Starvation, Malnutrition and Malnutrition Related Deaths of Children in 15 Tribal Districts of Maharashtra - Report of an Enquiry Conducted by Dr. Lakshmidhar Mishra IAS (Retd.), Former Special Rapporteur, NHRC in June-October, 2007
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Conducted by
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PART-II
(Field Impressions)

NATIONAL HUMAN RIGHTS COMMISSION
INDIA
Starvation, Malnutrition and Malnutrition Related Deaths of Children in 15 Tribal Districts of Maharashtra - Report of an Enquiry Conducted by Dr. Lakshmidhar Mishra IAS (Retd.), Former Special Rapporteur, NHRC in June-October, 2007, PART-II (Field Impressions).
Between 2003 and 2006 NHRC received a spate of complaint petitions mostly on the basis of newspaper reports on starvation and malnutrition related deaths of children in the 15 tribal districts of Maharashtra. Considering the seriousness of these complaints the full commission passed an order of enquiry into deaths of these tribal children on 23.04.07. The enquiry was entrusted to Dr. Lakshmidhar Mishra, IAS (Retd.), former Union Labour and Parliamentary Affairs Secretary who had joined the Commission on 18.08.06 as a Special Rapporteur.

Dr. Mishra took up the enquiry in right earnest in consultation with the State Govt., Divisional Commissioners and District Magistrates in May 2007 and visited all the fifteen districts in 2 spells between May – June’ 2007 and September – October, 2007 (July to August, 2007 being a heavy rainfall period not many visits except one to Thane were ordinarily possible). He visited Anganwadis, PHCs, CHCs, dispensaries, hospitals, nutrition rehabilitation centres, IEC Institutes, State level training Institute etc and interacted with a large number of households, pregnant and lactating women and mothers, NGOs, Voluntary Social Action Groups, Social Activists, PHC and CHC-in-charge, Medical Officers, Lady Health Visitors, Auxiliary Midwife and Nurses, Multipurpose Health Workers & Health Assistants, Anganwadi Workers, Members of Rugna Kalyan Samitis and Members of Health and Sanitation Committees. At the State level and in the wake of completion of field visits he interacted with Chief Secretary and Secretaries to Govt. of a number of concerned Departments (Agriculture, Animal Husbandry & Veterinary, Fisheries, Forest, Food and Civil Supplies, Housing, Labour & Employment, Planning, Public Health, Revenue, Rural Development, Tribal Development, Women & Child Development) and shared with them the perceptions and problems related to production and distribution of food grains he had gathered from field visits in a bid to find solution to those problems. At the national level, he interacted with Secretaries to Govt. of India in charge of Ministries of a Agriculture, Animal Husbandry and Veterinary, Food & Consumer Affairs, Public Distribution, Health & Family Welfare, Tribal Development, Women and Child Development, Rural Development etc. to have access to authentic and up to-date-data, to share with them micro-level
problems obtaining from his field visits and seeking their intervention to the solution of some of those problems.

Dr. Mishra submitted his report to the Commission in 2 volumes, the first being the report of enquiry into starvation and malnutrition related deaths of children and the second being a summary of field impressions emanating from the visit and interaction with all institutional functionaries of all the 15 districts. The first part of the Enquiry Report also carried a detailed study of the current position of food supply and the extent by which the various schemes initiated by the Tribal Development Department, Govt. of Maharashtra have contributed to solve the problems of starvation and infant mortality on the ground.

The full Commission had considered the Enquiry Report of Dr. Mishra in 2 volumes, in its meeting held on 20.01.08, had endorsed the observations conclusions and recommendations and had commended them to Govt. of Maharashtra for implementation.

The NHRC has accorded utmost importance to the issues of poverty, hunger and malnutrition as major violations of human right to life as in Art 21 of the Constitution. It has consistently maintained that right to food is an integral part of such right to life. It has always taken prompt cognizance of such violations for necessary preventive and corrective actions. The prompt and proactive intervention of the Commission in the matter of Starvation deaths in Kalahandi, Balangir and Koraput (KBK) districts of Odisha has earned it accolades from the apex court of the country.

The Commission would like to record its deep sense of appreciation for the thorough, participative, objective and dispassionate manner in which Dr. Mishra proceeded to conduct the enquiry, the pains taken by him to cover all the 15 tribal districts in a very short time and for the very comprehensive content of the report covering all aspects of nutrition, malnutrition and malnutrition related deaths of children. The entire report mostly written in a bulletised style in simple and intelligible language with a wide range of conclusions and recommendations makes a fascinating reading.

It is against this background, considering the comprehensive nature of the report as also the relevance of a series of sound and sensible recommendations made in the report, the Commission has taken a decision to have the two voluminous reports published in shape of a book.

It is hoped that this publication will be of immense professional and academic value to social scientists engaged in action research in the field of hunger, starvation and malnutrition.

(K. G. Balakrishnan)
Conducting social enquiries/investigations is always a difficult and unenviable act. This is on account of a number of reasons. To start with, despite most earnest efforts, people and stakeholders in general do not come out to the open to unfold the true and full story; truth, therefore, remains illusive. Secondly, there are powerful vested interests all around who do not want the lid to be broken, the mask to be uncovered and truth to come out, and, therefore, the process of discovery of truth is often inhibited. Thirdly, barriers of language i.e. language spoken by the people at the grassroot level and language spoken by the social investigator may be different from each other. This creates a hiatus in communication which often leaves truth half revealed and half concealed. Fourthly, the constraints of covering a vast geographical area and interacting with large cross sections of civil society with all the diversities of human characters and situations and limitations of time robs social investigation of a comprehensive and representative character.

I have been a socio legal investigating Commissioner of the Supreme Court on more than one occasion and have experienced all the problems associated with social investigation as enumerated.

These constraints and challenges were also there before me in full measure when NHRC appointed me as a social investigator in April, 2007 to investigate into malnutrition related deaths of children in 15 tribal districts of Maharashtra. I nevertheless accepted this both as an opportunity as well as a challenge. It was an opportunity of learning by sharing for one like me who is a non-paediatrician and non-dietician. It was a challenge on account of the fact that (a) I was to conduct the investigation single handed (b) the area involved was large and a large number of members of tribal communities were unapproachable as they lived in remote, interior and inaccessible dense forest tracts (c) even though I am quite adept in communicating in Hindi, I was not quite sure if I would succeed in making myself intelligible to the members of tribal communities many of whom speak and understand a dialect quite different from Hindi.
These constraints and challenges notwithstanding I proceeded with the investigation in right earnest in a planned, coordinated and concerted manner right from day one. The process was facilitated in no small measure by the willing cooperation of officers of the State Govt. right from the Resident Commissioner in Maharashtra Sadan at Delhi to the Chief Secretary and Secretaries of all concerned departments at the Mantralay, Mumbai, the Divisional Commissioners and DMs at the district level and all Chief Executive Officers, Zilla Parishad and down below. They also made the task of communication easy by translating my statements from Hindi to Marathi and the relevant tribal dialect wherever there was need for such translation.

In an enquiry/investigation of this kind there are bound to be a few silver linings and a few grey areas of concern. Some of the most conspicuous silver linings are:

- Maharashtra has a high GDP percapita next only to that of Punjab;
- 1.6 percent of the poor are being lifted above the poverty line every year;
- Percentage of breast fed children has gone up (23 percent to 52 percent);
- Percentage of women with BMI below normal (18.5 to 23) has registered decline from 40 to 33;
- IMR, MMR and CMR are low compared to the national average;
- Except Amravati, malnutrition rates are not alarming;
- The death figures both in terms of percentage and absolute number are declining.
- The main tribals in Maharashtra i.e. Bhils, Gonds, Mahadeo, Kolis, Madias, Pawaras, Thakurs and Warlis are simple, guileless, hospitable, amenable to ideas and suggestions and once convinced about the efficacy of a particular idea or approach they would unhesitatingly go ahead in implementing the same.

The grey areas in terms of right to food, food security and factors contributing to malnutrition are many such as:

- Maharashtra is a high deficit State;
- It is quite low in terms of food availability;
- It has an unstable cereal production;
- There are 20 to 50 percent landless labour households who consume less than 2300 calorie value of food;
- Production of jawar & bajra is coming down;
- These are being substituted by cash crops i.e. cotton and sugar cane;
- It is unlikely that this trend will be reversed;
- Ironically and tragically enough, farmers growing these cash crops are committing suicides in large number as they are unable to recover the high cost of production from sales and unable to repay the heavy debts incurred by them from village sahukars/money lenders;
- Soyabean has high nutritive value (100 gm = 432 kilo calorie) and its production is picking up but people of Maharashtra do not consume it substantially;
- Per capita availability of milk which is rich in calcium is 172 gram per person per day against the recommended norm of 272 gram per person per day;
- Per capita availability of eggs is 35 eggs per person annually as against the recommended norm of ½ an egg per person per day (180 eggs annually per person);
- There is huge deficit between the recommended norm and what is available for consumption in respect of cereals, sugar, pulses, vegetables, fruits, oil/fat, milk, meat and fish;

• The existing PDS does not distribute coarse cereals such as jawar, bajra and ragi for which members of tribal households have a preference.
• PDS caters to only 50 percent of the requirements of a family (the average family size in tribal households exceeds five).
• For the remaining 50 percent, it is compounded by the following:
  - Inadequate number of mandays of employment;
  - Non-enforcement of minimum wage;
  - Minimum earning vis-à-vis large family size being low, need for supplementing limited family income for feeling additional mouths gives rise to incidence of child labour;
  - Women wage earners in Maharashtra receiving 40 to 60 percent lower than what is paid to their male counterparts;
  - The number of families below poverty line identified through the household survey of 2002 is 20 lakhs in excess of the norm fixed by the Planning Commission (the number of BPL families according to this norm should be 45 lakhs while 65 lakhs have been identified as BPL);
  - 78,479 shelter less tribal families out of 3,75,711 families in the 15 tribal districts have been assisted under IAY; 2,89,677 shelter less families have been in the wait list for a period ranging between 2 to 25 years; this has generated a lot of bitterness and frustration alarround.
- Access to potable water is extremely limited;
- Nitrate and fluoride content in water is increasing and nearly 1000 villages in Amravati, Akola & Buldhana are getting affected by salinity.

In regard to the factors contributing to malnutrition and child mortality, there are a number of grey areas such as:
- Proportion of fully immunized children has declined;
- Percent of anaemic children in 6-35 months is going up;
- Overall percent of anaemic children is 77 percent in rural areas and 66 percent in urban areas;
- Percent of married women who are also anaemic is 49.

- Proportion of underweight children below 2 years is very high such as:
  - 38 percent - stunted;
  - 15 percent - wasted;
  - 40 percent - underweight

- Percent of neo-natal and infant mortality in some of the tribal districts like Thane, Nashik, Nandurbar, Amravati and Gadchiroli is quite high.

A number of structural and systemic factors (factors relating to low production of coarse cereals and pulses, vis-à-vis preference of tribal households, flawed identification of BPL families, resulting in exclusion of generally poor and deserving families from the BPL list, deficiencies in management of PDS, deficiencies in management of ICDS, deficiencies in management of public health institutions etc.) have contributed to the above sorry state of affairs and these have been analysed at length in Part – I of the enquiry report at the appropriate place. I would, however, like to focus on two other factors which according to me have contributed equally and substantially to the overall scenario of malnutrition and malnutrition related deaths of children. These are (a) lack of social communication through a design of appropriate IEC materials and (b) lack of convergence among departments and agencies concerned with prevention and control of malnutrition.

Social communication is a two way process. At the one end we have the designer and at the other end we have the receiver of the message. If the designer is able to perceive and internalise the genuine needs, preferences and interests of the receiver and designs a message which will be socially and culturally relevant for the receiver, the latter will not only imbibe and assimilate the nuances of the message but would also make serious and sincere efforts to apply in is his/her day to day life.
In such a situation, social communication will promote better understanding of concepts and issues; better understanding will lead to conviction and conviction will lead to better application or productive utilization of ideas in concrete action.

This process is called designing an IEC package. Every such package will have a central message which will have the following:

- It should be well visualised and illustrated;
- Its language should be simple and intelligible;
- It should be rich in terms of human appeal;
- There should be a logical and coherent link between various components of the message;
- The message should be clear, cogent, unambiguous, relevant and should be capable of being implemented.
- Such a message will serve a number of useful purposes such as:
  - It will remove fads, mistaken and ill perceived notions, obscurantist ideas and practices;
  - It will inspire and motivate the target groups;
  - It will sensitise the callous and insensitive;
  - It will produce better results in terms of social spending;
  - The gap between expected outcome and actual outcome will be reduced to zero.

To illustrate, in one of the tribal blocks located in an interior forest tract in Gondia district it was observed that members of tribal households are not consuming milk on the mistaken notion that this will produce some dermatological (related to skin) disorders. When it was pointed out to them that milk is rich in calcium absence of which would cause osteoporosis, they said this was being told to them for the first time. In other words, there was no evidence of any extension effort having been made by the Animal Husbandry and Veterinary Department to remove these notions or make beliefs.

