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Women and Children in Guna and Shivpuri Districts
A Situation Analysis 2008

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Children and Women
in
Guna and Shivpuri Districts
Madhya Pradesh

Analytical Report
based on
District Level Household Survey 2007-08

Guna and Shivpuri districts are located in the north-west corner of the state of Madhya Pradesh. According to the 2001 population census, district Guna had a population of 0.839 million while district Shivpuri had a population of 1.442 million. It is estimated that by the year 2009, the population of district Guna had increased to more than 1.04 million while that of district Shivpuri to more than 1.8 million. This shows that rapid population growth conditions continue to prevail in the two districts.

The level of social and economic development in the two districts continues to be low with a large proportion of population living in rural areas and subsisting on the primary sector of the economy. According to the estimates prepared by the Government of Madhya Pradesh, the per capita gross domestic product at current prices was Rs 16992 in district Guna and Rs 12809 in district Shivpuri. At the 1999-2000 prices, the per capita income in district Guna was Rs 11871 while that in Shivpuri was Rs 9065. The per capita income in the two districts is well below the state average of Rs 20874 at current prices and Rs 15162 at 1999-2000 prices.

Table 1
Standard of living

| | Proportion of households surveyed (Per cent) | | | |
| | Total population | | Rural population | |
	Guna	Shivpuri	Guna	Shivpuri
Low	72.20	80.60	83.20	91.20
Medium	16.90	9.90	14.30	7.00
High	10.90	9.50	2.50	1.80

Source: DLHS, 2007-08

The poor living conditions in the two districts are very well reflected from table 2. In district Guna, more than 72 per cent of the households in the total population and more than 83 per cent in the rural population were having a low standard of living index. These proportions in district Shivpuri were 80.6 per cent and 91.2 per cent respectively. In the rural areas of the two districts, less than 3 per cent of the households were having a high standard of living index. Obviously, poverty continues to be rampant in the two districts and is a serious impediment to improving the status of children and women.

This report presents an analytical review of the situation prevailing in the two districts in the context of key issues related to the status of children and women - education, health and nutrition. The report is primarily based on the data available through the district level household survey carried out in the year

2007-08 by the International Institute for Population Sciences on behalf of the Ministry of Health and Family Welfare of the Government of India. The survey has provided the latest information on key issues related to children and women in the two districts.

Living Conditions

Table 2 provides details about the living conditions in the two districts that have relevance to survival and health issues related to children and women. It is evident from the table that there is a severe paucity of even the basic living amenities in the two districts and the situation appears to be alarming in the rural areas. In district Guna, only about two-third of the households have electricity connection and this proportion is even less in district Shivpuri. On the other hand, toilet facility and piped drinking water facility in the rural areas of the two districts is virtually non-existent. The same is the case with the use of liquid petroleum gas for cooking. The situation depicted through table 2 clearly reflects a living environment which is generally offending to children in terms of their survival and health.

Table 2
Living Conditions

	Proportion of households surveyed (Per cent)			
	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Have Electricity connection	68.8	58.3	62.7	50.1
Have Access to toilet facility	15.8	13.8	4.1	3.8
Use piped drinking water	14.6	5.8	3.6	3.5
Use LPG for cooking	8.4	8.7	1.0	1.2

Source: DLHS, 2007-08

It is also clear from table 2 that improving living conditions of the people of the two districts appears to be a very challenging proposition. In any case, this is an area which needs to be given a priori attention as poor to very poor living conditions especially lack of proper sanitation facilities are cooking arrangements are extremely harmful to children. It is well known that mere availability of safe drinking water facilities may lead to a very significant reduction in the prevalence of diarrhoea in children and deaths due to dehydration associated with diarrhoea. However, less than 15 per cent households in district Guna and just around 5 per cent households in district Shivpuri have been found to have access to piped drinking water facility. In the

rural areas of the two districts, this proportion is found to be even less than 4 per cent.

As regards toilet facilities, it is clear from table 2 that open field defecation continues to be the norm in both the districts and the situation in the rural areas is, at best, alarming. Significant investment in improving the living conditions, especially in the rural areas of the two districts, through improvement in the availability of safe drinking water facilities and adequate sanitation facilities appears to be a major development challenge in both the districts.

Reproductive Health

Information about key indicators of reproductive health in the two districts, as obtained through the district level household survey, is given in table 3. It is clear that the goal of universal coverage of basic reproductive health services in the two districts remains a distant dream. In the rural areas of the two districts, even registration of pregnant women in the first trimester of pregnancy is abysmally poor.

