| | 2005-06 | 0.140 | 0.246 | 0.127 | 0.513 | 0.078 | 0.274 | 0.089 | 0.441 |
| | 2015-16 | 0.100 | 0.216 | 0.016 | 0.332 | 0.057 | 0.063 | 0.015 | 0.135 |
| | 2019-21 | 0.318 | 0.332 | 0.073 | 0.723 | 0.275 | 0.249 | 0.087 | 0.611 |
| Gujarat | 1992-93 | 0.109 | 0.381 | 0.037 | 0.527 | 0.031 | 0.426 | 0.018 | 0.475 |
| | 1998-99 | 0.137 | 0.396 | 0.085 | 0.618 | 0.039 | 0.494 | 0.037 | 0.570 |
| | 2005-06 | 0.196 | 0.381 | 0.099 | 0.676 | 0.079 | 0.476 | 0.104 | 0.659 |
| | 2015-16 | 0.137 | 0.275 | 0.059 | 0.471 | 0.059 | 0.387 | 0.021 | 0.467 |
| | 2019-21 | 0.248 | 0.292 | 0.155 | 0.695 | 0.123 | 0.410 | 0.089 | 0.622 |
| Haryana | 1992-93 | 0.204 | 0.283 | 0.093 | 0.580 | 0.058 | 0.370 | 0.039 | 0.467 |
| | 1998-99 | 0.229 | 0.305 | 0.138 | 0.672 | 0.081 | 0.450 | 0.073 | 0.604 |
| | 2005-06 | 0.337 | 0.228 | 0.100 | 0.665 | 0.149 | 0.428 | 0.043 | 0.620 |
| | 2015-16 | 0.236 | 0.315 | 0.049 | 0.600 | 0.189 | 0.434 | 0.040 | 0.663 |
| | 2019-21 | 0.342 | 0.248 | 0.145 | 0.735 | 0.239 | 0.374 | 0.116 | 0.729 |
| Himachal Pradesh | 1992-93 | 0.243 | 0.387 | 0.074 | 0.704 | 0.068 | 0.466 | 0.037 | 0.571 |
| | 1998-99 | 0.257 | 0.382 | 0.104 | 0.743 | 0.068 | 0.537 | 0.065 | 0.670 |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 2005-06 | 0.357 | 0.355 | 0.025 | 0.737 | 0.133 | 0.577 | 0.015 | 0.725 |
| | 2015-16 | 0.216 | 0.288 | 0.073 | 0.577 | 0.146 | 0.377 | 0.046 | 0.569 |
| | 2019-21 | 0.351 | 0.242 | 0.159 | 0.752 | 0.203 | 0.437 | 0.101 | 0.741 |
| Jammu and Kashmir | 1992-93 | 0.226 | 0.275 | 0.143 | 0.644 | 0.074 | 0.301 | 0.087 | 0.462 |
| | 1998-99 | 0.168 | 0.429 | 0.083 | 0.680 | 0.095 | 0.273 | 0.071 | 0.439 |
| | 2005-06 | 0.190 | 0.368 | 0.125 | 0.683 | 0.147 | 0.257 | 0.058 | 0.462 |
| | 2015-16 | 0.251 | 0.309 | 0.090 | 0.650 | 0.199 | 0.222 | 0.120 | 0.541 |
| | 2019-21 | 0.315 | 0.220 | 0.057 | 0.592 | 0.309 | 0.212 | 0.079 | 0.600 |
| Jharkhand | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | 0.144 | 0.355 | 0.101 | 0.600 | 0.051 | 0.201 | 0.030 | 0.282 |
| | 2015-16 | 0.096 | 0.329 | 0.042 | 0.467 | 0.051 | 0.307 | 0.025 | 0.383 |
| | 2019-21 | 0.137 | 0.377 | 0.146 | 0.660 | 0.113 | 0.376 | 0.115 | 0.604 |
| Karnataka | 1992-93 | 0.087 | 0.404 | 0.029 | 0.520 | 0.029 | 0.435 | 0.013 | 0.477 |
| | 1998-99 | 0.084 | 0.480 | 0.035 | 0.599 | 0.022 | 0.544 | 0.008 | 0.574 |
| | 2005-06 | 0.090 | 0.502 | 0.016 | 0.608 | 0.025 | 0.622 | 0.007 | 0.654 |
| | 2015-16 | 0.042 | 0.429 | 0.009 | 0.480 | 0.015 | 0.528 | 0.002 | 0.545 |
| | 2019-21 | 0.136 | 0.552 | 0.008 | 0.696 | 0.088 | 0.589 | 0.005 | 0.682 |