Similarly while on tour to Dahanu taluka in Thane district it was observed that members of tribal households and even fishermen do not consume fish even though they are on the west coast with plenty of sea fish (due to Arabian Sea). On being told that fish had protein which is essential for physical and cognitive development, they said that they were influenced by the teaching of Pandurang Athavale, their spiritual preceptor not to kill fish. When they were further told that absence of protein would cause protein energy malnutrition (PEM) which will cause growth retardation in infants and young
children, they stated that nobody had shared such informations with them before. In other words, the officers of Fisheries Department had not played their extension role in designing appropriate messages and in transmitting such messages to people in a simple and intelligible manner to make sense to them and to produce the desired results.

These two illustrations reinforce the importance of social communication or what is known otherwise as IEC. In the context of malnutrition and malnutrition related deaths of children in the tribal districts (15) of Maharashtra, the central message in social communication or in any IEC package should be the following:

- Human life is the finest and best in creation.
- Once deformed, damaged and destroyed, we cannot restore it to its original form.
- This sacrosanctity of life has got to be acknowledged in general and for children who are our succeeding generation in particular.
- Entire human life may be treated as a cycle.
- It starts with conception or pregnancy.
- It proceeds to different stages marked by the development and growth of the foetus, delivery and post delivery stage upto early childhood.
- Each stage is fraught with risks and hazards. These need to be correctly identified and remedial measures found.
- The prenatal phase begins 28 weeks after conception upto 7 days after delivery.
- The risks and hazards associated with this phase are:
  - Congenital malformation;
  - Infection (jaundice);
  - Birth asphyxia.
- The phase from 0 - 7 days is called early neonatal phase which is extremely crucial for survival and protection of the child.
- The risks and hazards which are associated with this phase are:
  - Infection (bacterial);
  - Meningitis;
  - Hypothermia (reduced temperature);
  - Hypoglycemia (low blood sugar);
  - Sudden infant death syndrome (SIDS).
- The phase from 8 days to 28 days is called late neonatal phase which is associated with the following risks and hazards such as:
- Infection (bacterial);
- Upper and lower respiratory tract infection;

- The neonatal phase comprises of 0 – 28 days and is fraught with the following risks and hazards:
  - Infection;
  - Problems associated with premature delivery;
  - Asphyxia.

- The postnatal phase comprises of 28 days to 1 year and is associated with the following risks and hazards:
  - Pertusis;
  - Diphtheria;
  - Tetanus;
  - Respiratory diseases;
  - Diarrhoea.

- Series of preventive and curative measures by way of checks and safeguards are needed to deal with these risks and hazards such as:
  - Quality antenatal care through 3 visits to the PHC by every pregnant mother;
  - Attendance of qualified and trained dais after birth;
  - Improving the PC of institutional delivery vis-à-vis home delivery;
  - Thermal protection (putting the baby in thermocol boxes);
  - Prevention of exposure to cold;
  - No bath to the baby;
  - Prevention of infection;
  - Exclusive breast feeding within half an hour of delivery and upto 6 months to be followed by composite feeding;
  - Extra care and protection for LBW children (who are born with a weight less than the normal weight of 2.5 kg) including admission to neonatal cardiac care unit (NICU) wherever the same exists;
  - Management of Associated Respiratory Infection (ARI);
  - Management of diarrhoea through ORS;
  - Commencement of the cycle of vaccination and carrying it to its logical conclusion.
All these messages in simple and intelligible language must be built into the IEC package and must be displayed prominently at the PHCs, CHCs, dispensaries, hospitals, anganwadi centres, Nutrition Rehabilitation Centres (NRCs) etc.

- They must also be displayed in school buildings, GP Offices, all other public and private health institutions, clinics for wider spread of awareness.

Additionally, the IEC package must also contain the following messages:

- Family size must be limited;
- Minimum spacing of 3 years between 2 children must be observed;
- We must put an end to early child marriage and teenage pregnancy which are injurious to mother’s health and health of the child to be born;
- Nutrition is both an art and science;
- It is a science of food in relation to health;
- It is the art of bringing about a balanced combination of carbohydrate, protein, oil/fat, trace minerals and vitamins;
- There is no place for blind faith or quackery in this;
- Gr. III & Gr. IV malnourished children need to be admitted to and treated in hospitals;
- Such treatment cannot be arranged at home and home cannot be a substitute for the hospital;
- Mothers should not commit the folly of taking away the children against medical advice (LAMA) before the full course of treatment has been completed;
- Even after discharge from hospitals there has got to be strict and timely compliance with the advice given by the doctors in terms of drugs, diet and day to day care and attention;
- In particular, children discharged from NICU will have to be wrapped round a baby woolen blanket or kept in a thermocol box so that exposure to cold and hypothermia are prevented (their body temperature is controlled at 36.5°Celsius by the women (thermo regulator) once they are inside the NICU);
- Children need milk and eggs since 80 percent of the brain is formed in the first 2 years of their life; we cannot afford to deny them any of those micro-nutrients;
- Bundles of fads are associated with breast feeding and these need to be replaced by a rational and scientific understanding of breast feeding for both children and mothers.
- In Maharashtra, IEC materials are being produced and supplied to all AWCs
centrally by the ICDS Commissionerate. Simultaneously, the State Bureau of IEC at Pune is also designing IEC materials but they do not find way to AWCs for dissemination of the central message. There is no synergy between the 2 State level bodies and what is being produced amounts to duplication. Additionally, the materials suffer from the following deficiencies:

- They have not brought out fully various stages in the cycle of life either in 0 – 6 age group or beyond;
- There is no logical and coherent link between various IEC materials produced;
- They are not well visualised or well illustrated;
- There is a lot of repetition and no convergence between various messages and processes involved in producing them.

Convergence is not fusion or amalgamation or loss of identity. It simply means 2 objects tending to converge or meet. We have different forms of micro-nutrient malnutrition such as (a) iron deficiency or anaemia (b) vitamin 'A' deficiency (c) iodine deficiency disorder and (d) protein energy malnutrition (PEM). We have three distinctly different target groups such as pregnant and lactating mothers, adolescents and children in 0 – 6 age group/with different health and nutritional needs. Multiple Strategies are needed to bring about the much needed change in their health and nutritional status.

We have different agencies (Commissioner, ICDS, functionaries of health & family welfare department, agriculture, animal husbandry & veterinary, fisheries, food and civil supplies departments, officers of IEC and training institutions etc.) who have divergent functions but closely related in the context of promoting health and nutrition of our target groups.

It is incumbent that all these departments and agencies function in close unison and coordination (what is otherwise known as partnership) if we have to improve the nutritional status and improve the access to supplies and services for health and well being of the target groups. Such partnership involves thinking, planning and working together for a common cause with a unified strategy. This is the first component of functional convergence.

The second component of convergence is pooling financial resources from a variety of sources and integrating them imaginatively and skilfully so that maximum resources could be mobilized for achieving a number of objects in a short time and less cost.

The third component of convergence is pooling of knowledge, information and skill from multiple stakeholders and integrating them in the interest of improving content and quality of the programme. The fourth component of convergence relates to improving
the content and quality of interaction between functionaries of govt, local community members and beneficiaries to improve outreach and remove operational hurdles. Last but not the least promoting sustainability of any programme (in the present context for health and nutrition) is a component as also the desired outcome of convergence.

The enquiry into malnutrition related deaths of children in Maharashtra has clearly brought out that such convergence at all levels is sadly lacking which becomes a matter of deep concern.

In the ultimate analysis an honest and earnest effort has been made through the enquiry into malnutrition related deaths of children in Maharashtra to cover as wide a canvas as possible such as conceptual and definitional clarity on nutrition, malnutrition and under nourishment, magnitude of the problem of malnutrition at the macro and micro levels, interventions made at the macro & micro-levels to ease the situation of starvation and malnutrition, role of various Ministries/Departments/Agencies of Govt. of India and State Govt. in production and distribution of food grains vis-à-vis special preferences and needs of the members of the tribal community, the huge uncovered gaps and how to bridge them, importance of simultaneous increase in production of fruits, vegetables, edible oil, eggs, fish, meat and milk and ensuring their equitable distribution and last but not the least a scientific analysis of malnutrition as a cause or contributory factor of death of children. The fact that such deaths are taking place in a progressive State like Maharashtra which has the second highest GDP per capita in the country and is otherwise so advanced agriculturally, industrially and commercially is as much a reflection on governance as on historical and cultural factors responsible for underdevelopment of certain regions within the State (including the tribal belt). The enquiry which is also in the nature of a study reinforces the need for both structural and systemic change as also change in human behaviour, attitude and approach. It can be used as a wake up call for many other States/UTs where the scenario of management of public health and nutrition needs a similar critical reflection and analysis for adoption of timely preventive and corrective measures.