Table 3

Reproductive health

	Proportion of women surveyed (Per cent)			
	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Mothers registered in the first trimester when they were pregnant with last live birth/still birth	20.1	15.2	14.0	10.4
Mothers who had at least 3 Ante-Natal care visits during the last pregnancy	15.9	13.2	10.1	9.8
Mothers who got at least one TT injection when they were pregnant with their last live birth / still birth	32.9	30.1	27.4	24.3
Institutional births	50.6	44.4	43.2	39.1
Delivery at home assisted by a doctor/nurse /LHV/ANM	1.4	2.5	1.2	1.0
Mothers who received post natal care within 48 hours of delivery of their last child	20.8	20.4	17.2	17.1

Source: DLHS, 2007-08

The only reproductive health indicator that appears to be somewhat satisfactory is the proportion of institutional births out of the total births covered during the survey. However, in the rural areas of the two districts, less than half of the total deliveries were found to be institutional deliveries. In district Shivpuri, this proportion is less than 40 per cent. Although, the government is implementing the *Janani Suraksha Yojna* to promote institutional deliveries in order to reduce the risk of death in women resulting from the complications of pregnancy and delivery, yet it is very clear from table 3 that the reach of the scheme continues to far from satisfactory. What is even more concerning is the observation that deliveries by professionally trained persons in out of hospital settings are almost non-existent in the two districts.

Marriage and Fertility

Marriage of girls at a young age appears to be the norm in the two districts, especially in the rural areas. In district Guna, more than 43 per cent and in district Shivpuri, almost half of the married women surveyed reported that they got married before completing 18 years of age, the legal minimum age at marriage for females.

Table 4

Marriage and Fertility

	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Percentage of girl's marrying before completing 18 years	30.6	43.1	31.4	49.6
Percentage of Births of Order 3 and above	15.5	16.1	17.0	15.2
Sex Ratio at birth	129	107	121	106
Percentage of women age 20-24 reporting birth of order 2 & above	35.4	40.1	36.5	39.3
Percentage of births to women during age 15-19 out of total births	10.2	16.2	10.4	16.9

Source: DLHS, 2007-08

Marriage of females at an early age is associated with above average fertility. This may be judged from the fact that more than 15 per cent of the births recorded during the survey were found to be third and higher order births. At the same time, reproduction appears to start at an early age, especially in the rural areas of the two districts where more the proportion of births to women during age 15-19 years accounted for more than 16 per cent of total births reported. A

very high concentration of births in women aged 15-19 years is a reflection of the fact that there is little fertility regulation in young women in the two districts.

The sex ratio at birth has been found to be very highly masculine in district Guna. Moreover, the sex ratio at birth is more masculine in the total population as compared to the rural population. This implies that in the urban areas of the district, the sex ratio at birth is even more masculine. The very highly masculine sex ratio in district Guna indicates towards substantial amount of sex selective abortions in the two districts. Although, detailed information about sex selective abortions in district Guna is not available, yet, information available through the district level household survey and the fact that the population sex ratio in district Guna is unfavourable to females clearly indicate towards substantial amount of gender discrimination in the district. This is an area which needs further exploration, especially the cultural and social aspects of gender discrimination in district Guna.

Family Planning

The number of births a woman has during her reproductive period and spacing between successive births are universally recognised as crucial to the health of the mother and her child. Use of family planning methods to regulate fertility, therefore, is an important component of any programme or activity directed towards improving the status of children and women.

Table 5
Family Planning

| | Proportion of currently married women in the age group 15-49 years surveyed (Per cent) | | | |
| | Total population | | Rural population | |
	Guna	Shivpuri	Guna	Shivpuri
Any Method	49.4	51.0	49.0	50.2
Any Modern method	47.1	45.4	46.2	45.7
Female Sterilization	41.1	37.6	42.2	40.5
Male Sterilization	0.3	0.1	0.4	0.1
IUD	0.2	0.6	0.0	0.5
Pill	1.1	1.3	0.5	0.3
Condom	4.3	5.7	3.0	4.2
Traditional methods	2.3	5.6	2.8	4.5
Total unmet need	24.2	21.3	24.7	23.3
Unmet need for spacing	9.8	9.6	10.5	10.5
Unmet need for limiting	14.4	11.7	14.2	12.8

Source: DLHS, 2007-08

Information about the use of different family planning methods - modern as well as traditional - by the currently married women of reproductive age (15-49 years) in the two districts is available through the district level household survey, 2007-08. The proportion of currently married women in the reproductive age using different family planning methods at the time of the survey is given in table 5. In both the districts, just about half of the currently married women of 15-49 years of age were found to be practising a family planning method - modern or traditional - to regulate their fertility. Interestingly, this proportion was marginally higher in the rural population as compared to the total population in the two districts which suggests that relatively, a lesser proportion of currently married women in the reproductive age group in the urban areas of the two districts were using a family planning method as compared to their rural counterparts.