| Kerala | 1992-93 | 0.069 | 0.504 | 0.109 | 0.682 | 0.057 | 0.475 | 0.082 | 0.614 |
| | 1998-99 | 0.062 | 0.512 | 0.081 | 0.655 | 0.047 | 0.510 | 0.075 | 0.632 |
| | 2005-06 | 0.111 | 0.474 | 0.104 | 0.689 | 0.067 | 0.509 | 0.109 | 0.685 |
| | 2015-16 | 0.048 | 0.458 | 0.028 | 0.534 | 0.041 | 0.459 | 0.028 | 0.528 |
| | 2019-21 | 0.070 | 0.436 | 0.108 | 0.614 | 0.053 | 0.495 | 0.053 | 0.601 |
| Ladakh | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | na | na | na | na | na | na | na | na |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 2019-21 | 0.291 | 0.169 | 0.046 | 0.506 | 0.313 | 0.172 | 0.030 | 0.515 |
| Lakshadweep | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.048 | 0.099 | 0.153 | 0.300 | 0.019 | 0.152 | 0.036 | 0.207 |
| | 2019-21 | 0.096 | 0.214 | 0.208 | 0.518 | 0.090 | 0.181 | 0.283 | 0.554 |
| Madhya Pradesh | 1992-93 | 0.116 | 0.346 | 0.015 | 0.477 | 0.034 | 0.124 | 0.176 | 0.334 |
| | 1998-99 | 0.123 | 0.402 | 0.027 | 0.552 | 0.021 | 0.372 | 0.014 | 0.407 |
| | 2005-06 | 0.179 | 0.384 | 0.048 | 0.611 | 0.034 | 0.481 | 0.026 | 0.541 |
| | 2015-16 | 0.136 | 0.354 | 0.027 | 0.517 | 0.042 | 0.456 | 0.015 | 0.513 |
| | 2019-21 | 0.215 | 0.423 | 0.076 | 0.714 | 0.097 | 0.564 | 0.058 | 0.719 |
| Maharashtra | 1992-93 | 0.443 | 0.065 | 0.021 | 0.529 | 0.030 | 0.508 | 0.005 | 0.543 |
| | 1998-99 | 0.116 | 0.451 | 0.018 | 0.585 | 0.049 | 0.572 | 0.006 | 0.627 |
| | 2005-06 | 0.188 | 0.452 | 0.027 | 0.667 | 0.051 | 0.607 | 0.013 | 0.671 |
| | 2015-16 | 0.158 | 0.449 | 0.032 | 0.639 | 0.076 | 0.566 | 0.013 | 0.655 |
| | 2019-21 | 0.186 | 0.441 | 0.031 | 0.658 | 0.108 | 0.539 | 0.018 | 0.665 |
| Manipur | 1992-93 | 0.172 | 0.144 | 0.127 | 0.443 | 0.070 | 0.135 | 0.098 | 0.303 |
| | 1998-99 | 0.128 | 0.186 | 0.135 | 0.449 | 0.092 | 0.139 | 0.125 | 0.356 |
| | 2005-06 | 0.153 | 0.095 | 0.297 | 0.545 | 0.147 | 0.083 | 0.230 | 0.460 |
| | 2015-16 | 0.091 | 0.038 | 0.121 | 0.250 | 0.097 | 0.028 | 0.101 | 0.226 |
| | 2019-21 | 0.149 | 0.044 | 0.422 | 0.615 | 0.142 | 0.033 | 0.437 | 0.612 |
| Meghalaya | 1992-93 | 0.078 | 0.199 | 0.042 | 0.319 | 0.045 | 0.076 | 0.059 | 0.180 |
| | 1998-99 | 0.183 | 0.206 | 0.064 | 0.453 | 0.066 | 0.029 | 0.043 | 0.138 |
| | 2005-06 | 0.176 | 0.191 | 0.070 | 0.437 | 0.064 | 0.066 | 0.054 | 0.184 |
| | 2015-16 | 0.152 | 0.124 | 0.052 | 0.328 | 0.158 | 0.048 | 0.018 | 0.224 |
| | 2019-21 | 0.139 | 0.071 | 0.049 | 0.259 | 0.177 | 0.052 | 0.049 | 0.278 |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| Mizoram | 1992-93 | 0.096 | 0.462 | 0.013 | 0.571 | 0.071 | 0.430 | 0.004 | 0.505 |
