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Family Welfare Programme Performance in North-Eastern States and India: A Comparison

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Abstract

Northeast, or North-Eastern Region, is the easternmost region of India composed of eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Often referred to as the seven sisters and one brother state of Sikkim, “the region holds 3.8% of India’s population. With a total population of 46 million (2011 census), 68% of the residents live in Assam alone. The other seven states have population ranging from 6 lakh (Sikkim) to 37 lakh (Tripura), with a modal size between 10 and 20 lakhs (Census 2011). The region is demographically unique, with most states having higher literacy rate than the national average of 74% with the exception of Arunachal Pradesh and Assam. Most of the states have high rural population except Mizoram where almost 52% of the population is urban. The region’s geographical location has been a significant obstacle to its economic and programmatic development.

Given the unique socio-economic and geographical profile of the North-Eastern states and their significant interstate variations, this study aims to assess the performance of the national Family Welfare programme. Using the latest available data from NFHS-5 (2019-21), the paper has two objectives: (i) to examine the inter-state variations in programme performance and (2) to compare the programme performance in the N-E states with that of India as a whole. The analyses focused on key Family Welfare, including maternal care, childcare and nutritional levels as well as outcome indicators such as marriage, fertility and mortality.

The study found no single state to be consistently good or poor across all indicators. Overall, Sikkim and Mizoram were found to be the best-performing states despite poor performance on some indicators. Similarly, Meghalaya and Assam were generally categorised as poor-performing, though they performed well on some of the indicators. When comparing the average performance of the North-Eastern states with India, the region performed poorly in the acceptance of almost all family welfare services.

Keywords

North-Eastern states,
Family welfare
programme,
Marriage, Fertility,
Mortality, Maternal
care, Childcare and
Nutritional level

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Introduction

The Northeast, officially known as the North-Eastern (N-E) Region, is the easternmost region of India consisting of eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. This region is often referred as the “seven sisters” plus the “brother state” of Sikkim. The hills states: Arunachal Pradesh, Meghalaya, Mizoram, and Nagaland are predominantly inhabited by diverse tribal populations. The region's population is a result of historical migrations from Tibet, Indo-Gangetic India, the Himalayas, Bangladesh, and Myanmar. It accounts for 3.8% of the country's population and holds 25 of the 543 *Lok Sabha* seats. Its unique geographical location and diversity of population have long been a big concern for the policymakers and development economists. (NEDFI Data Bank Journal, Ministry of Development of North-eastern Region, Seven Sisters of India, North-East Division Ministry of Home Affairs, Chakrabarti, A, 2010)

Hinduism is the majority religion in Assam, Tripura, Manipur and Sikkim and a significantly minority faith in Arunachal Pradesh. Christianity is the majority religion in Meghalaya, Nagaland and Mizoram and the plurality faith in Manipur and Arunachal Pradesh. Assam has a notable Muslim population with about 93% of all N-E Muslims residing there. About 30% of India's Christian population is concentrated in the N-E region. Buddhism has a strong in Sikkim, Arunachal Pradesh and Mizoram. (Chakrabarti, A, 2010, Sharma, A. (2012)).

Demographically, this region is unique in several ways. The total population of this region is 46 million of which 68% lives in Assam alone. Assam also has a very high density of 398 people per sq. km. similar to the national average 382 while Arunachal

Pradesh has lowest density at 17. The literacy rates in most N-E states are higher than the national average of 74% except for Arunachal Pradesh and Assam. The percentage of women with 10+ years of schooling is higher in the states of Manipur, Mizoram, Nagaland and Sikkim but lower in Tripura and Assam. According to 2011 census, Meghalaya had the highest population growth rate in the region 27.8 exceeding the national average of 17.64%. Nagaland recorded the lowest population growth in the entire country, with a negative growth rate of 0.5%. Similar to India as a whole, most of states in the region have high rural population with the exception of Mizoram where nearly almost 52% population is urban. (Health & Family Welfare Statistics in India, 2020)

Objectives

Given the unique topography and demography of the region, a study of the performance on National Family Welfare programmes³ was deemed necessary. This paper attempts to look at the performance of Health & Family Welfare programme in the N-E states and compares it to the performance in India as a whole. This paper has two specific objectives: To compares the performance of eight N-E states among themselves (inter-state performance) and to compares the average performance of the N-E states with that of India, as a whole.

Data & Methods

The choice of programme indicators is necessary for comparing the performance of the Health & Family Welfare programme.

³ Family Welfare Programme indicators, here, cover Programme services as well their demographic output/outcome indicators. More specifically, we have covered the following Programme services: family planning, maternal health, child health and nutrition. For its output/outcome indicators, we have covered marriage, fertility and mortality.

For this purpose, the following seven broad categories and sub-categories of indicators were selected.

Table 1 Broad categories and Sub-categories of indicators

Sl. No.	Broad category of indicators	Sub-categories of indicators
1.	Marriage	% Women ages 20-24 years married before age of 18 years, minimum legal age at marriage
2.	Acceptance of Family Planning	Current use of modern family planning methods (%) % female sterilization out of total number of acceptors of modern methods of family planning Total Unmet Need for family planning (%)
3.	Fertility	Total Fertility Rate Adolescent Reproduction (in ages 15-19)
4.	Mortality	Infant mortality rate Under 5 (child) mortality
5.	Acceptance of Maternal care services	% mothers who had an ante-natal care visit in first 12 weeks % Mothers who had at least four ante-natal care visits Institutional deliveries (%)
6.	Acceptance of Childcare services	% Children ages 12-23 months fully vaccinated (based on information from vaccination card or mothers' recall) Prevalence of diarrhoea in children in two weeks before the survey (%) % Children under 6 months of age exclusively breastfed
7.	Nutrition levels	% Children ages 6-59 months who are anaemic % pregnant women ages 15-49 who are anaemic

Besides, these programme indicators, another indicator "Sex Ratio at Birth for Children Born in Last Five Years (females/1000 males)" was taken. This has assumed importance because its skewness (unfavourable to females) observed in several states of India which has become a cause of social concern. The value of this indicator should be about 950 females per 1000 males; in India whereas it is only 929 (NFHS-5). This paper also intends to compare status of this indicator in the N-E states

Source of data for the levels of these indicators is NFHS 5 (NFHS 5, 20019-2021 fact sheets India, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland Sikkim, Tripura, Assam)

Results

Inter-state (eight N-E states) comparison of programme performance

Marriage

Table 1 and Figure 1 present the percentage of women aged 20-24 years who were married before the legal minimum age of 18 years. The lower the value of this indicator, the higher the age at marriage.