Another observation that has implications to the health and well-being of children and women of the two districts is the fact that there is very little practice of spacing methods of family planning. It may be pointed out that it is the proper spacing between successive births which contributes significantly to survival of the new born and health status of the mother. Birth limitation also has an impact but this impact on child survival and health or children and women is not that strong as the impact of proper spacing of births. It is evident from table 5 that the practice of family planning methods in the two districts is not oriented towards survival and health of children. Rather it is oriented towards reduction in fertility through limiting the number of children per couple. In order to ensure that family planning has a telling impact on child survival and health, it is imperative that family planning efforts should focus on proper spacing between successive births.

The unmet need for family planning has been found to be quite high in the two districts. In both the districts, the unmet need for family planning is only marginally higher in the rural areas as compared to the total population. This implies that there is substantial unmet need for family planning in the urban areas of the two districts. Moreover, unmet need for limiting family planning methods is higher than the unmet need for spacing family planning methods. This is because of the orientation of official family planning efforts which have traditionally focussed on the terminal methods of family planning at the cost of spacing methods.

Combing the proportion of currently married women in the reproductive age group (15-49 years) using any family planning method and the unmet need of family planning, the total demand for family planning in district Guna works out to be around 73.6 per cent and 72.3 per cent in district Shivpuri. There is

little difference between the total demand for family planning in the rural areas of the two districts as compared to the total population which implies that there is little different in the demand for family planning in the rural and urban areas of the two districts. In any case around 25 per cent of the currently married women in the reproductive age group in the two districts were either pregnant at the time of district level household survey or were wanting an additional child or were infecund. Obviously there is substantial scope for not only increasing the demand for family planning in the two districts but also for reducing the unmet need for family planning by improving the administrative capacity and the organisational efficiency of the family planning services delivery system in both rural and urban areas. In the context of improvements in the survival and health of children and improvements in women's health, it is imperative that any effort towards increasing the demand for family planning should be directed towards improving the demand for spacing methods of family planning rather than the terminal methods of family planning. Promoting the use of spacing methods of family planning, however, requires a very efficient supply system as the effectiveness of the spacing methods of family planning depends upon the continuity of the use and therefore requires regular interaction and contact with the user. This is in quite contrast to promoting the use of terminal methods of family planning which requires only one time contact with the beneficiary.

Child Health

The child health situation in the two districts appears to be grim according to the district level household survey. In the rural areas of the two districts only a very small proportion of children 12-23 months of age are fully immunised and there appears little significant difference between the rural and urban areas of the two districts.

Perhaps the most concerning conclusion that may be drawn from table 6 is that there is little possibility of universal child immunisation, one of the critical component of any child survival strategy, in the two districts even in the next 15-20 years or so. This scenario has important implications in terms of the health and survival of children as the herd immunity against the six vaccine preventable diseases - diphtheria, tetanus, whooping cough, poliomyelitis, tuberculosis and measles - is not likely to be achieved in the two districts, at least, in the near future. Immunisation against the six vaccine preventable diseases, it may be pointed out, is perhaps the most simple and most cost effective technology for improving child survival and promoting child health. Moreover, universal child immunisation opens a window of other opportunities for child survival and health.

