Preliminary Findings from the Third National Family Health Survey

A report on the findings on selected aspects of health from the NFHS 2005-06 in the five states of Chhattisgarh, Gujarat, Maharashtra, Orissa and Punjab.

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State fact sheets for Chhattisgarh, Gujarat, Maharashtra, Orissa, and Punjab, from the 2005-06 National Family Health Survey (NFHS-3) show that some health and family welfare indicators have improved markedly in the past seven years, while nutritional deficiencies remain a major challenge.

NFHS-3 is the third in a series of national surveys; earlier NFHS surveys were carried out in 1992-93 (NFHS-1) and 1998-99 (NFHS-2). All three surveys were conducted under the stewardship of the ministry of health and family welfare, government of India, with the International Institute for Population Sciences, Mumbai, serving as the nodal agency and a number of international and national agencies providing funds and technical help. In NFHS-3, 18 research organisations conducted interviews with more than 2,30,000 women (15-49 years) and men (15-54 years) throughout India. NFHS-3 also tested more than 1,00,000 women and men for HIV and more than 2,00,000 adults and young children for anaemia. Fieldwork for NFHS-3 was conducted from December 2005 to August 2006.

The following is a summary of key findings from the five states.

Fertility and Family Planning

Overall, during the past 13 years, since NFHS-1, there has been continuous fertility decline among the five states. The states of Punjab and Maharashtra have reached the replacement level of fertility, i.e., around two children per woman. Women in Chhattisgarh, Gujarat, and Orissa are expected to have an average of about 2.5 children at current fertility rates. The urban areas of all the five states have reached below replacement level fertility. There is a difference of one child between the fertility of women with no education and those with 10 or more years of schooling.

Consistent with decline in fertility, the use of contraceptive methods, particularly modern methods and that too of spacing methods is rising. The contraceptive prevalence rate shows that about two-thirds of women in Gujarat, Maharashtra, and Punjab are currently using some method of contraception, compared with half of women in Orissa and Chhattisgarh.

Also contributing to decreasing fertility is a rise in the average age at marriage and the resulting increase in the average age at the time of the first birth. Since 1998-99, the median age of women at the time of their first birth has increased by about one year in Chhattisgarh and Maharashtra, increased by about half a year in Orissa and Gujarat, and remained about the same in Punjab. The median age at first birth ranges from 18.8 years in Chhattisgarh to 21.4 years in Punjab.

The fertility decline and increasing contraceptive use are the result of an increasing desire among women to limit their family size. At least three-quarters of women who currently have two children do not want any more children. Son preference remains a barrier to more rapid decline in fertility. Only about half of women with two daughters and no sons want to stop childbearing, as against 90 per cent with two sons and no daughter want to stop childbearing. However, from NFHS-1 to NFHS-3 there is a continuous increase in the proportion of women, with two daughters and no son, do not want to have any more children.

Maternal Health

According to NFHS-3, antenatal care (ANC) is almost universal in all five states, i.e., almost all pregnant women have at least one contact with health personnel. However, just one contact is not sufficient for effective health monitoring of pregnancy. The maternal and child health programme recommends minimum three antenatal visits during pregnancy period. In these five states 55-75 per cent of women received antenatal care at least three times during their pregnancies. There are also large urban-rural and education-wise differences in women receiving three ANC visits. Institutional births have been steadily increasing over time in all states except Chhattisgarh, where there has been only a slight increase in the last seven years. Only one out of every six children is born in medical institutions in Chhattisgarh, compared with two out of every three births in Maharashtra. Though among these five states, the proportion of institutional deliveries is the highest in Maharashtra, still one-third of the births are delivered at home. After delivery, it is recommended that
Protecting the Equity of Darjeeling Tea

As champagne cannot be manufactured in any place other than the Champagne District of France (even though the grapes used are the same kind) but has to be referred to as sparkling wine, in the same manner only tea grown and produced in the defined area of the Darjeeling District in State of West Bengal, India, can be called DARJEELING tea. Any tea grown in any other region from the same sort of tea plants cannot be called Darjeeling tea.