There is a large variation in the value of this indicator among different N-E states, with

values ranging from a maximum of 40.1 per cent in Tripura to a minimum of 5.6 in Nagaland. Three states have the value ranging from 16 to 19 per cent and two states between 8 to 11 percent. It clearly shows the large differentials in age at marriage in North-Eastern states: age at marriage is lower in the states Arunachal Pradesh, Manipur and Meghalaya and higher in the states of Mizoram, Nagaland and Sikkim. The states of Tripura and Assam have relatively very low female age at marriage.

Practice of family planning methods This category includes three indicators: “Current Use of modern family planning methods (%)”, “the percentage of female sterilization

out of total modern method users” and “Total Unmet need for family planning (%)”. Figure 2A, 2B and 2C show levels for all the eight states on these three indicators.

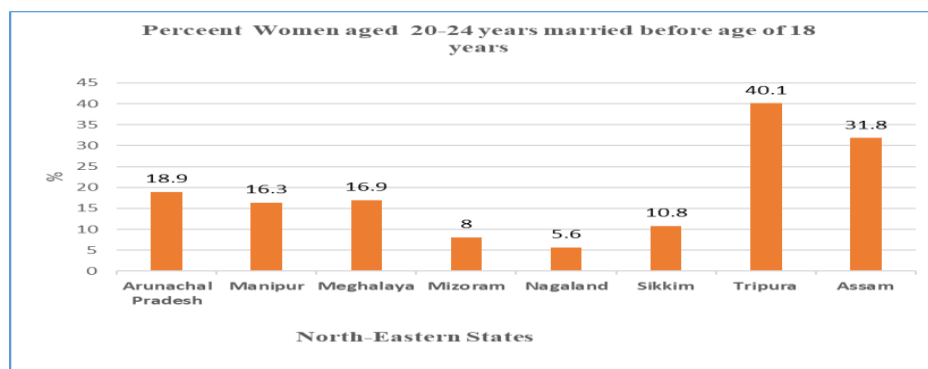


Figure 1 Comparison of Indicator on Female Age at Marriage in N-E states of India

The use of modern family planning methods varies from a low of 18.2% in Manipur to a high of 54.9% in Sikkim (Figure 2A). Prevalence rates are relatively

lower (less than 30%) in the states of Manipur, Meghalaya and Mizoram and higher in the other five states.

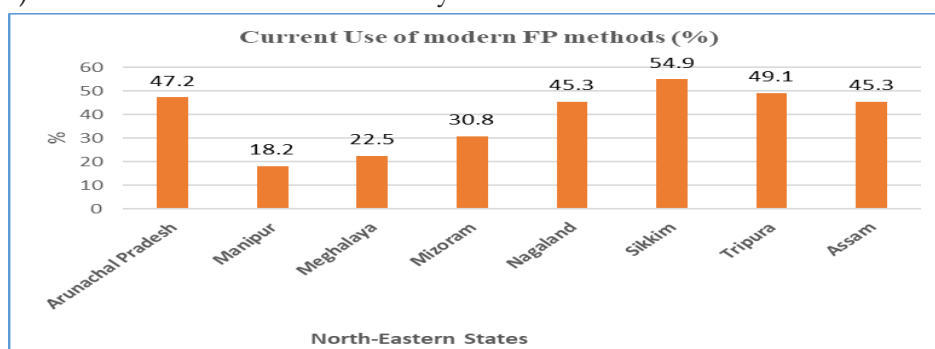


Figure 2A Comparison of Indicators of acceptance of family planning methods in N-E states of India

Regarding sterilisation as a percentage of total modern contraceptive use, the rates range from 19.9% in Assam to 42.2% in Mizoram (shown in Figure 2B). Most of the states fall within the 20-25% range which is

much lower than the national average of 67.1%. The exceptions are Arunachal Pradesh (38.6 %), Mizoram (42.2 %) and Nagaland (31.8 %).

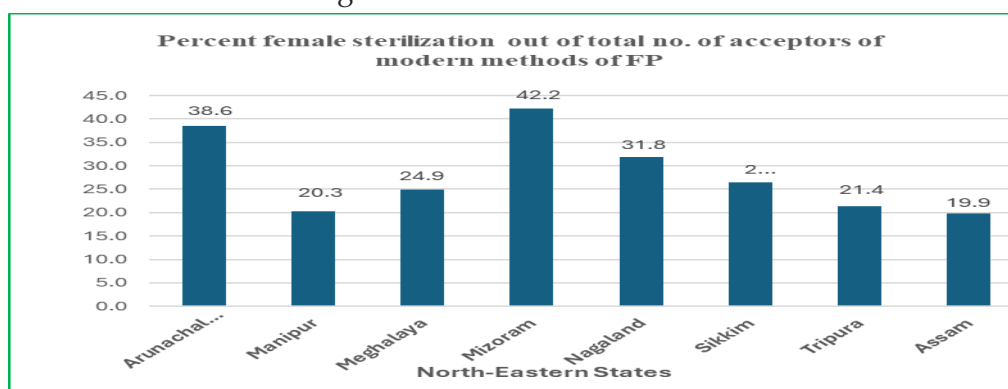


Figure 2B Comparison of Indicators of Acceptance of family planning methods in N-E states of India

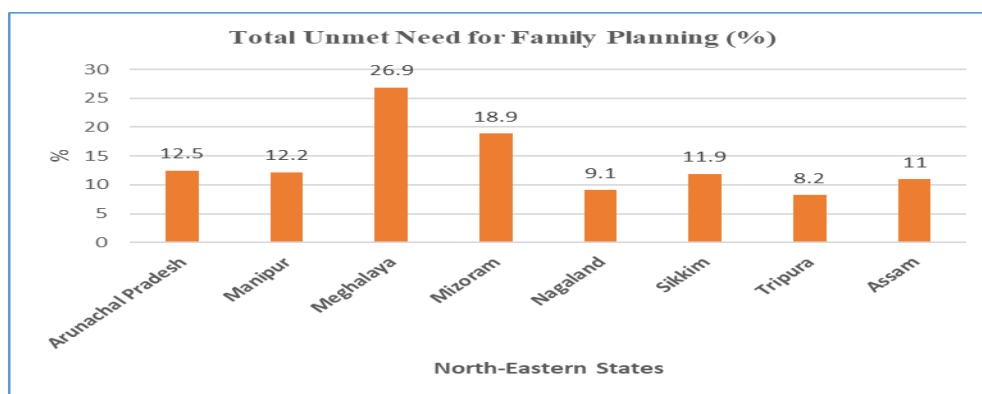


Figure 2C Comparison of Indicators of acceptance of family planning methods in N-E states of India

The information on third indicator chosen for the family planning programme “Total Unmet Need for family planning” is shown in Figure 2C.

The unmet need for family planning ranges from 8.2% in Tripura to 26.9 per cent in Meghalaya. The states with a relatively lower unmet need ((more than 10%) include Arunachal Pradesh, Manipur, Nagaland,

Sikkim, Tripura and Assam. In contrast, Meghalaya and Mizoram report a very high unmet need at 26.9% and 18.9%, respectively.