| | 1998-99 | 0.141 | 0.506 | 0.004 | 0.651 | 0.091 | 0.396 | 0.010 | 0.497 |
| | 2005-06 | 0.180 | 0.460 | 0.003 | 0.643 | 0.152 | 0.394 | 0.002 | 0.548 |
| | 2015-16 | 0.190 | 0.194 | 0 | 0.384 | 0.164 | 0.151 | 0 | 0.315 |
| | 2019-21 | 0.149 | 0.137 | 0.005 | 0.291 | 0.209 | 0.123 | 0.003 | 0.335 |
| Nagaland | 1992-93 | 0.082 | 0.124 | 0 | 0.206 | 0.061 | 0.048 | 0 | 0.109 |
| | 1998-99 | 0.182 | 0.196 | 0.089 | 0.467 | 0.104 | 0.105 | 0.052 | 0.261 |
| | 2005-06 | 0.168 | 0.150 | 0.101 | 0.419 | 0.108 | 0.080 | 0.060 | 0.248 |
| | 2015-16 | 0.152 | 0.103 | 0.059 | 0.314 | 0.107 | 0.085 | 0.050 | 0.242 |
| | 2019-21 | 0.349 | 0.136 | 0.125 | 0.610 | 0.29 | 0.148 | 0.119 | 0.557 |
| Odisha | 1992-93 | 0.079 | 0.372 | 0.023 | 0.474 | 0.021 | 0.306 | 0.015 | 0.342 |
| | 1998-99 | 0.125 | 0.327 | 0.088 | 0.540 | 0.038 | 0.359 | 0.062 | 0.459 |
| | 2005-06 | 0.187 | 0.314 | 0.093 | 0.594 | 0.089 | 0.347 | 0.054 | 0.490 |
| | 2015-16 | 0.223 | 0.260 | 0.130 | 0.613 | 0.159 | 0.289 | 0.117 | 0.565 |
| | 2019-21 | 0.226 | 0.246 | 0.297 | 0.769 | 0.200 | 0.291 | 0.245 | 0.736 |
| Puducherry | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.030 | 0.585 | 0.008 | 0.623 | 0.056 | 0.548 | 0.005 | 0.609 |
| | 2019-21 | 0.091 | 0.521 | 0.046 | 0.658 | 0.058 | 0.585 | 0.021 | 0.664 |
| Punjab | 1992-93 | 0.239 | 0.304 | 0.085 | 0.628 | 0.148 | 0.354 | 0.070 | 0.572 |
| | 1998-99 | 0.352 | 0.188 | 0.178 | 0.718 | 0.176 | 0.362 | 0.106 | 0.644 |
| | 2005-06 | 0.292 | 0.226 | 0.099 | 0.617 | 0.211 | 0.375 | 0.056 | 0.642 |
| | 2015-16 | 0.328 | 0.325 | 0.112 | 0.765 | 0.252 | 0.418 | 0.083 | 0.753 |
| | 2019-21 | 0.309 | 0.185 | 0.190 | 0.684 | 0.251 | 0.260 | 0.143 | 0.654 |
| Rajasthan | 1992-93 | 0.085 | 0.383 | 0.003 | 0.471 | 0.020 | 0.251 | 0.011 | 0.282 |
| | 1998-99 | 0.12 | 0.349 | 0.035 | 0.504 | 0.039 | 0.314 | 0.018 | 0.371 |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 2005-06 | 0.207 | 0.413 | 0.037 | 0.657 | 0.053 | 0.327 | 0.025 | 0.405 |
| | 2015-16 | 0.225 | 0.355 | 0.062 | 0.642 | 0.094 | 0.427 | 0.062 | 0.583 |
| | 2019-21 | 0.275 | 0.357 | 0.110 | 0.742 | 0.170 | 0.448 | 0.099 | 0.717 |
| Sikkim | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | 0.25 | 0.267 | 0.114 | 0.631 | 0.226 | 0.254 | 0.084 | 0.564 |
| | 2015-16 | 0.209 | 0.148 | 0.012 | 0.369 | 0.269 | 0.24 | 0.006 | 0.515 |
| | 2019-21 | 0.289 | 0.147 | 0.119 | 0.555 | 0.447 | 0.171 | 0.155 | 0.773 |
| Tamil Nadu | 1992-93 | 0.098 | 0.347 | 0.064 | 0.509 | 0.033 | 0.422 | 0.037 | 0.492 |
| | 1998-99 | 0.085 | 0.466 | 0.031 | 0.582 | 0.02 | 0.456 | 0.012 | 0.488 |