Dr. Lakshmidhar Mishra, IAS (Retd.)
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<tr>
<td>ACDPO</td>
<td>Addl. Child Development Project Officer</td>
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<td>ADHO</td>
<td>Addl. District Health Officer</td>
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<td>ANC</td>
<td>Ante Natal Care</td>
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<td>ANM</td>
<td>Auxilliary Nurse-cum-Midwife</td>
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<td>AP</td>
<td>Andhra Pradesh</td>
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<td>ARDS</td>
<td>Acute Respiratory Distress Syndrome</td>
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<td>ASHA</td>
<td>Accredited Social Health Activist</td>
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<td>ATMA</td>
<td>Agriculture Technology Management Agency</td>
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<td>AWC</td>
<td>Anganwadi Centre</td>
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<td>AWH</td>
<td>Anganwadi Helper</td>
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<td>AWW</td>
<td>Anganwadi Worker</td>
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<td>BAIF</td>
<td>Bharatiya Agro Industries Foundation</td>
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<tr>
<td>BAMS</td>
<td>Bachelor of Ayurvedic Medicine and Surgery</td>
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<td>BCG</td>
<td>Bacille Calmette Guerin</td>
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<td>BDO</td>
<td>Block Development Officer</td>
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<td>BMI</td>
<td>Body Mass Index</td>
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<td>BPL</td>
<td>Below Poverty Line</td>
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<td>CBO</td>
<td>Community Based Organization</td>
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<td>CBR</td>
<td>Crude Birth Rate</td>
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<td>CDR</td>
<td>Crude Death Rate</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CDPO</td>
<td>Child Development Project Officer</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>CDMO</td>
<td>Chief District Medical Officer</td>
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<td>CHC</td>
<td>Community Health Centre</td>
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<td>CMR</td>
<td>Child Mortality Rate</td>
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<td>CL</td>
<td>Consumption Loan</td>
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<td>CS</td>
<td>Civil Surgeon</td>
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<td>DCH</td>
<td>Diploma in Child Health</td>
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<td>Double Fortified Salt</td>
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<td>DHO</td>
<td>District Health Officer</td>
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<td>Director of Health Services</td>
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<td>DPT</td>
<td>Diptheria Pertusis Tetanus</td>
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<td>E&amp;D</td>
<td>Entitlement and Deprivation</td>
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<td>ENT</td>
<td>Ear Nose Throat</td>
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<td>ESCAP</td>
<td>Economic Commission for Asia Pacific</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>FPS</td>
<td>Fair Price Shop</td>
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<td>FRU</td>
<td>First Referral Unit</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GOI</td>
<td>Government of India</td>
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<td>GP</td>
<td>Gram Panchayat</td>
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<tr>
<td>HA(Male)</td>
<td>Health Assistant (Male)</td>
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<tr>
<td>HA (Female)</td>
<td>Health Assistant (Female)</td>
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<tr>
<td>HFWTC</td>
<td>Health and Family Welfare Training Centre</td>
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<tr>
<td>HIV/AIDs</td>
<td>Human Immuno Deficiency Virus/Acquired Immuno Deficiency Syndrome</td>
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<td>Description</td>
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<td>HP</td>
<td>Himachal Pradesh</td>
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<td>HPS</td>
<td>High Performing States</td>
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<td>IAY</td>
<td>Indira Awas Yojana</td>
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<td>ICDS</td>
<td>Integrated Child Development Services</td>
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<td>ICU</td>
<td>Intensive Cardiac Unit</td>
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<td>ICMR</td>
<td>Indian Council of Medical Research</td>
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<td>IDD</td>
<td>Iodine Deficiency Disorder</td>
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<td>IEC</td>
<td>Information Education Communication</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<tr>
<td>IHNCI</td>
<td>Integrated Management of Neonatal Illness</td>
</tr>
<tr>
<td>IFA</td>
<td>Intravenous Folic Acid</td>
</tr>
<tr>
<td>ITDA</td>
<td>Integrated Tribal Development Agency</td>
</tr>
<tr>
<td>ITDP</td>
<td>Integrated Tribal Development Project</td>
</tr>
<tr>
<td>JSR</td>
<td>Janani Surakshya Yojana</td>
</tr>
<tr>
<td>JRY</td>
<td>Jawahar Rojgar Yojana</td>
</tr>
<tr>
<td>KM</td>
<td>Kilo Meter</td>
</tr>
<tr>
<td>KVK</td>
<td>Krishi Vigyan Kendra</td>
</tr>
<tr>
<td>LAMA</td>
<td>Leaving Against Medical Advice</td>
</tr>
<tr>
<td>LBW</td>
<td>Low Birth Weight</td>
</tr>
<tr>
<td>LHV</td>
<td>Lady Health Visitor</td>
</tr>
<tr>
<td>LPS</td>
<td>Low Performing State</td>
</tr>
<tr>
<td>MAY</td>
<td>Matrutwa Anudan Yojana</td>
</tr>
<tr>
<td>MADA</td>
<td>Modified Area Development Agency</td>
</tr>
<tr>
<td>MBBS</td>
<td>Bachelor of Medicine and Bachelor of Surgery</td>
</tr>
<tr>
<td>MC</td>
<td>Malnourished Children</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>MCI</td>
<td>Medical Council of India</td>
</tr>
<tr>
<td>MHU</td>
<td>Mobile Health Unit</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>MLA</td>
<td>Member of Legislative Assembly</td>
</tr>
<tr>
<td>MLC</td>
<td>Member of Legislative Council</td>
</tr>
<tr>
<td>MMR</td>
<td>Maternal Mortality Rate</td>
</tr>
<tr>
<td>MMS</td>
<td>Mobile Medical Squad</td>
</tr>
<tr>
<td>MP</td>
<td>Madhya Pradesh</td>
</tr>
<tr>
<td>MP</td>
<td>Member of Parliament</td>
</tr>
<tr>
<td>MO</td>
<td>Medical Officer</td>
</tr>
<tr>
<td>MPW</td>
<td>Multi Purpose Worker</td>
</tr>
<tr>
<td>MREGS</td>
<td>Maharashtra Rural Employment Guarantee Scheme</td>
</tr>
<tr>
<td>MS</td>
<td>Medical Superintendent</td>
</tr>
<tr>
<td>MSP</td>
<td>Monopoly Procurement Scheme</td>
</tr>
<tr>
<td>MT</td>
<td>Metric Ton</td>
</tr>
<tr>
<td>MW</td>
<td>Minimum Wage</td>
</tr>
<tr>
<td>NBA</td>
<td>Narmada Bachao Andolan</td>
</tr>
<tr>
<td>NCHS</td>
<td>National Child Health Statistics</td>
</tr>
<tr>
<td>NFHS</td>
<td>National Family Health Statistics</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>NICU</td>
<td>Neonatal Intensive Cardiac Care Unit</td>
</tr>
<tr>
<td>NMR</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>NNMB</td>
<td>National Nutrition Monitoring Bureau</td>
</tr>
<tr>
<td>NHRC</td>
<td>National Human Rights Commission</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>NSSO</td>
<td>National Sample Survey Organization</td>
</tr>
<tr>
<td>NRHM</td>
<td>National Rural Health Mission</td>
</tr>
<tr>
<td>NRC</td>
<td>Nutritional Rehabilitation Centre</td>
</tr>
<tr>
<td>NREGS</td>
<td>National Rural Employment Guarantee Scheme</td>
</tr>
<tr>
<td>NSSO</td>
<td>National Sample Survey Organization</td>
</tr>
<tr>
<td>OT</td>
<td>Operation Theatre</td>
</tr>
<tr>
<td>PC</td>
<td>Percentage</td>
</tr>
<tr>
<td>PCO</td>
<td>Public Call Office</td>
</tr>
<tr>
<td>PDS</td>
<td>Public Distribution System</td>
</tr>
<tr>
<td>PEM</td>
<td>Protein Energy Malnutrition</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Centre</td>
</tr>
<tr>
<td>PHU</td>
<td>Primary Health Unit</td>
</tr>
<tr>
<td>PNC</td>
<td>Post Natal Care</td>
</tr>
<tr>
<td>PS</td>
<td>Panchayat Samiti</td>
</tr>
<tr>
<td>PUCL</td>
<td>People’s Union for Civil Liberties</td>
</tr>
<tr>
<td>PWD</td>
<td>Public Works Department</td>
</tr>
<tr>
<td>RAT</td>
<td>Rapid Action Team</td>
</tr>
<tr>
<td>RCH</td>
<td>Reproductive and Child Health</td>
</tr>
<tr>
<td>RCC</td>
<td>Reinforced Cement Concrete</td>
</tr>
<tr>
<td>RH</td>
<td>Rural Hospital</td>
</tr>
<tr>
<td>RDA</td>
<td>Recommended Dietary Allowance</td>
</tr>
<tr>
<td>RO</td>
<td>Reverse Osmosis</td>
</tr>
<tr>
<td>RM</td>
<td>Regional Manager</td>
</tr>
<tr>
<td>SBA</td>
<td>Skilled Birth Attendant</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>SC</td>
<td>Supreme Court</td>
</tr>
<tr>
<td>SC</td>
<td>Scheduled Caste</td>
</tr>
<tr>
<td>SDP</td>
<td>State Domestic Product</td>
</tr>
<tr>
<td>SHG</td>
<td>Self Help Group</td>
</tr>
<tr>
<td>SIDS</td>
<td>Sudden Infant Death Syndrome</td>
</tr>
<tr>
<td>SNP</td>
<td>Supplementary Nutrition Programme</td>
</tr>
<tr>
<td>SRM</td>
<td>Sub Regional Manager</td>
</tr>
<tr>
<td>ST</td>
<td>Scheduled Tribe</td>
</tr>
<tr>
<td>TFR</td>
<td>Total Fertility Rate</td>
</tr>
<tr>
<td>TOT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>TSP</td>
<td>Tribal Sub Plan</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
<tr>
<td>UT</td>
<td>Union Territory</td>
</tr>
<tr>
<td>UD</td>
<td>Urban Development</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UP</td>
<td>Uttar Pradesh</td>
</tr>
<tr>
<td>WCD</td>
<td>Women and Child Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WP</td>
<td>Writ Petition</td>
</tr>
<tr>
<td>YASDA</td>
<td>Yaswant Rao Chavan Academy of Development Administration</td>
</tr>
<tr>
<td>VHW</td>
<td>Village Health Worker</td>
</tr>
<tr>
<td>ZP</td>
<td>Zilla Parishad</td>
</tr>
</tbody>
</table>
Yavatmal
(4.6.2007)

The district lies between 19.26’ and 20.42’ north latitude and 77.18’ and 79.19’ east longitude. It has a total geographical area of 13,582 Sq KM and population of 24,58,271 with a low density (158 persons per sq.km). It has 5 subdivisions, 16 talukas, 16 panchayat samitis, 1204 GPs, 2143 villages (1850 habited and 250 uninhabited) and 5.18 lakh total number of households. Predominantly rural (80 pc) it has a sizeable ST population (4.73 lakh). In all 457 villages in 9 talukas are within the tribal sub-plan area.

The break up of the population is as under:-

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12,65,681</td>
</tr>
<tr>
<td>Female</td>
<td>11,92,590</td>
</tr>
<tr>
<td>SC</td>
<td>2,52,802</td>
</tr>
<tr>
<td>ST</td>
<td>1,29,482</td>
</tr>
</tbody>
</table>

In all there are 8 ICDS projects with 765 AWCs with a number of vacant posts of CDPOs, Supervisors and AWWs.

Similarly on the health side there are 63 PHCs and 435 sub-centres in 16 talukas with about 20 pc of the posts of medical officers vacant. 131 ANMs and 51 LHVs have been posted on contract basis.

4.6.2007

Visit to Anganwadi Centres at Karanji, Bhurkipod, Talaopod and Jirmira—redemming features:-

Health Department

‘Bhurki pod’ is situated within 1 K.m. from Public Health Centre Karanji. It has a population of 531 majority of whom belong to Kolam tribe. Registration of all births is done by Gramsevak; this information is also available with Anganwadi workers and is
being used by different Govt. agencies. Health check ups of all children in 0-6 age group at the AWC are done by one of the M.Os from PHC Karanji on a quarterly basis, ailments of children identified and corresponding treatment is provided. Auxiliary Nurse Midwife (ANM) - Shrimati Guggulkar, advises parents on nutrition of malnourished children and importance of green vegetables. The same advice is given to pregnant and lactating mothers and Mahila Mandal members. Smt. Kammu Arun Kohale Mahila Mandal member was asked to give an account of the subjects discussed in monthly meetings of Mahila Mandal. She explained that the programme regarding the construction of toilets at the households is given a high priority which would be evident from the fact that 3 members have already constructed such toilets in their houses. Dr. Raut is working as medical Officer PHC Karanji. He does the quarterly health check ups and prescribes appropriate treatment in form of curative medicine or vitamin supplements. Vaibhav Bhimrao Atram, a four year old child, whose weight is 11 kg, and who is in grade II category of malnutrition was found to be suffering from calcium deficiency. All posts of PHC Karanji have been filled up (M.O., MPHW, ANM) except one post of pharmacist. Pre-monsoon survey has been completed by 31st May and report is awaited.

**Women and Child Development Department (ICDS)**

There were two AWCs, out of which one centre has been shifted to Talao pod. It was necessary to shift all relevant records also. The ANM stated that medicines received for the children who are not keeping well according to check up of their health by the MO of the PHC are handed over to the Anganwadi worker who in turn hands them over to parents, and parents are given full understanding of dosage of medicines. Smt. Parwati Parate and Seema Atram are the AWW and Sahayika of the AWC respectively. The children in 0 to 6 age group who are enrolled in this AWC number 85. There is no case of severe malnutrition. The weight of one child named Vaibhav Atram (age 4 yrs. and 5 months) was taken and found to be 5 kgs. He is in grade II. Check-up of health of children was done in AWC last month by the M.O. His remarks in the register show that some children are suffering from calcium and iron deficiency and anaemia. In the SNP feeding green leafy vegetables do not form part of the recipe. Porridge is being cooked by the SHG of the village. Smt. Sonabai Atram, Chairperson of SHG was present. Smt. Kamu Bhilmode, head of another SHG stated that the group has been able to save upto Rs. 62000/- and has received Rs. 10000/- as revolving fund. The SHG is financially sound.

**Water Supply Department**

There are 2 hand pumps in the village. Bhurki Pod is included in Karanj Water Supply Scheme and has no problem. At the time of visit people were fetching water from common water stand post.
Rural Development Department

A) The units sanctioned under Indira Awas Yojana (IAY) are as under:

<table>
<thead>
<tr>
<th>Name of village</th>
<th>Taluka</th>
<th>No. of Houses</th>
<th>No. of families</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constructed</td>
<td>Upto 2005-06</td>
<td>as per permanent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>wait list for houses,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>prepared during</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the year 2006-07</td>
</tr>
</tbody>
</table>

1. Bhurki Pod Kelapur 25 124

Talao Pod (Karanji)

This shows that the number of households who qualify for assistance under IAY but who are on the waiting list is quite large. There is no time bound plan as to when their houseless status can be removed.

Food and Civil Supply Department

Food grains are supplied to the village from fair price shop of village Karanj. Total Number of ration cardholders are as under:

- BPL - 3
- Antyodaya - 62
- Anaapurna - 11

They (BPL and Antyodaya) are entitled to 25 kgs of rice and 10 kgs of wheat and 10 kg under Annapurna category. Full entitlement is being met.

B) Talao Pod PHC Karanj Taluka Pandharkawada:

Health Department

Talao pod is a part of village Karanj and situated 1 Km away from it, having 100% population of KOLAM tribe. Manisha Atram died 3 and half year back due to pneumonia in this village. Her mother also died due to psychosis.

During the Pulse Polio campaign all the beneficiaries were covered. Other beneficiaries were given booster doses of vaccine in time. Slogans on the importance of vaccination are addressed to students in their local language.

Women and Child Development Department (ICDS)

Smt. Sharda Atram and Smt. Tai Waghmare are the AWW and the Sahayika of the AWC respectively. Children in 0-6 age group enrolled in the AWC number 56. None of
them is in gr. III or gr. IV. The AWC functions between 8 AM to 12 noon in summer. I got the weight of one child named Jalpat Atram checked. He weighed 14.9 kg. and is in grade-I.

The job course training of the AWW was held at Ralegaon training centre. The weighing scale is not in working condition. So the AWW brings the weighing scale from another centre. In the Center Khichadi (Mixture of Dal and Rice), Usal (Mot and Gram) constitute the main recipe of SNP. This has 60 gm rice, 20 gm dal, oil and turmeric etc. No green vegetables are provided. It was complained that the grants have not been provided to the SHG who runs ICDS supplementary food management and cooks food. New ‘measurement scale’ has also not been provided. M.O. Runjha gave the details of coverage of pulse polio campaign.

Water Supply Department

There is one public well and one hand pump in addition to a piped water supply scheme. There is no problem of water scarcity in the pod.

Jeera Taluka Pandharkawada

The village has a population of 876 of which the tribal population is 480. It was complained that canal work is lingering for the last 15 to 20 years, and no water is provided through the canal of Khemkund project. It was represented by the people of the village that reasons should be known and the problem should be sorted out. It was stated that the SHG was having a balance of Rs. 75000/- of which Rs. 10,000/- constitutes the revolving fund. This is encouraging. One person complained that kerosene retailer is from another village i.e. Vrunja and the distribution of koil is rather irregular and erratic. Enquiry was demanded. It was further represented that too many documents are required to be produced, while obtaining a Caste Certificate. It was also complained that one revenue case related to ‘panjan road’ encroachment is pending with the local Tahsildar for the last one year and no action has been taken. This is an example of unwarranted laxity and inaction in revenue administration.

Women and Child Development Department (ICDS)

The children in 0-6 age group who have been enrolled in the AWC at Jeera Pod are 76. Besides, there are pregnant and lactating mothers – 5 each who are also attending the AWC. Smt. Sugandha Pendor and Smt. Sakhu Chavan are the AWW and Sahayika respectively. SNP is provided through SHG. Smt. Vaishali Powe is the head of SHG.