Fertility Indicators

Two fertility indicators were examined: Total Fertility Rate and Adolescent Reproduction (aged 15-19). Their levels are shown in Figure 3A and 3B.

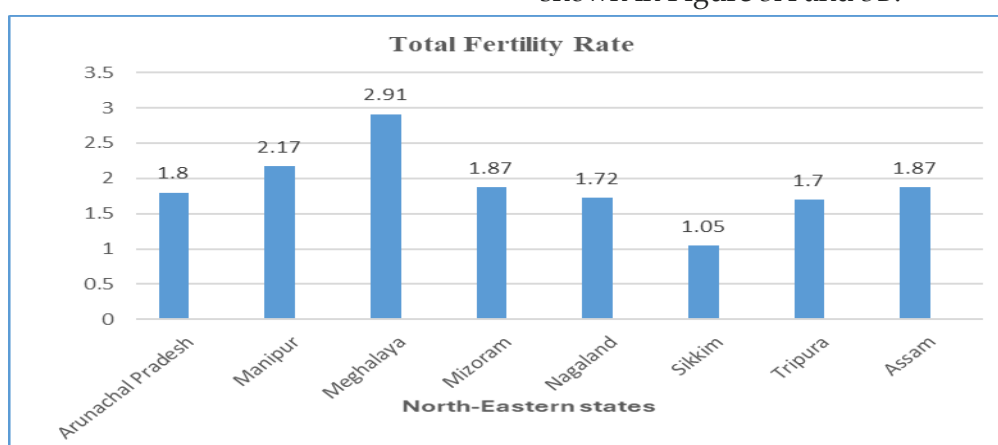


Figure 3A Comparison of Indicators of Fertility in N-E states of India

Six states-- Arunachal Pradesh, Mizoram, Nagaland, Sikkim, Tripura and Assam-- have achieved the national TFR goal of 2.1. The TFR levels are above this goal only in Manipur (2.17) and Meghalaya (2.91). The fertility problem in the N-E states is primary concentrated in Meghalaya, as Manipur is close to the TFR goal.

Adolescent fertility shows an interesting pattern. Mizoram, Nagaland and Sikkim

have very low adolescent fertility with around 20 births per thousand women aged 15-19 (Figure 3B). Other three states Arunachal Pradesh, Manipur and Meghalaya have an age specific (15-19) fertility rate of around 40. However, Tripura (94) and Assam (61) have very high fertility rates and require specific attention to reduce reproduction in these teen ages: delay in age at marriage and/or delay in reproduction after marriage.

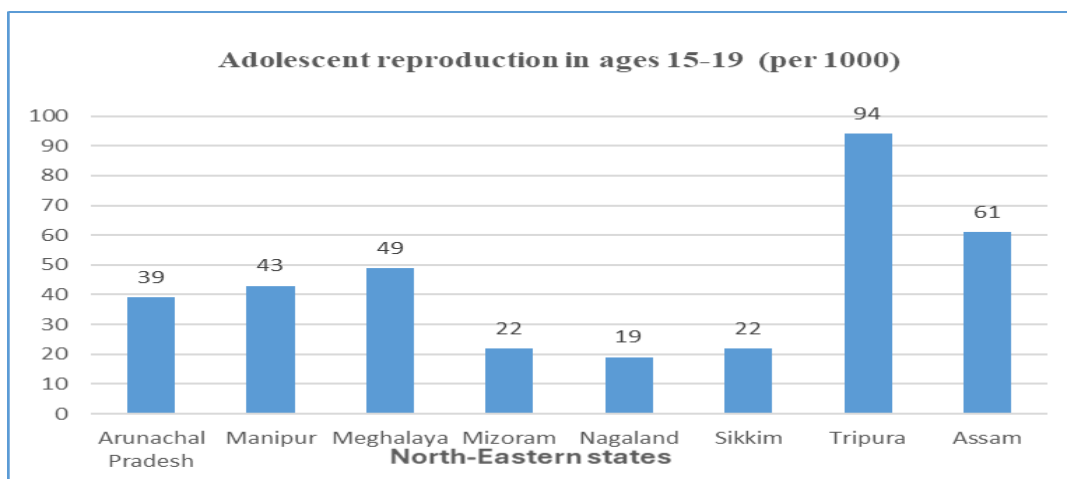


Figure 3B Comparison of Indicators of Fertility in N-E states of India

Mortality Indicators

The study analysed two mortality indicators: “Infant Mortality Rate” (IMR) and “Under 5 (Child) Mortality Rate”. Their levels are shown in Table 1 and Figures 4A and 4B. These indicators are included because the Sustainable Development Goals (SDGs) have set separate targets for each. For the IMR, target is < 25 and for “Under Five Mortality”, target is 28 by the year 2030.

Five N-E states have achieved the IMR goal of less than 25: Arunachal Pradesh (12.0), Manipur (25.0), Mizoram (21.3), Nagaland (23.4) and Sikkim (11.2). The remaining three states Meghalaya (32.2), Tripura (37.6) and Assam (31.9) are close to the goal with the exception of Tripura.

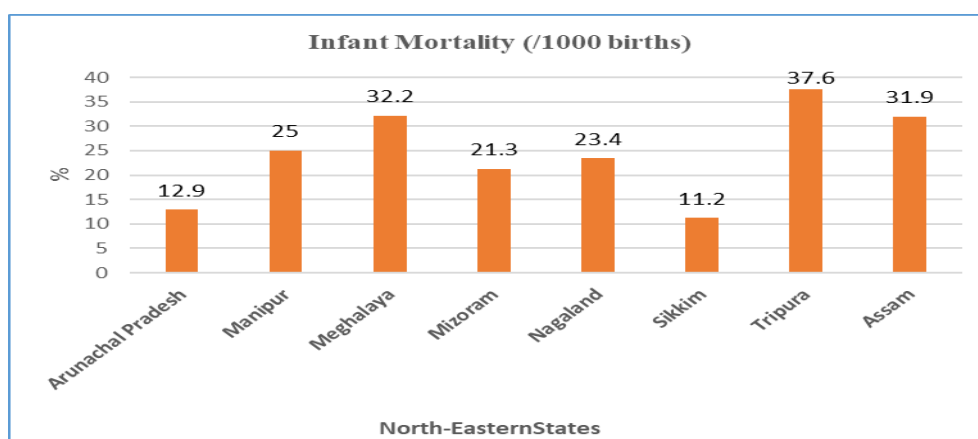


Figure 4A Comparison of Indicators of Mortality in N-E states of India

For Under 5 Mortality, only three states have achieved the SDG goal of 28: Arunachal Pradesh (18.8), Mizoram (24.0) and Sikkim (11.2). Other two states have levels in low thirties and are quite likely to

achieve their goal of 28 by 2030. The states of Meghalaya, Tripura and Assam with levels of around 40, require significant effort to reach the goal (Figure 4B).