Darjeeling tea, a rare coveted brew which is desired globally, but is only grown in INDIA.

Darjeeling – A Paradise

In the northeast Indian region of Darjeeling, women tea pluckers make their way up the steep mountain paths every day at dawn towards the 87 fabled gardens that have been producing the highly prized black teas for over 150 years. Located on grand estates some perched at altitudes of over 5,000 ft, the gardens are in fact plantations that, at times, stretch over hundreds of acres. But, they are still ‘gardens’, because all tea grown here bears the individual name of the garden in which it is grown.

First planted in early 19th century, the incomparable quality of Darjeeling teas is the result of unique and complex combination of agro-climatic conditions prevailing in the region, altitude, meticulous manufacture and disdain for quantity. The climate of Darjeeling is perfect for tea cultivation. Tea requires at least 50 inches of rainfall annually. Alternate spells of rain and sunshine are considered good for the crop. Also, the fog helps in maintaining the required level of moisture. The tea bush grows at a height of 700 to 7,000 metres above sea level, so it has all the space that it needs to grow.

Why is the location such a hallmark?

There are both scientific as well as popular religious beliefs behind why Darjeeling is the most suitable place to grow tea. The local people believe that the Himalayan range is the abode of Shanker Mahadeva and the breath of God brings winds that cool the brow of the sun filled valley, and the mist and fog which provide the moisture. The fountain that flows from the piled hair of Shiva provides water for the crop and it thrives. The diversity of Darjeeling tea is further accentuated by differences in wind and rainfall that depend on the altitude and exposure of the slopes under cultivation.

The quality, reputation and characteristics of Darjeeling tea are essentially attributable to its geographical origin. It possesses a flavour and quality which sets it apart from other teas, giving it the stature of a fine vintage wine. As a result it has won the patronage and recognition of discerning consumers worldwide for more than a century. Any member of the trade or public when ordering or purchasing Darjeeling tea will expect the tea to be the tea cultivated, grown and produced in the defined region of the District of Darjeeling and to have the special characteristics associated with such tea.

Consequently, Darjeeling tea that is worthy of its name cannot be grown or manufactured anywhere else in the world.

Darjeeling tea cannot be replicated anywhere.

DARJEELING TEA – A Geographical Indication

Under international law, geographical indications mean indications which identify a product as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the product is essentially attributable to its geographical origin.

Darjeeling tea is India’s treasured Geographical Indication and forms a very important part of India’s cultural and collective intellectual heritage. It is of considerable importance to the economy of India because of the international reputation and consumer recognition enjoyed by it.

In the legal sphere, countries are seeking to protect Geographical Indications as geographical indications, collective marks or certification marks.

Tea Board, India

All teas produced in the tea growing areas of India, including Darjeeling, are administered by the Tea Board, India, under the Tea Act, 1953. Since its establishment, the Tea Board has had sole control over the growing and exporting of Darjeeling tea and it is this control which has given rise to the reputation enjoyed by Darjeeling tea. The Tea Board has been engaged
on a worldwide basis in the protection and preservation of this treasured icon of India’s cultural heritage as a geographical indication.

To assist the Tea Board in its role of authenticating regional origin of Darjeeling tea, it has developed the following logo – known as the DARJEELING logo:

![DARJEELING Logo](image)

At a legal level, Tea Board is the owner of all intellectual property rights in the DARJEELING word and logo both in common law and under the provisions of the following statutes in India:

(i) **The Trade Marks Act 1999:** DARJEELING word and logo are registered certification marks of Tea Board;

(ii) **The Geographical Indications of Goods (Registration and Protection) Act, 1999:** DARJEELING word and logo were the first Geographical Indications to be registered in India in the name of the Tea Board;

(iii) **The Copyright Act, 1957:** The DARJEELING logo is copyright protected and registered as an artistic work with the Copyright Office.

Use of the DARJEELING word and logo are protected as Geographical Indications in India and as Certification Trade Marks in UK, USA and India. A major development in this area is the registration of the Darjeeling word as a community collective mark in the European Union.