I got the weight of Rekha Mangesh Surpam (date of birth is 18.6.2006) and found her weight to be 5.5 kg. She is in grade III. This is a fit case for admission and treatment
in a PHC or hospital. AWW should take the initiative to shift her to the nearby PHC or hospital at the earliest.

It was observed that the Anganwadi worker has not recorded the time of attendance of children.

**Rural Development Department**

The units sanctioned under IAY are as under:-

<table>
<thead>
<tr>
<th>Name of the village</th>
<th>Taluka</th>
<th>No. of Houses</th>
<th>No. of Families as Constructed Upto 2005-06 list for houses, prepared during the year 2006-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jira</td>
<td>Kelapur</td>
<td>11</td>
<td>95</td>
</tr>
<tr>
<td>Mira</td>
<td>Kelapur</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

This means that like Bhurki Pod and Talao Pod a large number of households are in the waitlist for assistance under IAY. There is no time bound plan to meet this basic need of the houseless people.

**Water Supply Department**

There are 3 public wells and 4 hand pumps. There is no problem of scarcity of drinking water.

**Food and Civil Supply Department**

A fair price shop is in existence for the eligible card holders who are as under:-

- BPL - 51
- Antyoday - 122
- Annapurna - 26

The eligible card holders are getting rice and wheat as per their entitlement.

**4.06.07**

(forenoon) Visit to Runza PHC:

I was at the PHC for more than one hour. During this period I interacted with the PHC in charge, the second MO, the ANM, the LHV and MPWs primarily with a view to satisfying myself about (a) their mobility and outreach and (b) the manner in which
they communicate to the members of the tribal community on basic themes like breast feeding, colostrum, forms of malnutrition like anaemia, vitamin A deficiency, LBW, IDD, importance of micro nutrients in food, balanced diet, intervals at which feeding should take place both for pregnant and lactating mothers as also children. Kolams and Pardhi constitute the main tribal group in the district as also in this area and they speak dialects which are distinctly different from the State standard language i.e. Marathi. Unless the health extension workers are given training to communicate the central health messages in the dialects spoken by these tribal groups with felicity of expression and ease and make the members of the group feel completely at home, the latter will not easily imbibe and assimilate these messages and act on them. After talking to the grass root level health functionaries at Runza I got an impression that (a) they are mobile to some extent ( b) they follow a particular calendar of visits which is drawn up for every month but were not so sure about the messages they are conveying to the tribal mothers, to what extent the latter are able to imbibe and assimilate those messages and act on them and what is the overall impact of this process on reduction of malnutrition rates which is quite high in this area. I also could not get a clear picture about (a) institutional deliveries versus home delivery (b) to what extent, ANMs and LHV’s have been able to persuade pregnant mothers to visit the PHC for their gynaecological and health check up and (c) to what extent they are able to physically bring mothers as well as malnourished children to the PHC. While the areas undoubtedly are far flung with poor connectivity and public transport is weak, with a high morale and motivation it should be possible on the part of the health extension workers to transmit the central messages about malnutrition, carry conviction to the mothers that malnutrition of children can be successfully prevented and arrested and they do not have to worry. The ANM- Smt. Rajakolhe failed to explain the cause of neonatal death. She also could not furnish any information about ‘Janani Surakhyaa Yojana’. The health supervisor could not explain details of the tours performed by her.

4.6.2007

Interaction with a paediatrician in a subdivisional hospital at Pandharkawada –Dr. (Mrs.) Satturwar.

How does she diagnose and deal with cases of malnutrition?

It’s a step by step approach followed by her, the steps in the sequence being:

- assess the extent of complication
- search the causes with the mother
- with the child
- remove the causes - by changing dietary pattern;
  ( high protein diet for both mother and child)
- improving frequency by feeding the child every 3 hours
- improving adequacy of feeding.

Dr. (Mrs.) Satturwar, the paediatrician stated that during last 7 to 8 months she has treated 8 cases of hypothermia, that Gr.III and Gr.IV malnourished children were being examined and treated regularly and showing good progress. There has not been a single case of foeticide or still birth. Two major causes of early neonatal death are:-

- Septicemia;
- Waterborne diseases.

She made a very objective and dispassionate observation about the causes which give rise to malnutrition such as

**With the mother:-**

- Early child marriage;
- Hard manual labour;
- Last to eat, low and infrequent diet (in terms of nutrients)

**With the children:-**

- Large size of the family (5 to 6 members);
- Low percapita availability of food;
- Possibility of infection (air and water borne);
- Infection through home delivery;
- Low earning by able bodied adult members;
- Illiteracy of the mother;
- Cultural moorings (not eating green vegetables)

On the whole, Dr. Satturwar, the paediatrician displayed knowledge, information as also skill with which the former could be applied. The interaction with her breathed hope that with medical officers of her calibre in position malnutrition can be controlled.
4.6.2007

Impressions at the end of visit of village Titri (Population 1286):

- The ANM does not come to the village, nor does she meet the villagers.
- Instead, she does her private practice.
- The villagers do not get any service from the PHC at Shivani but have to approach a private medical practitioner.
- The PHC incharge comes to the main village, sits in the subcentre but does not come to the tribal hamlet.
- The PHC at Shivani and the rural hospital at Ghatanchi are 40 and 22 Kms away respectively.
- Distance is the main hindrance which inhibits mobility and delivery of service.
- The ladies confirmed that the anganwadi worker undertakes regular home visits.
- The anganwadi worker – Smt. Tarabai Kawathalkar has been instrumental in formation of a SHG (14 members) and a mahila mandal (20 members) in the village.
- The Sahayika of AWC – Smt. Kusum Mithe is absconding since 3 months.
- Out of 162 pregnant and lactating mothers and children 130 attend the supplementary nutrition programme.
- The endeavour should be in the direction of 100% enrolment.
- It does not make sense that neighbours will bring food home from the AWC for an absentee mother (who does not visit the anganwadi centre) as food may get infected on the way and may be stale by the time it reaches home.
- The perception of the anganwadi worker about why children suffer from diarrhoea, jaundice and pneumonia is very clear.
- She regretfully has no control over external imponderables.
- A hand pump has been installed in the village but is mostly non-functional. It is affected by high floride content in water giving rise to florosis.
- People complained that they do not get potable water.
- They have to travel 2 Kms to collect water from a well. Very little time will be left particularly for a mother for cooking, serving food, and looking after nutritional requirements of children in such a situation.
- The village tubewell requires deepening.
- Piped water supply does not function optimally.
• Private parties have put up booster pumps unauthorizedly.
• A pump can be installed only after deepening the tubewell.
• There were 2 premature deliveries in the village.
• Three children died of whom 2 were twins.
• Their weight recorded at the time of birth was found to be 1000 gm and 800 gm respectively which is much lower than the standard birth weight of 2.5 kg.
• In one case, the mother was suffering from cancer; she died first followed by the death of the child.

More about the Problem of florosis:

Of the total number of 548 villages in the tribal areas, water in 305 tribal habitatioins have been found to be chemically contaminated the breakup of which is as under:-

- habitations having 100% chemically contaminated sources – 31;
- habititations having 70 to 99% chemically contaminated sources – 21;
- habitations having 50 to 69% chemically contaminated sources - 73;
- habitations having 1 to 49% chemically contaminated sources – 180;
- habitations covered – 122 (FC);
- habitations to be covered – 183 (PC).

The following table shows in detail the position of water quality affected habitations:

A. Status of 100% Water Quality Affected Habitations:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Habitations affected by</th>
<th>Total No. of Quality affected Habitations</th>
<th>Already Covered by taking measures</th>
<th>Scheme in Progress</th>
<th>Scheme Proposed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fluroide</td>
<td>11</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Nitrate</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Iron</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Multiple</td>
<td>12</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>31</td>
<td>11</td>
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B. Status of 70 to 99% Water Quality Affected Habitations:

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<tbody>
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<td>1</td>
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<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Iron</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Multiple</td>
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<td>8</td>
<td>6</td>
<td>3</td>
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<tr>
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<td></td>
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<td>11</td>
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</table>

Proposals submitted to Government for Approval.

C. Status of 50 to 69% Water Quality Affected Habitations:

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<th>3</th>
<th>6</th>
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</thead>
<tbody>
<tr>
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<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Iron</td>
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<td>2</td>
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<tr>
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<td>Multiple</td>
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Proposals submitted to Government for Approval.

D. Status of 1 to 49% Water Quality Affected Habitations:

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<th>11</th>
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<tr>
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<td>13</td>
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<td>3.</td>
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<td>9</td>
<td>17</td>
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<td>Multiple</td>
<td>59</td>
<td>27</td>
<td>16</td>
<td>16</td>
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<tr>
<td>Total</td>
<td></td>
<td>180</td>
<td>72</td>
<td>51</td>
<td>57</td>
</tr>
</tbody>
</table>

Proposals are under investigation and preparation.

|   | Grand Total | 305| 122| 94| 89|

Who will treat other malnutrition related diseases?

Against 12 sanctioned posts in the sub-divisional hospital only 4 have been filled up and 8 are vacant. Management of activities in the hospital and the results thereof which are targeted becomes extremely difficult in such a deficit situation.

**4.06.07**

Impressions at the end of the visit to village Kolambi under Ghatanj Taluka (population 1803):

- **ST** - 758 Anganwadi Kendras- 2
- **SC** - 216 Enrolment: First Women -83 Second Women -28
- **Other** - 820 Children – 19 Children – 106
• Status of health of women and children - normal.
• Anganwadi worker has maintained through home visits close contact with the families
• No. of BPL families – 181
• No. of Antyoday families – 209
• This is according to the findings of 1997 BPL survey; the findings of 2002 survey have not yet been acted upon.
• Average size of the family – 5
• What they get from PDS (20 Kg rice and 15 Kg wheat) is inadequate considering the large size of the family and consumption pattern.
• They have to buy wheat @ Rs. 12/- per Kg which goes beyond their earning.
• Men and women eat 3 times and children 4 times.
• There is general discontentment in the house holds about red colour of wheat (imported wheat from Russia and Bulgeria).
• The extent of landlessness is 70%.
• Minimum wage for men – Rs. 50/- while it is Rs. 20 to Rs. 25/- for women.
• Women and men get employment for about 6 months.
• The villagers complained that there are encroachments on land for residential purposes by outsiders. No efforts, whatsoever, have been made so far to remove these encroachments.
• There is no employment under NREG scheme so far but the old work under ‘Food for Works’ is continuing. These works are executed by contractors and the wage rates (Rs. 47/-) are much lower than the minimum wages notified by the State Govt. i.e. Rs. 68/- for 8 hrs. of work.
• 162 families are houseless (do not have a roof above their head) They have homestead land but no assistance under IAY has been made available so far to enable them to put up a structure measuring 225 sq.ft. within a sum of Rs. 28000/- per unit.
• The number of beneficiaries selected for 2007-08 is only 3. At this rate, a large number of people will have to wait for several years to get a roof above their head.
• There is no proper technical supervision and guidance to the beneficiaries to enable them to put up the structures. The units assisted earlier for this reason are in a dilapidated condition.
• The GP Secretary could not give any accurate and precise information.
• The Revenue Divisional Commissioner – Shri S.K. Goel who was with me throughout
my Yavatmal tour and who took a genuine and abiding interest in the livelihood, income and quality of life of the tribal population was of the view that possibilities should be explored for implementation of ‘Gaothan Scheme’. This is an old scheme of Revenue Department. According to the scheme, if there is increase in population of the village or division in the household possibility of locating government land or acquiring private land for the landless should be explored. The scheme is still in vogue but its implementation is tardy. The budget provision for acquisition of private land, levelling of uneven land and land development to make it more productive is very low. Private land purchased by government is not to be given free but on an occupancy price which is fixed by government.

- The villagers of Kolambi ventilated a number of complaints and grievances before me. The gist of these grievances is as under:-

  → Despite introduction of NREG since February 2006 by the Prime Minister at Ananthapur (A.P.), no stable and durable avenues of employment were provided to the people throughout the year. The planning for this made at the GP level was inadequate and faulty.

  → The Asstt. Engineer attached to the Panchayat Samiti makes inordinate delay in making measurement of the works executed for the wellbeing of the people. This delays completion of the works and payment to the executant and the labourers.

  → A large number of people have been left out of the purview of the BPL Survey conducted in 2002. Complaint petitions are filed (123 such complaints have been filed for village Kolambi) but these complaints are kept pending.

  → A number of changes take place in the composition of the family. Sons get married; they have children and stay as part of the joint family set up but these changes are not reflected in the old card nor a new card is issued.

  → People being poor eat Swargum (Jower) and this is the staple food grown in Vidarbha for years. The older varieties have less productivity but are good in taste, colour, flour percentage and flavour. This should be made a part of the PDS Package.

Meeting at Circuit House, Yavatmal (4.06.07):

8 PM to 10 PM

- Following are the departments of the State Government responsible to deal with problem of hunger/starvation and malnutrition.
An overall assessment of performance of ICDS and Public health functionaries in respect of Yavatmal district:-

- There are 15 ICDS Projects with 15 sanctioned posts of CDPOs of which 8 posts of CDPOs are vacant. The responsibility of managing a project could have been entrusted to one of the block/taluka level officers for better supervision but this has not been done.