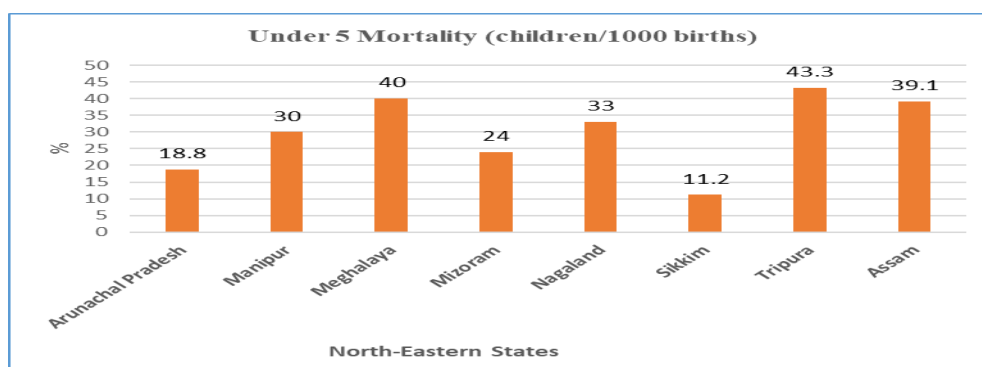


Figure 4B Comparison of Indicators of Mortality in N-E states of India

Maternal Care Services

Three indicators were chosen for “Maternal Care Services”: “the percentage of mothers who had an ante-natal care visit in the first 12 weeks”, “the percentage of mothers who had at least four ante-natal care visits” and “the percentage of Institutional deliveries”.

Data on these indicators are presented in Table 1 and Figures 5A, 5B and 5C. Regarding the first indicator, all states report levels of 50% or higher, with Manipur and Mizoram showing high rates of 80% and 73%, respectively (Figure 5A).

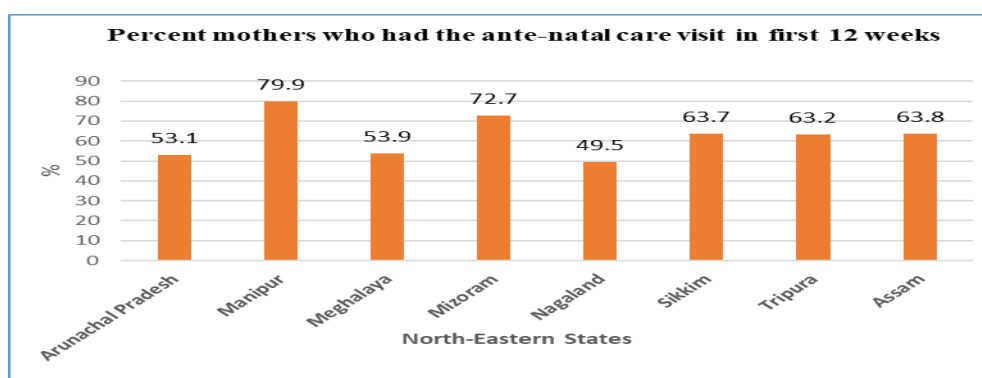


Figure 5A Comparison of Indicators on Maternal Care services in N-E states of India

Regarding the second indicator, only about 50 percent pregnant women had four or more check-ups during their pregnancy except for Manipur, where this level is

about 80% (Figure 5B). More emphasis on this service is needed due to its importance for infant and maternal health.

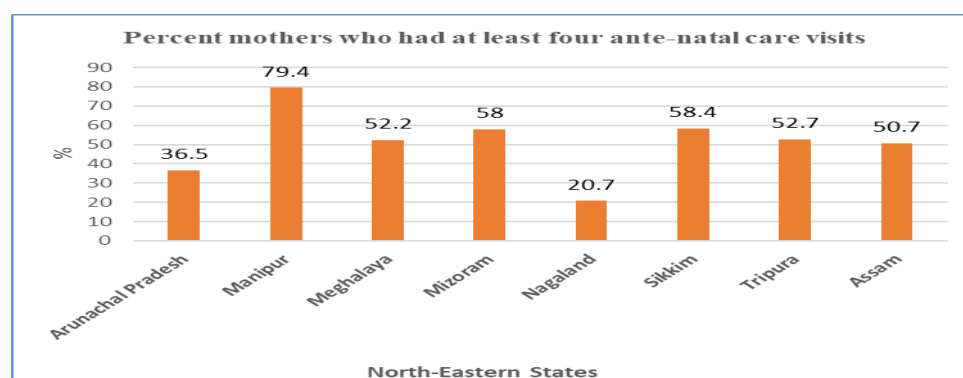


Figure 5B Comparison of Indicators on Maternal Care services in N-E states of India

For institutional deliveries, six states report rates higher than 75. However, Meghalaya and Nagaland reported a value of only

about 50 percent. This service also requires more emphasis to improve infant and maternal health outcomes (Figure 5C).

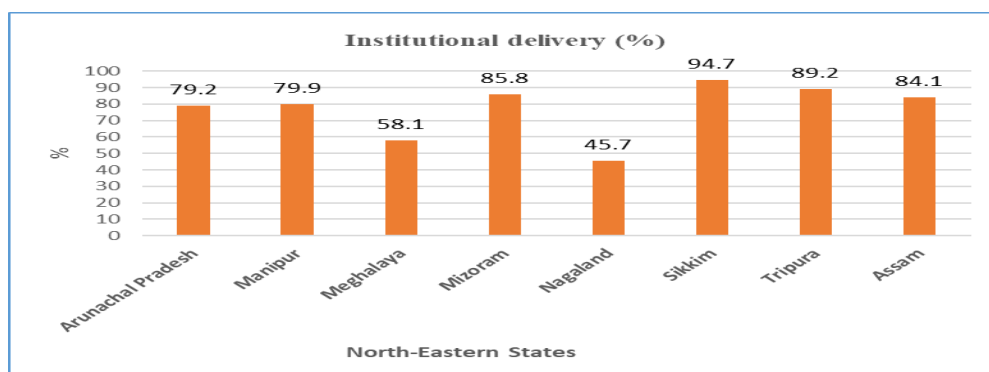


Figure 5C Comparison of Indicators on Maternal Care services in N-E states of India

Child Care Services

Three indicators were used for assessment of the childcare services: “the percentage of children aged 12-23 months fully vaccinated”, “the prevalence of Diarrhoea

in children in the two weeks preceding the survey” and “the percentage of children under six months who are exclusively breastfed”. Their levels are presented in Table 1 and Figures 6A, 6B and 6C.