Table 6
Child Health

	Proportion of children surveyed (Per cent)			
	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Children (12-23 months) fully immunized (BCG, 3 doses each of DPT, and Polio and Measles)	24.0	17.7	18.6	15.5
Children (12-23 months) who have received BCG	69.1	78.5	65.3	75.3
Children (12-23 months) who have received 3 doses of Polio Vaccine	39.4	42.0	34.5	39.5
Children (12-23 months) who have received 3 doses of DPT Vaccine	27.3	23.6	21.0	20.8
Children (12-23 months) who have received Measles Vaccine	41.6	29.0	33.9	27.3
Children (9-35 months) who have received at least one dose of Vitamin A	18.5	15.7	13.8	13.7
Children (above 21 months) who have received three doses of Vitamin A	7.2	4.7	6.3	2.2
Children with Diarrhoea in the last two weeks who received ORS	18.1	15.5	17.5	15.2
Children with Diarrhoea in the last two weeks who were given treatment	62.4	68.6	61.1	69.1
Children with acute respiratory infection/fever in the last two weeks who were given treatment	62.2	62.6	60.7	60.7
Children had check-up within 24 hours after delivery (based on last live birth)	23.5	21.2	18.5	16.7
Children had check-up within 10 days after delivery (based on last live birth)	24.0	19.7	19.3	14.9

Source: DLHS, 2007-08

In other areas of child health also the situation in the two districts appears to be hardly satisfying. For example, a very small proportion of children above 21 months of age have been found to have received three doses of Vitamin 'A' the role of which in resisting and combatting infections has been

effectively proved. Similarly, there appears little use of oral rehydration therapy, especially, the use of oral rehydration salt in preventing deaths due to dehydration in children with diarrhoea. Rather, there appears a clear tendency in the two districts to go for treatment in case of diarrhoea as well as in case of acute respiratory infections. It is well known that scaling up simple low cost medical technologies like immunisation, oral rehydration therapy, growth monitoring, etc. can contribute significantly in preventing large number of child deaths. A major challenge in the two districts in the context of the survival and health of children and women is how to scale up the use of simple low cost medical technologies like immunisation, oral rehydration therapy and vitamin 'A' supplementation so as to prevent a substantial proportion of premature deaths in the two districts.

Care of the new born during the very early stage of life has also been found to be far from satisfactory in the two districts. In both the districts, less than one fourth of the children were reported to have undergone a health check within 24 hours of delivery and this proportion decreased marginally in case of check up within 10 days after delivery. In the rural areas of the two districts, this proportion is even less than 20 per cent. In district Shivpuri, less than 15 per cent of children were reported to have undergone a check up within 10 days after delivery. This shows that the reach of the public health care delivery system, especially in the rural areas of the two districts, is extremely limited and needs to be extended. It is well known that there is a very heavy concentration of infant and under-five deaths in the first day and first seven days of life. As such, a significant proportion of infant and under-five deaths can be prevented just by ensuring that every new born is examined in the first day or in the first 10 days of life. In district Guna and Shivpuri, the most daunting challenge is to extend the reach of the public health care delivery system, especially in the rural areas, so as to ensure that proper attention and care is given to all new born during the first 10 days of life.

Nutrition

Information about the nutritional status of children and women is not available through the district level household survey. There is no other source of information about the health and nutritional status of children and women in the two districts. In the past, the state government has organised the *Bal Sanjeevani* campaign in the two districts which aimed at weighing all children below 5 years of age but this campaign has since been discontinued. Moreover, state level analysis of the data available through the campaign suggests a number of problems in assessing the nutritional status of children.

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Table 7
Nutrition

| | Proportion of children surveyed (Per cent) | | | |
| | Total population | | Rural population | |
	Guna	Shivpuri	Guna	Shivpuri
Children breastfed within one hour of birth	40.2	39.1	35.2	39.6
Children (age 6 months above) exclusively breastfed	17.3	29.9	16.7	30.1
Children (6-24 months) who received solid or semisolid food and still being breastfed	84.1	84.9	82.6	83.9

Source: DLHS, 2007-08

The district level household survey, however, provides information about the prevalence and patterns of breastfeeding which has a direct relevance to the survival and health of children of the two districts. This information is given in table 6. First and perhaps the most important observation of the table is that in general breast feeding in the two districts is delayed. In general, in case of less than 40 per cent of the children surveyed, breast feeding was reported to be initiated within one hour of birth. In case of rest of the children, the start of breastfeeding was delayed, although, information about the duration of delay is not currently available through the survey.

The second important observation of table 7 is that the prevalence of exclusive breast feeding is very low in the two districts, especially in district Guna where less than one fifth of children above 21 months of age were found to be exclusively breast fed at the time of the survey. By comparison, the situation appears to be relatively better in district Shivpuri. It appears that breast feeding in the two districts is associated with a number of cultural beliefs and traditional practices which are quite orthodox in nature. A comprehensive behaviour change communication programme is needed to change the community perception about breastfeeding in the two districts.