- One ICDS project is ordinarily coterminous with a CD Block.

- No norm for CDPO to supervise the work of X number of supervisors has been laid down.

- One supervisor is required to oversee the work of 25 anganwadi centres.

- The CDPO and supervisors are required to visit one anganwadi centre within their jurisdiction atleast once a month. This is seldom carried out. They are required to record an inspection report, a copy of which should be kept in the Visitor’s Book. No guidelines have been issued so far by the Commissioner ICDS about the items which should engage their priority attention in course of visit to the AWC with the AWW.

- There is a monthly reporting system.

- The report is prepared by the AWW and picked up by the ANM
• The report has inputs pertaining to functioning of both ICDS and Health
• It is required to be sent to the District Planning Officer through the Supervisor and the CDPO; a copy is to be marked to the District Health officer.

The report is expected to cover
- No. of children in 0-6 age group;
- No. of pregnant and lactating mothers;
- Growth of children (height, weight etc.);
- Supplementary nutrition programme: frequency of feeding, quantity and coverage;
- Checkup of health of mothers and children by an MO of the PHC; recording of the findings in the health checkup register;
- Training of the anganwadi worker;
- Content and quality of preschool education.
- Immunization – frequency and percentage of children covered.

What has emerged out of the analysis of the monthly reports?
• 90% of children’s growth is being monitored.
• 2500 children were in grade- III and grade IV earlier.
• The number has come down to 1300 in Gr. III and 94 in Gr. IV as a result of intensive growth monitoring and corrective action pursuant to monitoring.
• The reports are reported to be crosschecked by the CDPOs.

Role of Jijabai Mission:
• The mission is doing independent cross checking on the status of nutrition.
• It has adopted a colour code to assess the extent of malnutrition
• There are three colours namely green, yellow and red.
• Green indicates above the State average
• Yellow indicates in between the State average and actual ground level status of malnutrition.
• Red indicates below State average.
• The mission is under the administrative control of WCD Deptt.
• The per capita allocation for SNP fixed by the WCD, Mantralay, Mumbai is Rs. 1.98/- per child only.
• Plan funds for ICDS have not been released so far.
• Rs. 38 crores have been surrendered in 2006-07.
• There are 2 major schemes which are being implemented by the Public Health Deptt. These are:-
  Matrutwa Anudan Yogna;
  Janani Surakshya Yojana;
• The funds under the IInd have not yet come from NRHM w.e.f 1.04.07
• Claims worth Rs. 23 Lakhs @ Rs. 700/- for institutional delivery and @ Rs. 500/- for home delivery are still pending for approval and disbursement with NRHM from 2006-07.
• Under the first a subsidy of Rs. 400/- is meant to be disbursed in the following manner:
  At the time of ANC registration - Rs. 100/-
  VI month - Rs. 100/-
  VII month - Rs. 100/-
  IX month - Rs. 100/-
• Remaining Rs. 400/- is being disbursed annually in shape of medicines to adivasi pregnant women upto 3 live issues.
• The total financial implications are Rs. 12 lakh towards subsidy and Rs. 12 lakh towards medicine annually.
• Janani Surakshya Yojana is intended to promote safe delivery through institutional means (PHCs, sub-centres, hospitals etc.).
• There is a three tier system under which these schemes are being implemented. These are: Anganwadi, ANC (Sub-centre) and PHC.
• Anganwadi is under WCD Deptt. while sub-centre and PHC are under Health Deptt.
• A synergy between these 2 departments and their functionaries is vital. This regretfully is wanting. Lack of synergy is more attitudinal and less institutional. While all agreed in the meeting which took place in the Circuit House with the Divisional Commissioner in the chair that such synergy was crucial in our fight against malnutrition few had any clue as to how to translate synergy to action. The knitty gritty of synergy needs to be worked out in the following manner:-
  • Officers of ICDS and Public Health must meet and get to know each other more closely;
They must share the outcome of their field visits;
Both must individually and jointly mobilize pregnant mothers and facilitate their timely check-up;
Both must individually and jointly facilitate the process of admission and treatment of malnourished children in PHCs/hospitals;
Both must individually and jointly follow up and watch the pace of recovery of children after discharge from hospital/PHC;
Both must get timely accurate feedback about the status of health of children and report to the senior officers of WCD and Public Health Departments.

Role of Tribal Welfare Deptt:

Consumption Loan scheme:

- The scheme was launched in 1995 with the laudable objective of protecting tribals from the clutches of money lenders and indebtedness.
- In 2006-07 Rs. 3.79 crores have been disbursed. A sum of Rs. 9.80 crores (70% kind and 30% cash) has been disbursed between 2003-04 to 2006-07.
- No funds have been received thereafter; the scheme is non-functional.
- Waiver of previous loans which tribals are unable to repay continues to be the major problem. The scheme has come to a grinding halt primarily on account of inability of tribals to repay.

Grain Bank Scheme:

- The scheme rests on 1/3rd of beneficiary’s contribution and 2/3rd to be deposited by the Tribal Development Corporation in the grain bank. It is intended to promote food security of tribals on the principle of collective sharing and ownership.
- The scheme is almost non-functional on account of inability of most of the tribal families to repay.
- The beneficiaries always want to waive their contribution.
- So far the coverage under the scheme (1404 families) has been very limited.
- The officers of Tribal Development Corporation need to go to Paderu under Vizag district in Andhra Pradesh and study how the tribals of Paderu are able to repay - be it cash or grain and carry on the scheme without any hurdle.

Reimbursement of opportunity Cost:

- This is a scheme meant for compensating tribals for loss of wages on account of absence from work with a view to attending to malnourished children in hospitals.
@ Rs. 40/- per day.

- Total allocation under this was Rs. 20.36 crores in 2006-07.
- The amount disbursed in 16 tribal taluks was Rs. 18 crore 80 Lakhs.
- It is necessary to spread greater awareness about the scheme so that more and more mothers will bring their children for hospitalization, stay with them and look after them till the children are discharged.

**Allotment of forest land in favour of tribals:**

- A decision has been taken in principle to denotify forest land (patra jungle) in the vicinity of a village as de reserved forest and allotted to the tribal families who have been cultivating it for several years. This will be of immense help to the landless members of the tribal community, will heighten their motivation to continue with and do better agriculture and improve earnings through land and in the process improve the nutritional status of the household.
Amravati
(5.6.07 to 6.6.07)

The district has a total geographical area of 12,212 sq.km. and a total population of 26,07,160 spread over 6 sub-divisions, 14 talukas, 842 GPs, 2002 revenue villages and 5,26,230 households. The tribal areas of the district have 1 sub-division, 2 talukas, 322 GPs, 331 revenue villages and 43,183 households and a population of 2,42,647.

- The break up of the population is as under:-

<table>
<thead>
<tr>
<th>For the district as a whole:</th>
<th>For the tribal areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male - 13,45,614</td>
<td>Male - 1,23,915</td>
</tr>
<tr>
<td>Female - 12,61,546</td>
<td>Female - 1,18,732</td>
</tr>
<tr>
<td>SC - 6,20,939</td>
<td></td>
</tr>
<tr>
<td>ST - 3,56,533</td>
<td></td>
</tr>
</tbody>
</table>

- The detailed break up of children in 0-6 age group in the tribal areas is as under:-

<table>
<thead>
<tr>
<th>Age Group (Years)</th>
<th>No. of children in 0-6 age group in September, 2007</th>
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</thead>
<tbody>
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<td></td>
<td>Dharni</td>
</tr>
<tr>
<td>0-1</td>
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</tr>
<tr>
<td>1-2</td>
<td>4260</td>
</tr>
<tr>
<td>2-3</td>
<td>4205</td>
</tr>
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<td>3-5</td>
<td>8058</td>
</tr>
<tr>
<td>5-6</td>
<td>3562</td>
</tr>
</tbody>
</table>

- In sharp contrast with low rates of literacy in tribal districts elsewhere in the country, the literacy scenario in the tribal areas of Amravati is much better as would be evident from the following:-
Literacy rate in Dharni taluka:
Male - 74.6%
Female - 49.3%

Literacy rate in Chikaldhara taluka:
Male - 77.2%
Female - 51.0%

The MMR and IMR rates in Dharni and Chikaldhara taluka are:
NMR - 24.74% } per 1000 live births
IMR - 49.49%}

On the public health side, there are 42 public hospitals (including rural hospitals), 56 PHCs, 333 sub-centres and 8 mobile health units. Of the 56 PHCs 18 PHCs have not got their own departmental buildings and are functioning in rented accommodation. Similarly of the 333 sub centres, 18 sub-centres have not got their own buildings and are functioning in rented accommodation.

On the ICDS side there are 14 ICDS Projects and 1992 AWCs. Of the 14 projects 13 CDPOs are in position and of the 1992 AWCs, 1975 AWWs are in position. 1174 AWCs have got departmental buildings and the remaining 818 AWCs are functioning in buildings belonging to other departments. Of the vacancies on the health side, 25 posts of MO Class I and 33 posts of MO Class II are vacant. The vacancies in respect of ANMs, LHV and MPWs are 14, 15 and 11 respectively.

Field visits to AWCs in Amravati 5/6/07 (forenoon):

- Field visits by Supervisor and CDPO to AWCs are few and far between.
- The monthly report in respect of AWC is the basic document which is a reflection on the total number of activities of the AWC.
- Monthly report is not an exercise in ‘khanapuri’.
- It’s not a tool of statistical measurement.
- It’s a tool of planning, prevention and correction of gaps and omissions.
- In actual practice, it is neither a tool of prevention nor correction.
- It is required to be cross verified by the CDPO and the Supervisor; in actual practice it is not.
- ANM visits 5 villages twice a month (which is generally the area of a sub-centre).
- LHV visits 6 to 7 sub-centres.
- Anganwadi worker and ANM seldom go together for a joint visit.
- Institutional delivery is 5 to 10 PC which is quite low.
- 15 to 20 PC delivery is in the hands of untrained Dais with serious consequences.
• Mothers visiting AWCs do not take either medicine or food.
• There is a district committee under Chairmanship of Collector. What is possible under local conditions and which would otherwise meet the norms of nutrition should in all fairness be decided by the said district committee.

Melghat  5/06/07 (afternoon):

The prevalence of malnutrition (under 5 children) is severe going upto 5%
Neonatal mortality rate – 60 (0-4 weeks) for every 1000 live births.
IMR – 80 for every 1000 live births.
Under 5 – mortality rate - 140 per 1000 live births.
Situation is precarious in
Kharyatembharu;
Babdo;
Dabiyakheda
• Real situation obtaining on the ground is invariably suppressed (both by health and ICDS functionaries)
• Correct Status of malnutrition is seldom brought to light.
• No health education is imparted to families. The ANMs, LHVs and MPWs who are responsible for this seldom receive any orientation or guidance as to how to go about it in a purely unorthodox and unconventional manner with some richness of human appeal.
• The quantity and quality of food distributed to children in anganwadis needs to be monitored by a People’s Committee at the village level itself. The Committee may comprise of representative of the GP, representative of an NGO and any other field functionary.
• Malnourished children need to be shifted to nearest hospitals without any delay.
• NGOs (like MAHAN) have the imagination, creativity and resourcefulness for social communication and are willing to shoulder many of these responsibilities but they are seldom taken to confidence and entrusted with specific responsibility.
• In particular, their involvement and support could be enlisted in the area of designing and disseminating an appropriate IEC package.
• Many of the ongoing activities (like recording of weight) could be performed jointly by the health functionaries and a local NGO. The same would enhance the credibility of the process and the outcome.
Special Problems of the Sub-district hospital, Dharni (Melghat):

- Anaemia is very common in Melghat.
- Death of a young mother and baby due to lack of blood transfusion facilities was brought to my notice.
- No regular full time gynaecologist has been posted in Dharni sub-district hospital.
- The incidence of maternal mortality in Melghat is very high.
- There is no regular X-ray technician even though an X ray machine has been installed. This is just one of the many specimens of lop sided health planning and management in rural areas.
- The incidence of TB and pneumonia is very high.
- Pneumonia has been reported to be a major killer of children.
- TB has been reported as a major killer of adults.
- Food supplied to malnourished babies admitted to the hospital and parents is of poor quality and inadequate.
- This is one of the reasons as to why parents are reluctant to go in for hospitalization of children.
- Govt. has sanctioned Rs. 65/ per day for food of both mother and the child but one test case confirmed that food supplied has barely the value of Rs. 20/- a day i.e. less than 1/3\textsuperscript{rd} of the actual scale.
- The following 19 villages of Melghat deserve special priority attention in terms of intensity of prevailing malnutrition.
  - Ambadi; - Mansudhawadi;
  - Baspani; - Pohara;
  - Berdabulla; - Tanibanda;
  - Bobdo; - Jampani
  - Bothra; - Chitri
  - Dabiyakheda; - Didamda
  - Ghota; - Keli
  - Hirabambai; - Kot
  - Khanjatembhani; - Mangiya
  - kokmar
- In a number of villages MOs are not available; many children die due to lack
of medical attention. Such children should be treated by trained village health workers. NRHM has not yet been fully implemented in Maharashtra; otherwise, ASHA workers would have been of immense help. In the absence of ASHA workers involvement and support of NGOs like MAHAN who have trained such village health workers should be enlisted. Such involvement could substantially reduce under 5 mortality rates. VHWs can also be trained to work as monitoring agents for various govt. schemes. They can also be trained to conduct health education programmes after an appropriate IEC has been designed.