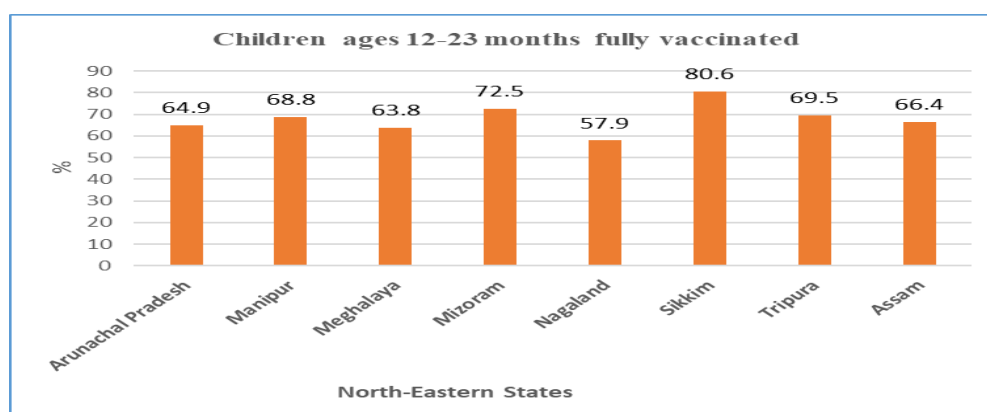


Figure 6A Comparison of indicators of childcare services in N-E states of India

It may be noted that most states have vaccination coverage for children between 60% and 70%... The two exceptions are Nagaland, with the lowest coverage of 57.9%, and Sikkim, with the highest at 81% (Figure 6A). The prevalence of diarrhoea in

children within two weeks” of the survey ranges from 3.4% in Nagaland to 10.4% in Meghalaya though the modal value for this indicator for N-E states is 5.6% which is lower than all India figure of about 7% (Figure 6B).

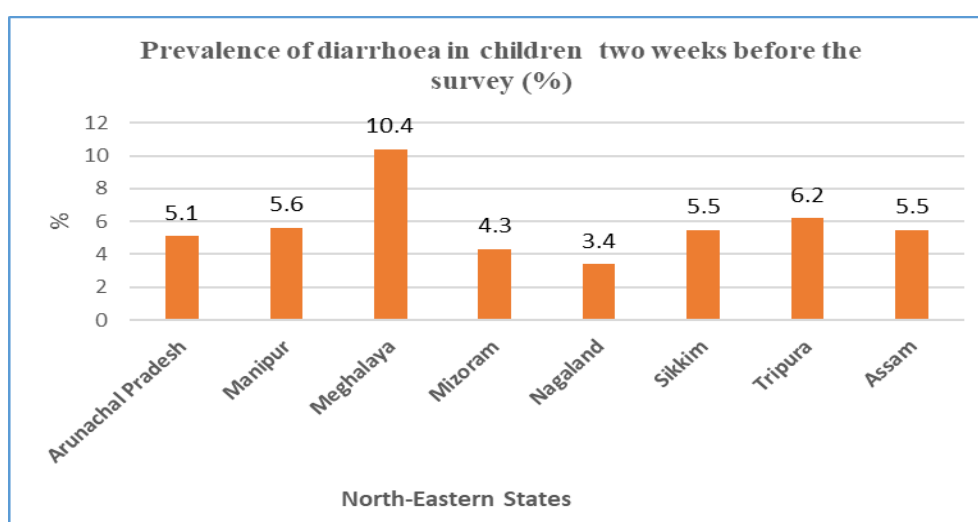


Figure 6B Comparison of indicators of childcare services in N-E states of India

Exclusive breastfeeding for children under 6 months varies significantly from a low of 28.3% in Sikkim to a high of 70.7% in Manipur (Figure 6C). While five of the eight states report this practice for 60-70% of mothers; two states report this practice by

about 40% mothers. It is only Sikkim where only 28% of mothers exclusive- breastfeed their children for first six months and requires additional efforts to improve the situation.

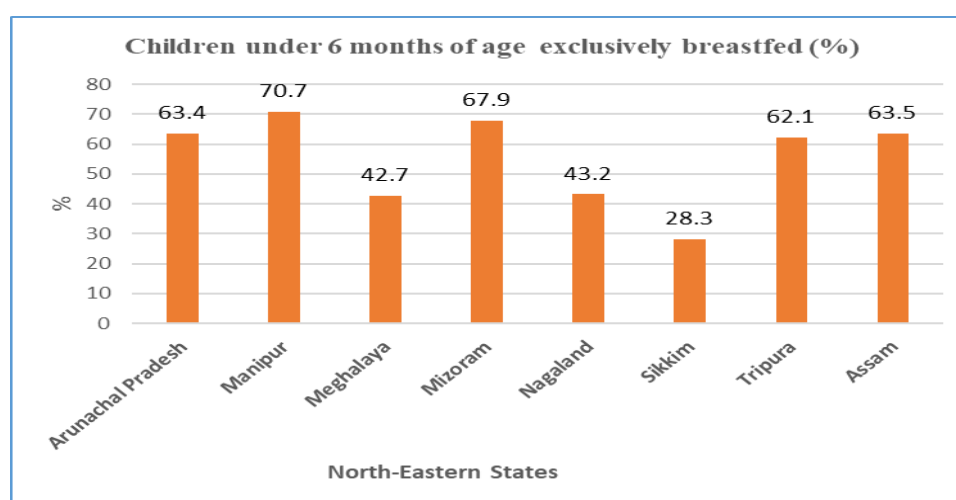


Figure 6C Comparison of indicators of childcare services in N-E states of India

Nutritional Indicators

Two indicators were chosen for assessing the performance of nutrition programme: “the percentage of children aged 6-59 months who are Anaemic” and “the percentage of pregnant women aged 15-49 years who are Anaemic”. Their values are presented in Table 1 and Figures 7A and 7B. It may be seen that quite a large percentage

of children are anaemic. The minimum percentage of anaemic children is as high as 42.7% in Nagaland and 2.8% in Manipur, while Assam has the highest rate at 68.4%. In fact, two states have anaemic children between 60 to 70% percent, two states between 50-60% and four states between 40 to 50% (Figure 7A). The situation of these states, though very poor yet looks to be slightly better than all India figure of 67%.