The DARJEELING logo is registered in Belgium, Netherlands, Luxembourg, Germany, Austria, Spain, France, Portugal, Italy, Switzerland, former Yugoslavia, Egypt and Lebanon as a collective mark, in Canada as an official mark, as a trademark in Japan and Russia. The DARJEELING word is also registered as a trademark in Russia. Tea Board has pending applications for registration of the Darjeeling word as a certification mark in Australia, as a community collective mark in the EU and as a collective mark in Germany and Japan.

As a prerequisite for domestic and international protection of Darjeeling as a certification trademark and a geographical indication, the Tea Board has formulated and put in place a comprehensive certification scheme wherein the definition of Darjeeling tea has been formulated to mean tea that:

(a) is cultivated, grown or produced in the 87 tea gardens in the defined geographic areas and which have been registered with the Tea Board;

(b) has been cultivated, grown or produced in one of the said 87 tea gardens;

(c) has been processed and manufactured in a factory located in the defined geographic area; and

(d) when tested by expert tea tasters, is determined to have the distinctive and naturally occurring organoleptic characteristics of taste, aroma and mouth feel typical of tea cultivated, grown and produced in the region of Darjeeling, India.

The certification scheme put in place by the Tea Board covers all stages from the production level to the export stage and meets the dual objective of ensuring that (a) tea sold as Darjeeling tea in India and worldwide is genuine Darjeeling tea produced in the defined regions of the District of Darjeeling and meets the criteria laid down by the Tea Board and (b) all sellers of genuine Darjeeling tea are duly licensed. This licensing program affords the Tea Board the necessary information and control over the Darjeeling tea industry to ensure that tea sold under the certification marks adheres to the standards for DARJEELING tea as set forth by the Tea Board.

Thus, only 100% Darjeeling tea is entitled to carry the DARJEELING logo. While purchasing Darjeeling tea, you need to look for Tea Board’s certification and license number otherwise you will not get the taste and character that you should expect from Darjeeling tea.

At the administrative level, Tea Board has taken the following steps to ensure the supply chain integrity of Darjeeling tea
1. The use of Darjeeling tea in multi-origin mixtures made subject to correct labeling requirements to protect the customer against any deception or confusion;

2. The use of the expression “blended Darjeeling tea” or its variants restricted to a blend of Darjeeling teas only drawn from more than one tea garden within the definition of Darjeeling tea;

3. Labeling guidelines formulated and issued to govern and regulate use of Darjeeling name and logo marks as part of trademarks and thus prevent any misuse thereof for teas other than Darjeeling tea;

4. Detailed inspection procedures put in place to ensure the integrity and purity of the supply chain for grant of the Certificate of Origin by the Tea Board.

5. Customs Notification dated June 25, 2001 issued making all exports of Darjeeling Tea subject to mandatory proof of such certificate of origin.

While the efforts to obtain statutory protection in the DARJEELING word and logo are an essential part of the strategy to protect the integrity of Darjeeling tea, a major plank of all the initiatives undertaken by the Tea Board has been to prevent dilution of the integrity of Darjeeling tea in the following ways:

(i) preventing dealings in tea which is not drawn from any of the 87 gardens or which is a mixture of non-Darjeeling and Darjeeling teas and sold under and by reference to the name DARJEELING and/or DARJEELING logo;

(ii) action against attempted registration and/or use of Darjeeling not only in respect of tea or related products but other diverse dissimilar products or services as well.

This is also part of India international obligations under TRIPS which mandates that no country is obliged to protect Geographical Indications unless it is demonstrated that such Geographical Indications enjoy home protection in their countries of origin.