HIV/AIDS and RTI/STI

The district level household survey also provides information related knowledge about HIV/AIDS including causes and means of prevention in the two districts. This information is summarised in table 8. Interestingly, knowledge of both married women 15-49 years of age and unmarried women 15-24 years of age about RTI/STI is poorer than the knowledge about HIV/AIDS in both the

districts. However, the most concerning observation is that there is little testing for HIV/AIDS in the two districts.

Table 8
HIV/AIDS

	Proportion of women surveyed (Per cent)			
	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Ever married women (15-49 years)				
Women heard of HIV/AIDS	25.9	20.4	13.3	11.9
Women who knew that consistent condom use can reduce the chances of getting HIV/AIDS	70.1	53.8	79.8	60.4
Women having correct knowledge of HIV/ AIDS	91.5	78.6	85.1	86.8
Women underwent test for detecting HIV/ AIDS	0.6	0.9	1.5	0.4
Women heard of RTI/STI	22.6	15.2	17.6	12.4
Unmarried women (15-24 years)				
Women heard of HIV/AIDS	51.0	53.7	34.3	37.4
Women who knew that consistent condom use can reduce the chances of getting HIV/AIDS	44.8	23.7	42.3	40.6
Women having correct knowledge of HIV/ AIDS	87.7	71.2	84.3	83.1
Women underwent test for detecting HIV/ AIDS	1.2	0.5	0.0	0.0
Women heard of RTI/STI	14.7	22.0	15.4	20.1

Source: DLHS, 2007-08

The information contained in table 8 highlights the need for reinvigorating the behaviour change communication programme in the two districts backed up by an efficient yet confidential system of testing for HIV/AIDS. Such a system appears to be largely absent, at present, in both the districts. Interestingly, the knowledge about HIV/AIDS in women - married and unmarried - appears to be somewhat satisfactory in the two districts but the translation of this knowledge into action necessary for preventing the spread of this dreaded disease appears to be largely missing in both the districts.

Education

The district level household survey suggests a literacy rate of more than 60 per cent in district Guna and around 56 per cent in district Shivpuri around the period 2007-08. In females, the literacy rate has been estimated to be around 45 per cent in district Guna and around 40 per cent in district Shivpuri during the period 2007-08. According to the 2001 population census, the female literacy rate in district Guna was around 43 per cent while that in district Shivpuri was around 41 per cent. This implies that there has been only a marginal increase in female literacy in district Guna between 2001 and 2007-08 but there appears virtually no increase in female literary in district Shivpuri. In case of male literacy rate also, there appears little improvement in the two districts between 2001 and 2007-08 despite all efforts to universalise elementary education.

Table 9
Education

	Total population		Rural population	
	Guna	Shivpuri	Guna	Shivpuri
Percent total literate Population (Age 7 +)	60.5	56.5	55.2	52.2
Percent literate Male Population (Age 7+)	74.3	70.8	70.3	68.0
Percent literate Female Population (Age 7+)	45.2	40.5	38.5	34.0
Percent girls (age 6-11) attending Schools	99.0	96.0	99.1	95.4
Percent boys (age 6-11) attending Schools	98.8	98.0	99.0	97.6

Source: DLHS, 2007-08

On the other hand, the proportion of girls 6-11 years of age in school has been estimated to be very close to 100 per cent, even higher that the proportion of boys 6-11 years of age in school in district Guna. The prevalence of low levels of literacy along with nearly 100 per cent proportion of children 6-11 years of age in school indicates towards poor to very poor quality of education in the two districts.

The reason why despite nearly universal enrolment of children in primary education, the literacy rate in the two district has not shown significant improvement in the two districts is not known and needs detailed investigation. It appears that despite being in school, children in the two district have not been

able to develop the capacity of reading and writing with understanding - the fundamental definition of literacy. The gap between the literacy rate and the proportion of children in school also indicates that there is a very heavy drop out of children from the primary education.

Conclusions

The foregoing description of the situation prevailing in district Guna and Shivpuri districts of Madhya Pradesh highlight the challenges in improving the situation of children and women. It is evident from the latest information available through the district household survey, that significant additional efforts and investments are required to address specific child survival and health related issues facing the districts. Most importantly, the administrative capacity and organisational efficiency of the public services delivery system needs to be increase substantially so as to scale up even the basic services related to child survival and health such as immunisation, universal primary education, vitamin 'A' supplementation, etc.