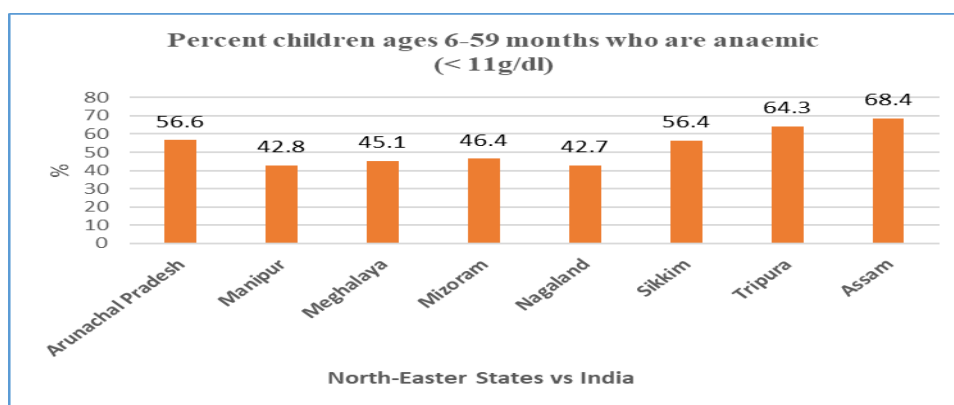


Figure 7A Comparison of Indicators on Nutrition levels in N-E states of India

The situation of anaemia among pregnant women is similar. Only Arunachal Pradesh and Nagaland have their rate in the twenties. All other states have rates over 30% with Tripura and Assam

reporting high percentages above 50%. (Figure 7B). The comparable figure for India is 52% which is worse than six of N-E states.

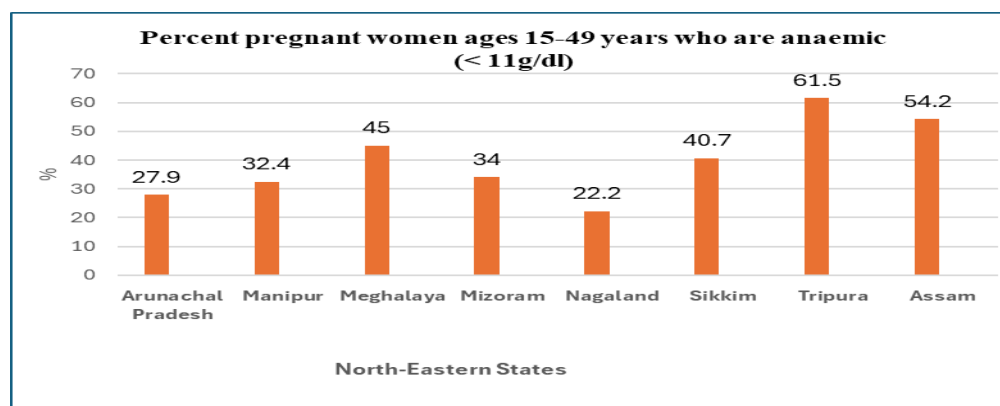


Figure 7B Comparison of Indicators on Nutrition levels in N-E states of India

Sex Ratio at Birth

It is very satisfying to see that the indicator of “Sex Ratio at Birth” in N-E states aligns with fits the biological expectations, which is about 950 females per 1000 male births; In contrast the ratio for In India as a whole, is heavily skewed against females (929 females per 1000 males), which suggests female feticide and infanticide. (Table 1).

Comparison of average performance of Family Welfare programme in N-E states with India

One of the study’s objectives was to compare inter-state differences in the

performance of Family Welfare programme of the N-E states with that of India as a whole. This has been done in the sections above.

The second objective was to compare the performance of the N-E states with that of India. For this, **unweighted average** of the seven smaller ((excluding Assam because of its large size and distinct population). Thus, the average of the seven small N-E states was computed to compare with the performance of Family Welfare Programme of India.

This data is presented in Table 1 and Figures 8A and 8B.

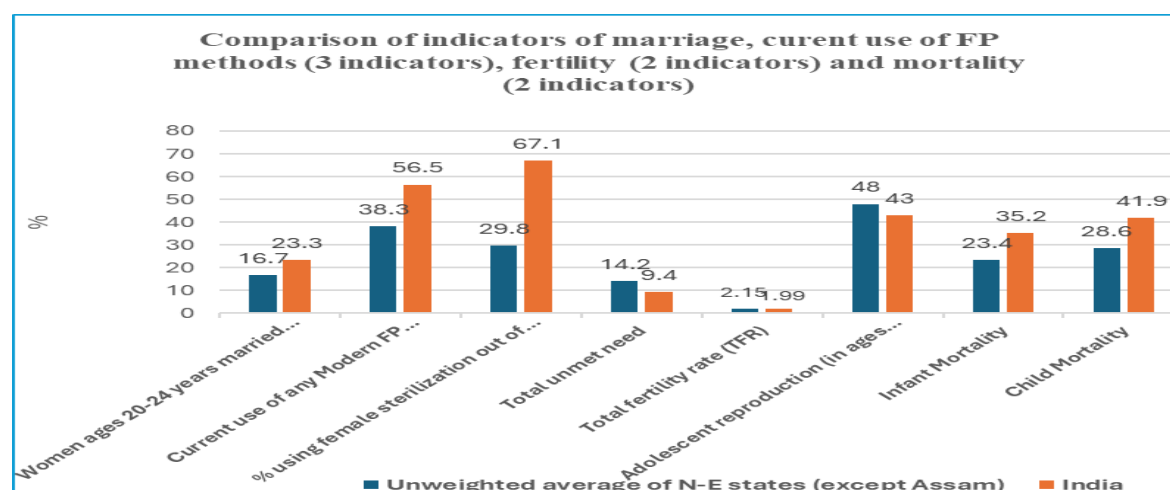


Figure 8A Comparison of Family Welfare Programme Performance Indicators in N-E states (Average) with India