In 1998, World Wide Watch agency CompuMark was appointed to monitor conflicting marks globally and in the last couple of years, several instances of misuse and attempted registrations have been found and challenged by the Tea Board by way of 22 oppositions/invalidation/cancellation actions, 8 legal notices, 2 court actions and domain name cancellations against third party misuse of Darjeeling. These actions covered countries like Bahrain, Belarus, Bangladesh, Canada, Estonia, France, Germany, Israel, Japan, Kuwait, Latvia, Lebanon, Lithuania, Norway, Oman, Russia, Sri Lanka, Taiwan, UK and USA. In some countries like France, Germany, USA more than one action is pending. In India, over 20 legal notices have been served and 15 oppositions have been filed.

The Steps Forward

The next phase in the protection of Darjeeling tea involves monitoring the movement of green leaf and the extension of the certification system to overseas markets, which are currently self declaratory.

An online system is intended for the purpose in order to encourage ease of use and minimize paper work.

There is no doubt that it would be in the best interests of industry to export a value added product. The economies however require to make sense both in terms of value addition as well as import duty rates for packet tea vis a vis bulk.

The Tea Board has been partnering with tea importing communities like Germany and the United Kingdom in this venture.

These measures, though slow moving in a lot of cases, have had a cumulative effect. Today, worldwide, there is an increasing awareness of the name Darjeeling as a protected entity.

However, protection in countries like France, Japan and Russia still remains a problem. Member countries are operating in an environment where the multilateral Registry under the WTO is yet to take shape and GIs other than wines and spirits are seeking additional protection under Article 23 of Trips. The issue of registration in different jurisdictions and seeking redressal according to the legal requirements of each country remains a challenge that Tea Board has had to face.

In the meantime to promote Darjeeling tea and consolidate its equity along with increasing consumer awareness about Darjeeling as a Geographical Indication, the Tea Board is holding festivals in various export markets and running Darjeeling tea promotions together with retail chains and specialty restaurants. Public relations and educational communication materials are spreading the awareness of Darjeeling Tea worldwide as well as in India.
women should receive postnatal care within two days, which can help prevent complications after childbirth, but the percentage actually receiving such care ranges from only 23 per cent in Chhattisgarh to 54-59 per cent in Maharashtra, Punjab, and Gujarat.

Child Survival and Child Health

The proportion of children who die in the first year of life has dropped substantially in the last seven years in all five states. The largest decline in the infant mortality rate has taken place in Punjab (26 per cent), Gujarat (21 per cent), and Orissa (20 per cent). The infant mortality rate in Orissa has declined by more than 40 per cent in the last 13 years. Nevertheless, 7 per cent of children in Orissa still die before reaching their first birthday (Figure 1).

By the time children are one year old, they are supposed to receive a BCG vaccination against tuberculosis, a measles vaccination, and three doses each of polio and DPT vaccine. Impressive gains in immunisation coverage have been made in Chhattisgarh and Orissa (Figure 2). But in Maharashtra, Punjab and Gujarat, there has been a substantial deterioration in full immunisation coverage in the last seven years due to the decline in vaccination coverage for both DPT and polio. The urban-rural differences in full immunisation coverage are more pronounced in Chhattisgarh, Gujarat and Maharashtra. In all the five states, mother’s education leads to increase in immunisation coverage. The full immunisation coverage among children of mothers with 10 or more years of schooling is more than twice that of the immunisation coverage among children of mothers with no education.

Nutrition and Anaemia

It also revealed that many adults suffer from nutritional deficiencies. These five states are struggling with the dual burden of undernutrition accompanied by a substantial problem of overweight and obesity. More than 40 per cent of ever-married women and about one-third of ever-married men in Orissa and Chhattisgarh are thin for their height. In Gujarat and Maharashtra, one-third of women and 20-25 per cent of men are thin. Undernutrition is much lower in Punjab (only 12-14 per cent of women and men are too thin). Except Punjab, a larger proportion (above 40 per cent) of rural women and those with no education are thin.