Additional points for consideration:-

- Road connectivity should be provided as a matter of a very high priority to 25% of the villages of Melghat which remain unconnected.

- Artificial insemination centre at Bod farm should be activated. This will increase the quantity of milk. Simultaneously backed by a drive for higher consumption of milk it will eventually improve the level of nutrition.

Concrete evidence of malnutrition:

Visit to PHC Semadoh on 05.06.07:

There are 7 sub-centres under the PHC. Of the 2 MOs, one has not joined as he has been recently relieved from Salona PHC. One MO, 7 ANMs, 7 MPHWs and 16 pada workers are in position. I met five malnourished children who have been admitted in the paediatric ward of the PHC. They are:-

**Kumari Chhayya Jajue Mawebban** – Age 1½ years, admitted on 31.05.07
- Weight 6.7 Kg as against 10.8 Kg.
- Status of malnutrition – Gr. III

**Kumari Akash Bhogelal** – Age 2 years 5 months, admitted on 31.05.07
- Weight 8.3 Kg as against 11.8 Kg.
- Status of malnutrition – Gr. III

**Kumari Sheetal Chottu Kasdekar** – Age 5 years 6 months, admitted on 31.05.07.
- Weight 9.5 Kg as against 17 Kg.
- Status of malnutrition – Gr. III

**Kumari Durgesh Mahadev Bawne** – Age 3 years, admitted on 4.05.07.
- Weight 11.5 Kg as against 14 Kg.
- Status of malnutrition- Gr. II

**Kumar Kailash Mahadeb Bawne** - Age 7 months
- admitted on 4.05.07, Weight 5.3 Kg as against 7.2 Kg.
- Status of malnutrition – Gr. III
• The PHC, MOs and paramedical staff attributed the following as factors responsible for malnutrition and eventually to malnutrition related deaths:-
  - early child marriage;
  - large family size;
  - poor personal and environmental hygiene;
  - not washing hands before taking food;
  - not taking bath for days together;
  - not eating green leafy vegetables;
  - too many fads and obscurantist ideas and practices sustained by cultural moorings for generations.

• One child in Makla died on 27.4.2007 due to excessive exposure of the mother and the child to heat and humidity. The mother preferred to walk in the hot sun carrying the child and did not pay any heed to the advice of the LHV not to do so. The child was weighing 2.8 kg after birth and was otherwise hale and hearty but did not survive as it was dehydrated beyond measure on account of exposure to heat. The ignorance and obduracy of the mother not to pay heed to a sensible advice was responsible for the tragedy.

  The calendar of field visits by the MO and ANM is being maintained. The ANM spends about an hour in the AWC and interacts with pregnant and lactating mothers. She also visits them in their respective households in the village. On the basis of the interactions and experience gained she attributes malnourishment of children to poor hygienic conditions (irregular baths), accumulation of garbage giving rise to flies, open defecations, lack of home toilet, early marriages, poor food habits and dietary patterns.

Deaths of children in selected villages of Chikaldhara taluk

I In Bihali 4 children have died due to bronco-pneumonia, hypoglucemia with hypothermia, poisoning and SIDS.

II In Salona 4 children have died due to burns and SIDS.

III Two children have died in Semadoh due to SIDS and Pneumonia

IV In Adnad 1 child died due to MRCP

V Death audit is being done at the district level. It will be in order if the cause of each and every case of death is analysed by DHO and the report sent to State Government who in turn can inform the NHRC about the same in a prescribed format.
06.06.2007

Anganwadi Kendra at Bihali:

- Forty children were found in 3-6 age group.
- A number of malnourished children were found in the category of LBW and premature delivery. They need to be admitted to nearby PHCs/hospitals, as the case may be.
- The AWW – Ms. Mangla Vidhale seemed confident of restoring the children from Gr.IV to Gr.III, Gr.III to Gr.II and Gr.II to Gr.I
- A number of charts and educational aids were found to have been displayed on the wall. There was no convincing explanation if the content of these IEC materials is explained to the mothers who visit the AWC.
- A child – Sakshi Ramlal Dhikar, aged 4 years was weighed using the sling. Her weight was 11.5 kg. She was in grade IV 3 years ago. Due to sustained efforts of the AWW she has been brought back to grade II. As she was abandoned by her mother, AWW counselled the grand mother to look after the child the grandmother listened to her and started rearing the child and this is how the child; has been brought back to grade II. The AWW was confident that she can be brought to grade I in two months.
- Another child Harshad Ganesh Dhote was in grade III. He was born prematurely at the 7th month of pregnancy. He belongs to Basod caste. The mother did not get the benefit of Matrutwa Anudan Yojana as the family does not belong to ST community. The delivery was conducted in a private institution and cost Rs. 3000/-. The mother, though poor, preferred a private nursing home as the child was conceived 5 years after marriage and, therefore, was considered high risk. The AWW herself was not confident about survival of the child due to heat and humidity, unhygienic living conditions and lack of environmental hygiene. She has, however, been proved wrong. The child survived and is showing signs of recovery. The family works in bamboo furniture making and earns about Rs. 200/ per week.
- Interaction with a mother showed that they are keen on safe delivery but where a child is being born after a long interregnum, they prefer to go to private nursing homes out of anxiety for survival of the child even at the cost of incurring avoidable heavy expenditure. In the process they get into indebtedness.
- General awareness of parents about scale of assistance made available by govt. for their children is lacking.
• The home environment with large family size, without proper space to move about, without adequate lighting and ventilation, with low earnings (Rs. 200 per week), pervasive ignorance of what constitutes a nutritive diet and the culture of not eating green leafy vegetables does not appear to be very conducive to maintain the level of nutrition.

• Dr. Vinanti Navre, MO in charge of the Rapid Action Team was present at the time of my visit. She referred to the efforts being made to administer Vitamin A tablets to children. The AWW has not received honorarium since last 3 months. The SHG which prepares the food under SNP has also not received the payment since 2 months. All these will seriously hamper the pace and progress of implementation of these programmes.

Salona PHC:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Villages</td>
<td>42</td>
</tr>
<tr>
<td>Sub-centres</td>
<td>8</td>
</tr>
<tr>
<td>MO</td>
<td>2</td>
</tr>
<tr>
<td>ANM</td>
<td>9</td>
</tr>
<tr>
<td>Multipurpose Health worker</td>
<td>8</td>
</tr>
<tr>
<td>Pada workers</td>
<td>48</td>
</tr>
<tr>
<td>Daily out-turn in OPD</td>
<td>30 to 35</td>
</tr>
<tr>
<td>Daily out-turn in sub-centre</td>
<td>4 to 8</td>
</tr>
</tbody>
</table>

• The villages are not located within a close proximity (sometimes within a radius of 20 to 50 Kms with an average distance of 20-25 km).

• There are 3 rapid action teams (RAT) and one Primary Health Unit (PHU) within the PHC area.

• In all there are 3 vehicles and they are in running condition (2 from RAT and 1 vehicle for PHC).

• Each team is given one vehicle on contract. It is required to cover 2000 Kms per month.

• The contractor provides the POL for the 3 vehicles of RAT.

• Visit to a village is on weekly basis.

• The MO of RAT receives an honorarium of Rs. 6000/- per month.

• All 42 villages have been covered only once.

• People in these villages speak in Korku dialect. It could not be confirmed if members of RAT are also able to communicate to them in Korku.
• The premonsoon survey for 2008-08 was carried out in the third week of May, 2007. The report is still awaited.

• In course of visit the members of RAT are required to interact with parents and children, enquire about dietary pattern, delivery, ordinary ailments, diarrhea, burns, boils, extent of under nutrition/ malnutrition etc.

• Such tours/ visits are important for
  - meeting people;
  - talking to people;
  - communicating simple messages about infection, ailment, malnutrition, its causes and consequences, preventive and corrective measures;
  - generating a climate of trust and confidence.

• Despite such painstaking efforts the general impression that I got at the end of the visit to the PHC is that people still prefer to look upto quacks locally known as Bhagat or Bhumka.

Why recourse to faith healers?

• The bhumkas have been there for generations.

• They and the tribals have lived together; their lives are intertwined with each other.

• It is difficult, if not impossible to wean the members of the tribal community away from these faith healers. It requires extremely dedicated functionaries who should also be first rate communicators who can carry conviction to these people not to turn to quacks in moments of crisis.

• Why do the tribals go to faith healers?

• It is because of the fact that:
  - Our mobility and outreach to the people is poor;
  - Our institutions do not deliver in less time and cost;
  - Our functionaries have not been able to inspire the trust and confidence of the target groups.

Visit to Sub divisional hospital, Dharni:

• At the time of visit eleven children who are victims of chronic malnutrition (of them two were in NICU) in different grades were found such as:
  
  GR-I  -  1  The child was suffering from bronco-pneumonia,
  GR-II -  4  These children were suffering from acute gastroenteritis,

  fever, infection in upper respiratory track
GR-III - 3 These children were victims of vitamin A deficiency, anaemia, LBW etc.

GR-IV - 3 Some of them were cases of premature delivery with LBW.

- The mother of one of the malnourished girls complained of inadequate diet. She went to the extent of stating that she has to go out to get fruit and snacks from outside. This is not a very happy state of affairs. In the absence of any other family member, a mother is not expected to leave a chronically malnourished child on the bed and go out in search of food/snacks when the same are expected to be provided to her by the hospital authorities under orders of Government. It is only in an emergency situation of grave crisis that she can go out temporarily for a few minutes with the permission of a treating physician.

- Regretfully the CDMO in charge is not aware of the latest circular letter pertaining to revision of scales of diet which has fixed it at Rs. 65/- (issued since 21.7.06) as also the norms pertaining to transport allowance in case of high risk pregnant mothers/patients. This does not include Rs. 40/- which is exclusively meant for compensating the loss of wages on account of either of the parents attending to the malnourished child in the hospital (for which he/she cannot go to work). The Divisional Commissioner directed the Medical Superintendent – Dr. (Mrs.) Sanchiti to scrupulously adhere to the revised norms without any ifs and buts. He also directed the Collector to inquire into why the old norms are being followed when new guidelines have been issued about a year ago.

- There is no kitchen in the hospital. The contractor is bringing food from outside which is not a very healthy arrangement. Due to constraints of time the CDMO or the Paediatrician are not able to check the quality of food and satisfy themselves that the food being brought by the contractor and being supplied to mother/child in the hospital meets all the nutrition requirements.

- The Divisional Commissioner made an offer to Bandhu Sane and Dr. Satav, NGO representatives accompanying us and present at the time of discussion to think seriously if they can take the responsibility to organize kitchen services within the premises of the hospital. The NGO concerned which has experience in the field should be able to ensure that the right quality of food within the prescribed scales is served.

- A sum of Rs. 10 lakhs is left as unspent amount towards upgradation of the hospital and public health standards. Land is available within the premises of the hospital. The amount has been placed at the disposal of the CDMO. It should be possible to set up a blood storage unit in the hospital at the earliest. Major equipment is
already available. A blood donation camp can be organized. Permission of Food and Drugs Administration is awaited. Equipments have to be installed first and then FDA can come for inspection.

- There is too much of loadshedding and power interruption and tripping. This results in short circuit and the machines installed in the hospital go out of order. This is how the X ray unit has gone out of order. We need a 24 hours power back up through installation of a diesel generator set. The set has been installed but the old battery has been exhausted. A new battery is ret to be purchased. This should not get bogged down to procedural red tapism but should be expedited.

- One hundred and fourteen cases were tested positive for malaria last year. Divisional Commissioner directed the Medical Superintendent and Collector to take steps for preventing the incidence of malaria by (a) collection and testing of blood slides on a regular basis (b) distribution of impregnated mosquito nets being supplied by GOI free of cost (c) distribution of chloroquin tablets through AWCs to deal with positive cases.

Grain Bank Scheme:

Maharashtra State Cooperative Tribal Development Corporation Started the Grain Bank Scheme in the tribal sub-plan area as an option to Consumption Finance Scheme. This is one of the components of the activity which comes under the ‘Nav Sanjeevani’ Scheme introduced by the State Govt. for the health and well being of tribals in the State in 1995.

The scheme is being implemented by the project office of ITDP with the help of voluntary organizations and is meant for a group of 3-4 tribal villages having 50 to 500 tribals families as its members. Contribution of grain at the rate of $1/3^{rd}$ from the tribal members is one of the requirements of the scheme while the share of the TDC is $2/3^{rd}$. Members, however, have not been able to bring in their share of contribution. This is the reason as to why the grain bank scheme has not taken off and is currently non-operational. The progress achieved between 1997 to 2004 is indicated below:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of grain banks</th>
<th>Members</th>
<th>Wheat</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997 to 2004</td>
<td>119</td>
<td>6344</td>
<td>4293-57</td>
<td>Rs.42.28 Lakh</td>
</tr>
</tbody>
</table>

Working of National Rural Employment Guarantee Act, 2005 and Scheme in Amravati:

Employment Guarantee scheme is being implemented in Maharashtra since 1972. National Rural Employment Guarantee scheme is being implemented since Feb. 2006 as Maharashtra Rural Employment Guarantee Scheme.