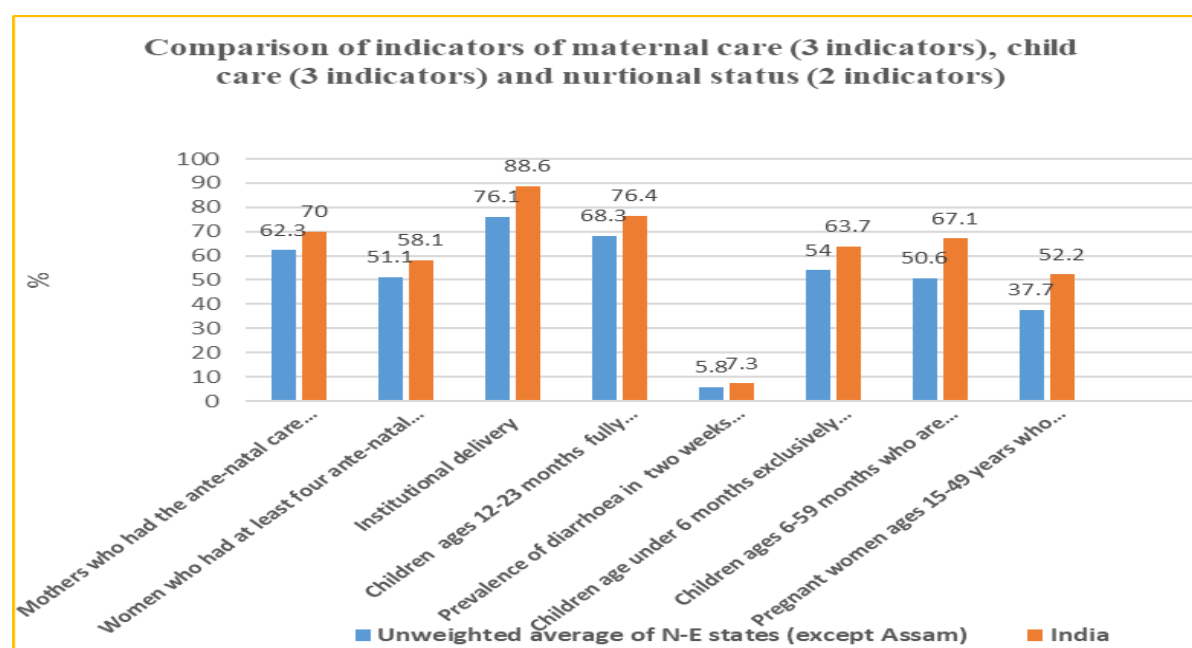


Figure 8B Comparison of Family Welfare Programme Performance Indicators in N-E states (Average) with India

The following are the key findings of this comparison (between N-E states and India):

- **Age at marriage and Fertility:** The female age at marriage in the N-E states is **higher than India** as a whole (because smaller percentage of women in the age group 20-24 were reported to be married--indicator used in this study)

but surprisingly, adolescent reproduction (age specific fertility in ages 15-19) was also higher, apparently a contradictory finding. This higher reproduction in the ages 15-19 was, perhaps, mainly because very high adolescent reproduction rates were reported in the states of Tripura and Assam (Figure 8A).

- **Family Planning:** Three indicators of family planning practice have been used to compare the practice of family planning methods between N-E states and India. The results are shown in Figure 8A. The results of the comparison are: (1) Use of the modern family planning methods was lower in N-E states than India. (2) Percentage of female sterilization out of total number of acceptors of modern family planning methods is also lower, though the level of TFR was almost similar to that of India (2.15 compared to India 1.99). A more detailed study of data on practice of FP methods in N-E states shows that couples in N-E states tend to use (relative to India) traditional methods of family planning like Rhythm and Withdrawal. This is particularly so in the states of Manipur, Tripura and Assam. Even between traditional methods, withdrawal is more practiced than Rhythm. This may be one reason why TFR level in N-E states is almost similar to that of India despite lower use of modern FP methods. (3) Unmet Need for FP is reported to be very high in N-E states (14.2%) compared to India (9.4%).
- **Mortality:** Both Infant and Child (Under 5) mortality levels are lower in N-E states than India (Figure 8A)
- **Service Acceptance:** The acceptance of family welfare programme services by mothers and children, is much lower in N-E states, for all the selected Compared to India (Figure 8B).
- **Health Indicators:** The prevalence of diarrhoea among children under five is lower in N-E states (5.8 %) compared to India (7.3%). However, the practice of exclusive breastfeeding for the first six months is also lower in N-E states (54%) compared to India (63.7%) (Figure 8B).
- **Nutrition:** The selected indicators were “Children aged 6-59 months who are Anaemic” and “Pregnant women aged 15-49 who are Anaemic”. The comparative figures are presented in Table 1 and Figure 8B. It may be seen that anaemia levels for children and pregnant mothers in N-E states are lower in comparison to India.
- **Sex Ratio at Birth:** The Sex Ratio at Birth for N-E states is 978 females per thousand males which meet biologically expected standards. This is in stark contrast to the national figure for India (929) which is heavily skewed against females, suggesting some degree of female foeticide and infanticide in India (Table 1)

Discussion

Inter-state programme performance differentials in N-E states

The analysis of family welfare programme in the North-Eastern states of India revealed significant interstate variations and some notable differences when compared to national average. In other words, no consistently best performing state could be singled out on all indicators or even on specific category of indicators like Marriage, Fertility, Mortality, Acceptance of Maternal or Childcare services and Nutritional level indicators. But overall, Sikkim was found to be the best performing state though it ranked poorly on indicators like prevalence of diarrhoea, “right” breast feeding practices and nutritional indicator for children and pregnant mothers.

Similarly, Meghalaya was found to be the overall poorest performing state though it performed relatively well on indicators of nutritional status of children when compared to the other N-E states. (While making this statement it should be understood that the statement is an interstate comparison of North-Eastern states; it has nothing to do with any other states of the country).

The sex ratio at birth in all N-E states was very good (at the biologically expected level of 950 girls per 1000 male babies).

In order to study the performance of the individual state on individual indicators, this paper in Table 2 has given ranking of different states on various programme indicators discussed in the paper: no effort has been made to classify a state as “relatively good” or “relatively poor” performing on the individual indicator. It is up to a reader/ programme manager to decide the criterion herself/himself to decide “relatively good” or “relatively poor” performance of a programme and indicator of her/his state so as to develop strategies to improve the situation. (One possible criterion for stating “relatively good performing” state on a specific indicator could be its rank of 4.5 or less; with this criterion, a rank of > 4.5 would mean relatively poor performing state on a specific indicator.

Comparison of family welfare programme performance of N-E states (Average) with India

Figures 8A and 8B compare an average level of each family welfare programme indicator in N-E states with its level in India. (As explained earlier in the paper,

average was computed for seven small N-E states excluding Assam). The N-E states were doing better than India on the category of indicators of marriage and mortality but were lagging on indicators of “Acceptance of modern family planning methods and Fertility”. Poor performance is the “use of family planning methods” is because of higher use of conventional methods of family planning like Rhythm and Withdrawal in N-E states. Similarly, Adolescent fertility in the age group 15-19 in N-E states was higher than India despite the fact that age at marriage is higher (than India) in these states; this is due to the fact that adolescent fertility for the states of Tripura and Assam is reported to be very high.

Regarding acceptance of the programme services like Acceptance of Maternal and Childcare services, N-E states are doing poorly compared to the acceptance level of overall India. The prevalence of diarrhoea in last two weeks in N-E states was lower than the prevalence in India.

These finds suggest that while there have been some successes, there is a clear need for targeted interventions to improve the performance of the Family Welfare Programme in the North-Eastern region, particularly in states that are underperforming. Future policies should focus on addressing the specific socio-economic and geographically challenges that have been a stumbling block for the region’s development.

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Appendix

Based on authors' experiences with the programme, some general suggestions are made below on how the states can address the problems though it is felt that the programme managers are in a better position to take their own decisions in view of the existing eco-system of the programme.