| | 2005-06 | 0.067 | 0.525 | 0.016 | 0.608 | 0.027 | 0.58 | 0.013 | 0.62 |
| | 2015-16 | 0.041 | 0.494 | 0.006 | 0.541 | 0.022 | 0.494 | 0.006 | 0.522 |
| | 2019-21 | 0.083 | 0.557 | 0.036 | 0.676 | 0.068 | 0.600 | 0.027 | 0.695 |
| Telangana | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | na | na | na | na | na | na | na | na |
| | 2015-16 | 0.020 | 0.563 | 0.005 | 0.588 | 0.005 | 0.553 | 0 | 0.558 |
| | 2019-21 | 0.042 | 0.627 | 0.021 | 0.690 | 0.020 | 0.645 | 0.011 | 0.676 |
| Tripura | 1992-93 | 0.139 | 0.254 | 0.318 | 0.711 | 0.083 | 0.176 | 0.265 | 0.524 |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | 0.273 | 0.171 | 0.224 | 0.668 | 0.267 | 0.183 | 0.205 | 0.655 |
| | 2015-16 | 0.255 | 0.176 | 0.237 | 0.668 | 0.303 | 0.124 | 0.203 | 0.63 |
| | 2019-21 | 0.392 | 0.142 | 0.235 | 0.769 | 0.383 | 0.091 | 0.215 | 0.689 |
| Uttar Pradesh | 1992-93 | 0.138 | 0.158 | 0.024 | 0.320 | 0.034 | 0.124 | 0.009 | 0.167 |
| | 1998-99 | 0.176 | 0.190 | 0.082 | 0.448 | 0.036 | 0.147 | 0.056 | 0.239 |
| | 2005-06 | 0.232 | 0.192 | 0.139 | 0.563 | 0.089 | 0.164 | 0.144 | 0.397 |

| Country/State/Union Territory | Year | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Modern spacing methods | Permanent methods | Traditional methods | All methods | Modern spacing methods | Permanent methods | Traditional methods | All methods |
| | 2015-16 | 0.247 | 0.151 | 0.158 | 0.556 | 0.109 | 0.181 | 0.131 | 0.421 |
| | 2019-21 | 0.350 | 0.136 | 0.190 | 0.676 | 0.251 | 0.181 | 0.176 | 0.608 |
| Uttarakhand | 1992-93 | na | na | na | na | na | na | na | na |
| | 1998-99 | na | na | na | na | na | na | na | na |
| | 2005-06 | 0.361 | 0.231 | 0.061 | 0.653 | 0.165 | 0.377 | 0.03 | 0.572 |
| | 2015-16 | 0.293 | 0.191 | 0.055 | 0.539 | 0.168 | 0.331 | 0.033 | 0.532 |
| | 2019-21 | 0.415 | 0.180 | 0.140 | 0.735 | 0.264 | 0.307 | 0.124 | 0.695 |
| West Bengal | 1992-93 | 0.111 | 0.254 | 0.253 | 0.618 | 0.051 | 0.325 | 0.181 | 0.557 |
| | 1998-99 | 0.182 | 0.282 | 0.270 | 0.734 | 0.12 | 0.355 | 0.170 | 0.645 |
| | 2005-06 | 0.206 | 0.293 | 0.256 | 0.755 | 0.156 | 0.343 | 0.196 | 0.695 |
| | 2015-16 | 0.303 | 0.227 | 0.160 | 0.690 | 0.265 | 0.323 | 0.130 | 0.718 |
| | 2019-21 | 0.341 | 0.269 | 0.165 | 0.775 | 0.300 | 0.306 | 0.124 | 0.730 |

$p$          Prevalence of all family planning methods
$p_s$         Prevalence of modern spacing methods
$p_p$         Prevalence of permanent methods
$p_t$         Prevalence of traditional methods
na        Not available
Source: Government of India (1997; 2000; 2007; 2017; 2021)