Obesity is emerging as a major problem in Punjab. Thirty-eight per cent of women and 30 per cent of men are overweight or obese. In urban areas of Punjab, close to half of women are overweight or obese. In all five states, obesity is a growing problem. In the last seven years, the percentage of women who are overweight or obese has increased from 16 per cent to 20 per cent in Gujarat, from 12 per cent to 17 per cent in Maharashtra, from 30 per cent to 38 per cent in Punjab, and from 4 per cent to 7-8 per cent in Orissa and Chhattisgarh. In the urban areas and among women with 10 or more years of schooling, at least one in five women are overweight or obese. The extent of overweight and obesity is greater among women than men.

There has been substantial improvement in the nutritional status of young children since 1998-99 in Orissa, Maharashtra and Chhattisgarh, but nutritional deficiencies are still widespread in these states (40-52 per cent of children are underweight) (Figure 3). There has been no improvement in nutritional status in the last seven years in Gujarat, where 47 per cent of children are underweight. Undernutrition is considerably lower in Punjab, but even in that state 27 per cent of young children are underweight. The extent of underweight children is higher by almost 10 percentage points among rural children compared to their urban counterparts. Except in Punjab, in all other four states more than 50 per cent of the children of women without any education are underweight.

A related problem that is also due primarily to poor nutrition is the high level of anaemia in both adults and children. The percentage of ever-married women who have anaemia ranges from 38 per cent in Punjab to 63 per cent in Orissa. In each of the five states, anaemia prevalence among pregnant women is almost 5 percentage points higher than that among all women. A matter of serious concern is increasing anaemia prevalence among pregnant women in all five states, except Chhattisgarh, in the last seven years, and low coverage (less than 35 per cent) of consumption of iron and folic acid for 90 or more days during pregnancy. Men are much less likely than women to be anaemic, but anaemia levels in men are still unacceptably high, ranging from 13 per cent in Punjab to 37 per cent in Orissa.

The anaemia situation is most serious among young children age 6-35 months. NFHS-3 found remarkably high and more...
or less similar levels of anaemia prevalence in children in all five states. Moreover, except for Chhattisgarh, in the last seven years there has been little or no improvement in anaemia levels of young children. The prevalence of anaemia actually increased in Gujarat and Orissa during that period. A general pattern among the five states is that anaemia levels do not differ substantially by residence and education of the mother.

**Domestic Violence**

A substantial proportion of married women report that they have been abused, physically or sexually, by their husbands at some point of time in their lives. Among these five states, the prevalence of spousal abuse is highest in Orissa (39 per cent), but is also high in the remaining states (Maharashtra, Chhattisgarh, Gujarat and Punjab), ranging from 25-31 per cent (Figure 4). Women with no education are most likely to have suffered spousal violence. In the five states, 34-44 per cent of uneducated women say they have been abused by their husbands. However, spousal abuse even extends to women who have secondary or higher education (13-19 per cent of whom have been victims of spousal violence).

**Knowledge of AIDS**

Knowledge of AIDS among women has been increasing rapidly over time, but many women have still not heard of AIDS. Between 1998-99 and 2005-06, the percentage of ever-married women who have heard of AIDS increased from 20 per cent to 41 per cent in Chhattisgarh, from 30 per cent to 49 per cent in Gujarat, from 39 per cent to 62 per cent in Orissa, from 55 per cent to 70 per cent in Punjab, and from 61 per cent to 79 per cent in Maharashtra. In all five states, men are much more likely than women to have heard of AIDS. Two-thirds of men in Chhattisgarh and more than 90 per cent of men in Maharashtra and Punjab have heard of AIDS. Knowledge of AIDS is universal among men and women with 10 or more years of schooling. Majority of women with no education have not heard of AIDS.

In a nutshell, there is remarkable progress in fertility reduction. The fertility trends suggest the possibility of achieving the replacement level of fertility by the year 2010, a goal set in the National Population Policy, 2000. In maternal healthcare, though almost all pregnant women have had a minimum of one contact with health personnel, not all of them receive all recommended services such as three ANC visits, institutional delivery and postnatal care. The high levels of anaemia among women, especially among pregnant women and children are matters of concern. The reproductive and child healthcare programme needs to take notice of these. Despite improvement in the indicators of demographic and child healthcare, still mother’s education remains a critical determinant of all.