State	Problems/programme issues	Suggestions
Arunachal Pradesh	Performance of family planning programme is poor	Instructions to ASHA worker for advice on use of FP methods for planning and delayed age at marriage; Use of Mass media and Inter-personal communication to spread the message
	Acceptance of Maternal and child health programme is poor	Bring integration and coordination in the MCH work of ANM, AWW and ASHA
	Nutritional status of children is poor	Strengthening the AWC and monitoring its functioning. Intake of IFA Tablets needs improvement
Manipur	Use of family planning methods, particularly spacing methods poor	Work of field workers like ASHA, AWW and ANM needs monitoring
	Female age at marriage needs to be increased	Need to publicize the need for female higher age at marriage. ASHA, AWW. ANM need to use their IPC.
	Institutional deliveries need to increase	Work of field workers like ASHA, AWW and ANM needs monitoring
Meghalaya	Incidence of diarrhea needs to reduce	Need to improve knowledge on causes of diarrhea among mothers. IPC of field workers
	All FW programmes are not working satisfactorily	Orientation of the field workers and their close monitoring is needed
	Family planning programme services needs strengthening, and the programme workers may be alerted on its performance	Orientation of the field workers and their close monitoring is the need
Nagaland	Use of maternal and child health services is poor	The field workers need to be told about poor use of the services. Their work needs to be monitored
Sikkim	Need to propagate the breast-feeding practices	Institutions where deliveries are conducted and field-level workers need to be alerted. They need to talk to people
	Nutrition level of pregnant mothers and children is poor	Pregnant mothers need to take IFA tablets during pregnancy, and they be told about the causes
Tripura	Age at marriage and age at first birth need to be raised. They affect IMR	Early marriage and early age at birth need to be changed by mass media campaign and inter-personal contact (IPC) by field workers.
	Nutrition level of both pregnant mothers and children in poor	Pregnant mothers need to take IFA tablets during pregnancy
Assam		AWW should advise children for green vegetables etc. for iron improvement
	Doing poorly in all the family welfare programmes	Orientation of the field workers and their close monitoring is needed

It may be noted that integration and coordination in the work of ASHA, AWW and ANM can help in most of the states except Tripura where age at marriage/first birth needs to be raised by media advocacy.

Table 1 Comparison of Some Important Health & Family Welfare Programme Indicators in N-E states and India

Important Health & FW Programme Indicators	North-Eastern states									India
	Arunachal Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Assam	Unweighted Average (without Assam)	
Population profile										
Pop. Size (in '000) (Census 2011)	1384	2856	2967	1097	1979	611	3674	31206		1210855
Pop. Density (Pop/Sq. Km) (Census 2011)	17	115	132	52	119	86	350	398		382
% Pop. Rural (census 2011)	77.1	70.8	79.9	47.9	71.1	74.8	73.8	85.9		68.8
Sex Ratio at Birth for children born last five years Female/1000 Males)	979	967	989	969	945	969	1028	964	978	929
Women with 10+ years of schooling	39.4	48.1	35.1	50.0	44.4	49.0	23.2	29.6	41.4	41.0
Marriage										
Women ages 20-24 years married before age 18 years	18.9	16.3	16.9	8.0	5.6	10.8	40.1	31.8	16.7	23.3
Current use of FP methods										
Current use of any Modern FP method	47.2	18.2	22.5	30.8	45.3	54.9	49.1	45.3	38.3	56.5
% using female sterilization as per cent of total users of modern contraceptive methods	38.6	20.3	24.9	42.2	31.8	26.4	21.4	19.9	29.8	67.1
Total Unmet Need	12.5	12.2	26.9	18.9	9.1	11.9	8.2	11.0	14.2	9.4
Fertility										

Important Health & FW Programme Indicators	North-Eastern states									India
Total Fertility rate	1.80	2.17	2.91	1.87	1.72	1.05	1.70	1.87	2.15	1.99
Adolescent Fertility (Ages 15-19)	39	43	49	22	19	22	94	61	48	43
Mortality										
Infant Mortality	12.9	25.0	32.2	21.3	23.4	11.2	37.6	31.9	23.4	35.2
Under 5 Mortality	18.8	30.0	40.0	24.0	33.0	11.2	43.3	39.1	28.6	41.9
Maternal Care										
Mothers who had the ante-natal care visit in first 12 weeks	53.1	79.9	53.9	72.7	49.5	63.7	63.2	63.8	62.3	70.0
Women who had at least four ante-natal care visits	36.5	79.4	52.2	58.0	20.7	58.4	52.7	50.7	51.1	58.1
Institutional delivery	79.2	79.9	58.1	85.8	45.7	94.7	89.2	84.1	76.1	88.6
Childcare										
Children ages 12-23 months fully vaccinated	64.9	68.8	63.8	72.5	57.9	80.6	69.5	66.4	68.3	76.4
Prevalence of diarrhoea in two weeks before the survey	5.1	5.6	10.4	4.3	3.4	5.5	6.2	5.5	5.8	7.3
Children age under 6 months exclusively breastfed	63.4	70.7	42.7	67.9	43.2	28.3	62.1	63.5	54.0	63.7
Nutritional status										
% Children ages 6-59 months who are anaemic (< 11g/dl)	56.6	42.8	45.1	46.4	42.7	56.4	64.3	68.4	50.6	67.1
% Pregnant women ages 15-49 years who are anaemic (< 11g/dl)	27.9	32.4	45.0	34.0	22.2	40.7	61.5	54.2	37.7	52.2

Table 2 Ranking of each N-E states on the performance of family welfare programme service/ outcome and output Indicators

Broad category and specific indicators of the family welfare Programme	North-Eastern states							
	Arunachal Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Assam
Marriage								
1.% Women age 20-24 years married before age 18 years, minimum legal age at marriage	3	4	5	2	1	3	8	7
Family Planning								
2.Contraceptive Prevalence Rate of modern methods	3	8	7	6	4.5	1	2	4.5
3.Use of female sterilization as per cent of total users of modern contraceptive methods	2	7	5	1	3	4	6	8
4.% Unmet Need	6	5	8	7	2	4	1	3
Fertility								
5.Total fertility rate	4	7	8	5.5	3	1	2	5.5
6.Adolescent Fertility (ages 15-19)	7	4	5	3	1	2.5	7	6
Mortality								
7.Infant mortality rate	2	5	7	3	4	1	8	6
8.Under 5 child mortality	2	4	7	3	5	1	8	6
Maternal Care Services								
9.% Mothers who had at least four ante-natal care visits	7	1	5	3	8	2	4	6
10.% Institutional deliveries	6	5	7	3	8	1	2	4
Child Care Services								
11.Children ages 12-23 months fully vaccinated	6	4	7	2	8	1	3	5

Broad category and specific indicators of the family welfare Programme	North-Eastern states							
	Arunachal Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Assam
12.Prevalence of diarrhoea in two weeks preceding the survey	3	6	8	2	1	4.5	7	4.5
13.% Children under age 6 months exclusively breastfed	4	1	6	2	7	8	5	3
Nutrition Services								
14.% Children ages 6-59 months who are anaemic	6	2	3	4	1	5	7	8
15.% pregnant women ages 15-49 who are anaemic	2	3	6	4	1	5	8	7