Details of employment provided to unskilled labourers in Melghat area for the week ending 26.05.07 is as under:-
No. of job cards issued to families in Malghat area | No. of works in progress in Melghat area | Labour attendance implemented by Govt.
--- | --- | ---
39571 | 382 | 15060

Deptts. - 79 | - 6112 | 
GPs - 253 | - 1705 | 
Deptt. Works - 50 | - 7243 | 

Employment is provided to unskilled labour as per demand of labour. It is observed that many families have registered their names but are not demanding work and are not coming forward to work. This leads to poor labour attendance at the work sites. Perhaps there is a misunderstanding that they will get some payment merely by registering the name. If this trend continues the central objective of any employment guarantee scheme will be squarely defeated.

Maharastra Govt. Planning Division letter No. Majuri – 2007 kra 62/EGS –I dt. 17.03.07 has fixed minimum wage rate for Melghat area Rs. 68=00 for 8 hrs of work per day. Payment of this wage was, however, nowhere in sight.

**Agriculture and horticulture in Amravati:**

National Horticulture Mission is not a new scheme. Fifty Lakh hectares under Maharastra Employment Guarantee Scheme have already been covered by fruit bearing species since 1991. A sum of Rs. 4.5 crores has already been spent mostly for fruit bearing species. The component of green vegetables in this, however, is negligible. Besides, no information is available on the extent to which small and marginal farmers and landless agricultural labourers have been benefited by the scheme and the extent to which the Mission activities constitute an anti-dote to malnutrition. Mango and orange constitute the major horticulture crop.

**Kitchen garden Scheme:**

Deptt. of Agriculture has started a kitchen garden scheme for tribal families of Melghat region for both Chikaldhara and Dharni talukas since 1998-99 with the following objectives:

- making available required health supplements;
- providing nutritional support;
- providing vegetables and fruits in daily diet;
- providing some additional income.
Assistance is given to individual beneficiaries in the form of inputs i.e. vegetable seeds, horticulture plants and implements through Govt. approved agencies. A sum of Rs. 200/- is given to each beneficiary. The details of the kits are given below:-

- horticulture plants/ grafts – papaya, guava and drumsticks etc.
- vegetable seeds – spinach, methi, pumpkin, cowpea etc.
- implements – spade.

In all 44025 beneficiaries have been covered under this scheme since 1998-99 with an expenditure of Rs. 87.76 Lakhs.

What has, however, been lost sight of is allotment of homestead land to landless adivasis since no kitchen garden scheme can be implemented without the beneficiary being in possession of a plot of homestead land of the desired extent (say a minimum of 10 cents.). No information, however, is available on the extent of number of families not possessing homestead land.

**Electrification:**

All BPL families have to be given electricity under Rajiv Gandhi Rural Electrification Scheme. More than 30 % of the villages are yet to be electrified. There are AWCs which are without electricity even for 20 to 25 years. Solar energy could be an important source but by and large this is yet to be tapped.

**General impressions/observations about Amravati:**

**Positive indicators:**

Rajmata Jijau Bal – Arogya and Poshan Mission has been meticulously planned to monitor the following:

- Joint and separate home visits and guidance by AWWs, Supervisors and ANMs;
- Meticulous planning for monthly check up of health of malnourished Gr. III and IV children by the MO of the PHC at the AWC;
- Planning for all the childrens’ quarterly health check up at the AWC;
- Implementation of adoption scheme for malnourished children by persuasive efforts;
- Planning for improvement in malnutrition of children having serious illness (from Grade IV to Grade III, from Grade III to Grade II, from Grade II to Grade I and from Grade I to normal);
- Planning for health check up of Gr.III and Gr. IV children by a qualified paediatrician at the PHC/Rural hospital/subdivisional hospital;
- Planning for postnatal health check up of mother (PNC);
- Monitoring information about growth and functioning of child weighing machine;
- Planning for training of district and taluka officers.

The monthly progress report is fairly exhaustive and has the following redeeming features;

- The report gives full details about children in 0-6 months, 6 months to 1 year, 1 year to 3 years, 3 to 6 years;
- It gives full details about pregnant /nursing mothers;
- Percentage of children whose weight has been taken ranges between 81 to 101%;
- Improvement in gradation (Gr. IV to Gr.III, Gr.III to Gr.II, Gr.II to Gr.I, Gr.I to normal);
- Decline in number of Gr.III and Gr.IV malnourished children;
- Health check up (monthly) of Gr.III and Gr.IV malnourished children.

**Disquieting features:**

- Still Birth rate continues to be high.
- Death of 0-1 year children continues to be high.
- IMR continues to be 36.88 per 1000 live births.
- MMR continues to be 91 in 100,000 pregnant mothers.
- Institutional deliveries vis-à-vis home deliveries need to go up substantially.

**Public Health Deptt. (Melghat area):**

**Redeeming features:**

- Infrastructure in terms of hospital, (sub-divisional and rural hospital), PHCs, PHUs, MHUs, dispensaries, sub-centres etc. has been created.
- Statistics of vital rates which have considerable bearing on nutrition of children (CBR, SBR, IMR, CMR and MMR) up to 2005-2006 has been maintained.
- Number of malnourished children in all grades except Gr.IV in 2005-06 is on the decline.
• Grade wise death of children on the whole has marginally declined.
• Disease wise death of children on the whole has also marginally declined.
• The position about indoor admission and discharge is more or less constant (except 2004-05 when the number was more).

Other redeeming features:

Pada swayam sevak yojana
• Local Korku women treat and refer children suffering from diarrhoea, pneumonia, fever etc. to PHC/hospital.
• Bharari Pathak Yojana: Mobile vehicle units (22) equipped with medicine and health staff (flying squads) cover the following hamlets between May to March every year:
  - Children in 0-6 years;
  - Pregnant mothers;
  - Post-natal mothers;
  - Gr.III and IV malnourished children;
  - Ashram school children.
• Matrutwa Anudan Yojana: (salient features of the scheme have been given earlier).
• Dai Baithak Yojana: (Dais undergo refresher course every 3 months)
• Compensation for loss of wages (nucleus budget) (salient features of the scheme have been given earlier).
• Janani Surakshya Yojana (salient features of the scheme have been given earlier).
• Pre-monsoon survey is conducted by all PHC staff covering the following:
  - Survey of water resources and distribution systems;
  - Disease survey;
  - Collection of water samples, bleaching powder samples and salt samples;
  - Health check up of ANC, PNC, Gr.III and Gr.IV malnourished children, sick children and 0-6 year children;
  - Immunization of pregnant mothers and children;
  - Identifying any other specific health, immunization and nutrition related problem in the village.
  - Such survey has been completed by 31st May, 2007 even though survey reports are awaited.
• Deputation of paediatrician/ gynaecologist to rural hospital Melghat for one month period in rotation from other hospitals in the region.

• Positive and timely action taken on Dr. Abhay Bhang and Dr. Ashis Satav’s reports and suggestions in the following manner:
  - registration of deaths of children by gram sevak (100%), health and ICDS workers;
  - 30 ASHA workers trained under NRHM for home based neo-natal care;

• IMNCI training under NRHM for health and ICDS personnel;

• Combined gradation exercise by govt. health and ICDS personnel and Dr. Ashis Satav’s project workers.

• Anganwadi workers trained and oriented to record proper gradation.

Public Distribution system (Melghat)

Redeeming features:
  - 100 pc cardholders (antyoday, annapurna and BPL) have been covered;
  - Irrespective of allocation to the district, cardholders get 35 Kg of grains (rice and wheat) per card per month @ Rs. 5/- per kg. of wheat and Rs. 6/- per kg of rice under BPL.
  - In antyodaya scheme the rates are much lower (wheat Rs. 2/- per kg and rice Rs. 3/- per kg);
  - Under annapurna scheme destitute card holders get 10 kg of food grains (it can be either rice or wheat) free of cost per month;
  - 100 pc anganwadis supplied rice for supplementary nutrition on establishment cards;
  - 7324.98 qunital of rice supplied annually for the midday meal scheme.

Other areas of concern:

• IEC activities on early marriage, planned parenthood, spacing etc. are being taken up but local traditions being too deep rooted the impact of such activities is minimal.

• While CBR rates are more or less constant, IMR, CMR and MMR are still areas of concern.

• SBR is still very high due to home deliveries in Melghat.

• IMR increased from 36 in 2002-03 to 49 in 2005-06 and 50 in 2006-07 due to under reporting of such deaths.
Deaths in 0-1 years (neonatal) increased from 248 to 322 over last 5 years.

Abscond figures (353) are still very high. It is one of the contributory factors responsible for deaths of children. Parents of premature and LBW babies who need long stay in hospitals (from 15 days to one and half months) are reluctant to stay in the hospital for such a long time (on account of more children who need to be looked after at home, agricultural operations and not so congenial environment in the hospital).

Suggestions at the end of visit to Melghat sub division:

- The communication process has to be made more lively, more relevant and more effective.

- The quintessence of an effective and meaningful communication process would be:-
  - how to talk to the members of the household and in particular to the mothers;
  - how through such communication make them observe the correct dietary pattern (both in terms of scale and frequency);
  - what are the foodgrains, fruits and vegetables which are locally grown?
  - to what extent are they being integrated into the dietary pattern?
  - what is the level of awareness of parents and other members of the family about importance of nutrition in their lives as well as the lives of children;
  - what should be the content in the IEC package which needs to be designed to heighten the level of that awareness?
  - how does the sender of the package satisfy himself/herself that the receiver at the other end has been able to receive the message, understand and internalize the message and is going to apply it to his/her life?

- Throughout the Melghat tour it was a refreshing experience to come across a team of doctors turned social activists who have been able to design an excellent communication package. The doctors are:-
  - Dr. Ashish Satav (MBBS MD);
  - Dr. Jayashree Pendharkar (M.Sc Biochem Diploma in Dietics, B.Ed.);
  - Dr. Abhijeet Bharadway (MBBS DCH);

- They have designed the package in the following manner which is also a step by step approach:-
  - take a few photographs of malnourished children belonging to different grades of malnutrition;
- list out the problem clearly at the bottom of the photograph;
- list out clearly the various forms of malnutrition i.e. LBW, anaemia, Vitamin A and iodine deficiency;
- provide the solution (both preventive and corrective) in a simple and intelligible manner.
- The language in which the entire package was written is simple bolchal Hindi.

- The Divisional Commissioner – Shri S.K. Goel who was present at the PHC was requested to adopt the communication package (it can be easily translated into Marathi) as a model for use in all the PHCs and sub centres in his revenue division.
- His response was positive.
Nandurbar
(11.6.07 to 13.6.07)

The district formerly known as West Khandesh lies on the upper Tapti basin towards north-west of Maharashtra State. Carved out of Dhule district in July, 1998 it’s a predominantly rural and tribal district (66 pc of the total population numbering 13.09 lakh is tribal). It has 6 talukas, 4 municipalities, 501 GPs, 977 villages and 1534 padas.

On the side of ICDS, there are 6 ICDS projects (each project coterminous with a CD Block), 2047 AWCs and 2043 AWWs with total number of 1,96,947 children, 13,499 pregnant mothers, 16,193 lactating mothers and 74,988 adolescent girls.

On the side of public health there are 58 PHCs and 275 sub-centres of which 15 PHCs and 65 subcentres are without buildings.

Field visits:
12.06.07 8 AM

Anganwadi Centre, Lahan Shahada:

Redeeming features:

• Home visits by the AWW are regular.
• The AWW speaks to the pregnant and lactating mothers, advises them about their food and food to be given to children – content, quality, frequency and adequacy.
• She gives demonstration as to how to prepare balanced food with all the micro-nutrients.
• Colostrum feeding soon after birth is being repeatedly recommended and mothers counselled.
• All malnourished children in Gr.III and Gr.IV are being given one egg and 150 ml of milk with the help of Balarogya Sanwardhan Nidhi.
Disturbing aspects:

- The AWC is too congested. Too many items (food stuff, medicines, weighing machine, pre-primary educational materials, office records and registers etc.) have been huddled together in a limited space.
- Attendance of children and mothers was found to be lower than normal (due to a ceremony in the village)
- SNP does not comprise of any green leafy vegetables.
- Incidence of Low Birth Weight (LBW) is very high.
- No milk and very few green leafy vegetables are served to children at home.
- Malnutrition is caused primarily due to
  - early child marriage;
  - absence of any worth while spacing;
  - unclean and unhygienic environment at home with flies buzzing around which causes infection of food;
  - lack of knowledge about the type of balanced food required for healthy growth of children.
  - the medical officer of the P.H.C. who comes for check up of health of mothers and children on a quarterly basis for all children in 0-6 age group and every month for children who are Grade III and Grade IV malnourished should clearly mention about his/her diagnosis of the ailment, line of treatment recommended, dosage of medicine and at what interval the medicine is required to be taken. He/she does not do so. He/she is invariably in a hurry and much of what he/she records in the register is illegible.

Visit to PHC at Lahan Shahada 12/06/07 9:30 AM:

Redeeming features:

- A calendar of visits by the ANM, LHV and MPW to 24 villages which fall under the jurisdiction of PHC has been prepared. The staff are mobile except when the vehicle is immobile. The supply of medicine is adequate.
- Vaccines and life saving drugs are stored in sufficient quantity in the refrigerator.
- Gr.III and Gr.IV malnourished children are being admitted. There has not been any case of refusal of admission so far.
- Pulse Polio Campaign is being regularly conducted with 100 pc coverage.
• Deworming operations for children are being regularly carried out twice a year.
• Samples of malaria parasites are being regularly drawn and prophylactic treatment by distribution of chloroquin tablets through the AWW is being given.

Visit to Amlad Tal – Taloda Anganwadi Kendra:

Redeeming features:

• There is a rapport and bonhomie among the AWW and the mothers who come to the AWC with their children.
• The mothers clearly remember about the nature of advice imparted by the AWW. (colostrum feeding, exclusive breast feeding for 6 months after delivery etc.)
• The hardship caused due to low earning gets smoothened to some extent due to
  - BPL card which entitles a family to get 30 kg of rice and 5 kg of wheat;
  - Allotment of a house under Indira Awas Yojana ( IAY) though the number allotted is much less and number of potential beneficiaries waiting for assistance is much larger.
• The health of all pregnant mothers and children is being regularly checked and entered in the health check up register.
• All children, pregnant and lactating mothers are being vaccinated.
• No death on account of malnutrition has been reported so far.
• There is gradation of children according to the level of malnutrition in which they have been placed and this has been recorded in the growth monitoring register.
• There is gradual progression from Gr.IV to Gr.III, from Gr.III to Gr.II, from Gr.II to Gr.I.
• A primary school teacher has adopted one Gr.III child due to sincere and persuasive efforts made by the AWW.

Grey areas:

• Even pregnant mothers work as agricultural labourers till the last day before delivery even though what they receive is a pittance i.e. Rs. 30/- which is much lower than what is received by men for same or similar nature of work.
• Intra-familial distribution of earnings is uneven.
• Even distribution of earnings between food and non food items is not balanced.
• Limited earnings do not enable the households to buy enough foodgrains from the open market.
12/06/07 (12 Noon) Visit to Subcentre (in the same village):

Redeeming features:

- The outturn of pregnant mothers coming for check up of their health is good (ranges between 42 to 45 per day).
- Cases of high risk mothers (5) have been referred to PHC.
- The ANM meets the pregnant and lactating mothers and gives them timely advice against early child marriage and in favour of proper spacing and planned parenthood.
- The stock of medicines in the sub centre is adequate.
- All deliveries conducted by the ANM at the sub-centre have been safe and there has not been any maternal mortality so far.

Negative features:

- The approach road to the Sub-centre constructed through EGS is in a bad shape. The road is full of potholes.
- Under IAY a sum of Rs. 28,000/- is made available to every beneficiary. He is expected to construct the dwelling unit himself. The beneficiary, however, is in need of technical guidance so that the house which is built is strong and stable, cool during summer (which is very harsh in Nandurbar) and which makes living convenient and comfortable. No such guidance seems to be forthcoming either from the Block or GP or any officer of revenue deptt.
- I inspected one such housing unit constructed under IAY which has the following features:
  - there are 4 members in the family (including an elderly person);
  - there are 2 rooms of 10’x10’ in size without any lighting and ventilation;
  - even if mosquito nets are supplied it is difficult to fix them;
  - there is a small kitchen garden though the vegetables grown there are not of much consequence from the point of nutrition.
  - on the whole, the space available for 4 members, kitchen fodder, fuel and food grains is terribly inadequate.

12/06/07 (12:30 Noon) visit to rural hospital, Taloda.

Negative features:

- It’s a 60 bedded hospital but there is no separate Paediatric ward.
• The diet (100 ml milk and 100 gm of usal for breakfast, 2 chapatis, rice, green vegetables and dal for lunch) is not adequate.

• Many patients (children) have low haemoglobin count (ranging between 5 to 7.5 mg%); they need to be given folic acid and iron tablets and need to be put under close surveillance.

• We need to create an environment for health and nutrition education which does not exist.

• There is no water purification system. Water samples are not drawn at regular intervals and sent to approved laboratories for test; it is difficult to certify if the water supplied to the patients is potable;

• There is no opthalmologist, no ENT specialist and no Paediatrician; it is necessary and desirable to create these posts.

• X ray unit is non functional;

• There is no power back up;

• The overall environment of the hospital is very unclean; there are flies, mosquitoes and junk/garbage all around;

• There are no cleaning, sweeping and spraying facilities;

• Of the 40 sanctioned posts 7 are vacant (17.5%).

Somawal anganwadi No. I and No. II

Redeeming features:

• The AWWs are capable of giving excellent demonstration of the beautiful slogans in Marathi which are written on the wall conveying clearly the message of health, food and nutrition and how closely they are interlinked.

• The AWWs give advice in simple and intelligible Marathi to parents about their own and children’s personal hygiene through mouth wash, bath, hand wash before food, removal of nails, haircut etc.

• AWW II has mobilized local women and formed one SHG. She is the President of SHG. The SHG has taken a plot of land on rent. It grows crops on the land and through sale of usufructs after payment of rent has been able to save Rs. 12000/- to Rs. 15000/-

Disturbing aspects:

Of the 33 children present in the first anganwadi, weight of 5 children was taken.
They were in the age group of 3.11 to 3.9 years and they weighed much less than the standard weight as prescribed. The implications of such low weight at the most tender and formative stage of development of the most precious human resource i.e. children were explained to the mothers through the AWW and they were requested to rectify this through change of dietary pattern with the desired micro-nutrients, adequate feeding and feeding at frequent intervals.

Somawal PHC: (12/6/07 2 PM)

Redeeming features:

- No Gr.III and Gr.IV malnourished children have been admitted.
- No death of children has been reported recently.
- Staff quarters are available for the MO and all other staff members
- No incident of maternal mortality has been reported in the last 2 years.
- All functionaries are getting their Pay and allowances in time.
- The MO is from amongst the tribal community and is able to talk to the parents of children in the tribal dialect which they speak at home and thereby has succeeded in creating the much needed rapport and bonhomie with the parents.
- Whatever deaths (3) took place in the past have all been reported and investigated. The investigation reports show that the patients were brought to the hospital at a very late stage and deaths could not be prevented despite best efforts.

Negative aspects:

- The PHC has a boundary wall with a lot of space available for planting flowers and fruit bearing trees. In the absence of this, the whole environment in the PHC presents a dull and depressing picture.

Visit to rural hospital, Akkal Kua

12/06/07 2:30 pm

This is a 30 bedded hospital established in 1994. Except the MS, the Xray technician, office superintendent and ward boy all other sanctioned posts are vacant. There is a separate ward for Gr.III and Gr.IV children. A paediatrician visits the hospital twice a week. Two cases of death which took place in 2006 were enquired into and the findings are as under:

1. Suman Radhava Vasawe (1 yr 3 months):

She was suffering from severe bronco-pneumonia with acute gastroenteritis and dehydration. She was admitted on 4.09.06 at 3:40 pm. She was given the following treatment.
RL 350 cc start
Inj. Ampicillin 200 mg
Inj. Gentamycin 500 cc
Inj. Hydrocal 10 mg.
Soda bicarb 3 cc
Syrup PCM
Syrup Norflox
Nasal 02
Inhalation of asthalin
ORS solution.

The child died the same day at 5 30 PM.

II **Rangila Barkya Vasave** was suffering from bronco pneumonia with septicemia, was admitted on 29.0906 at 1 PM and was given the following treatment:

- Inj RL 300 cc
- Inj Penicillin 0.3 cc
- Inj Soda bicarb 3 cc
- Inj effocortin 10 mg
- Inj taxim 250 ml
- Nassal 02

The child died on 1.10.06 at 7 30 PM. The enquiry into both the cases revealed that all possible efforts have been made to save these 2 lives but despite these they could not be revived as they came to the hospital at a belated stage.

**Visit to Molagi PHC 12/06/07 (5 PM)**

**Redeeming features:**

- There is a proposal to convert the PHC to a RH in the near future.
- The average out-turn of OPD patients is 60 to 70 which goes upto 150 during rainy season.
- Except 2 vacancies most of the functionaries against 11 sanctioned posts are in position.
- No epidemic has been reported during the last 2 years.
- Supply of medicine is regular despite topographical constraints.
• The MO has learnt the local dialects (bhillori and pawari) and is able to communicate to the local people in their dialect.

Constraints:

• Patients find it difficult to come to the PHC due to poor road condition and heavy rain during monsoon.
• Anaemia is a major problem in the area. The haemoglobin content on an average is as low as 7 mg%
• The ambulance van is under repair and has adversely affected mobility of the health staff.

Visit to Ashram School, Mojara Tahasil Dhadgaon (12/06/07 6 PM):

• Total no of students belonging to bhil and pawara tribal community is 474. About Rs. 1500/- is spent per student per annum.
• Academic performance of the school is showing progressive improvement.
• The subject of social service has been included in the curriculum.
• Food grains are supplied from the godown of TDC at Shahada.
• Parent teachers’ association meets only once a year.
• The school building is in a bad shape having developed cracks at a number of points. If timely and adequate attention is not paid it may collapse during rainy season when it rains heavily.
• The PO ITDA did not inspire much confidence in terms of his (a) mobility (b) understanding (c) involvement (d) responsiveness to issues and (e) sensitivity in handing the issues.

Visit to rural hospital, Dhadgaon (12/06/07 7 PM):

• Two malnourished children of Gr.III and Gr.IV category have been admitted. One is 11 months and another 10 months. They were weighing only 3 kg while the normal weight at this stage should have been at least 9 kg.
• The number of admissions goes up during rainy season.
• Bronco pneumonia, meningitis and dysentry are common ailments.
• Between April 07 to 12.06.07, 23 admissions of children have taken place but no deaths.
• All the sanctioned posts except the x ray technician have been filled up.
• There is no paediatrician which is a dire and genuine need.
• There is shortage of anti-snake venom, no transportation facility, no POL for the ambulance and the grains supplied through PDS do not reach the poor.
• It was complained by 2 NBA activists that 2 girls died of snake bite due to non availability of medical facility. They are:

Balwanti Haradha Padvi – 7 Yr.
Shewanti Bori Padvi - 8 Yr.

These deaths should be investigated, causes and factors contributing to death should be established beyond doubt and responsibility for death be fixed if it’s a case of criminal negligence. Special care needs to be taken in this case as poisonous snakes came from the forests which have been submerged as a result of Narmada dam reservoir; they entered the human settlements in the non-submersible area and snake bites and death due to such bites have become a common occurrence.
Gadchiroli
(20.6.07 to 23.6.2007)

The district was formed on 26th August, 1982 by bifurcating the district of Chandrapur. It is located between 18º 40’ to 20º 50’ north latitude and 79º 45’ to 80º 55’ East longitude which essentially indicates that the district is located in the Deccan Plateau.

The district has a total geographical area of 14,412 sq. kms. (of which the forest cover is 78.4%) and a population of 9.70 lakh spread over in 3 sub-divisions, 12 talukas, 467 GPs, 1673 revenue villages and 2,10,362 households. The break-up of the population is as under:-

- Urban - 0.67 lakh
- Rural - 9.03 lakh
- Men - 4.91 lakh
- Women - 4.79 lakh
- SC - 1.09 lakh
- ST - 3.72 lakh

The break up of the population of children in 0-6 age group in tribal areas is as under:-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>17,798</td>
</tr>
<tr>
<td>1-2</td>
<td>18,555</td>
</tr>
<tr>
<td>2-3</td>
<td>16,232</td>
</tr>
<tr>
<td>3-4</td>
<td>17,809</td>
</tr>
<tr>
<td>4-5</td>
<td>15,002</td>
</tr>
<tr>
<td>5-6</td>
<td>16,945</td>
</tr>
</tbody>
</table>
• While all villages have been fully covered by a scheme of potable water supply, access to domestic toilet is for about 10% of the total households.

• The rate of literacy for men in the tribal areas of the district is 71.9% while for women it is 48.1%.

On the ICDS side, there are 1458 AWCs and 465 mini anganwadis spread over in 11 ICDS Projects of which 5 CDPOs, 63 supervisors and 1263 AWWs are in position leaving a good number of vacancies.

On the health side, there are 45 PHCs and 376 sub-centres of which 35 PHCs and 345 sub-centres have their own buildings. Over 100 positions (MOs and para medical staff) are lying vacant causing serious dislocation to health service in rural areas.

Visit to AWC, Tadurwarnagar, Armori:

• Two children’s weight was taken and both were found to be in the category of Gr.1 malnutrition.

• They were being served food twice daily at the AWC i.e. at 9:30 AM and at 12 Noon. If their weight does not pick up they may be served food for one more round i.e. 7 30 AM to 8 AM as soon as the AWC opens and thereafter, if the weight does not register any gain, they may be referred to the nearby PHC or RH, as the case may be.

• Chavali, palak, methi, pulses, cereals, rice, jaggery and groundnut should be served as part of SNP.

Visit to PHC Vairagad ( Tahasil Armori) : 12 Noon:

• Two posts of medical officers have been sanctioned and filled up.

• One staff nurse and 2 ANMs are also in position.

• It was represented by a ZP Councillor that the MO in charge does not stay at the headquarters. He commutes the distance from Armori. One MO has gone for his P.G. specilisation. If the MO in charge does not reach in time the PHC cannot be opened in time increasing the waiting time for the patients who come from far off places to get examined and receive treatment.

Suggestion Mode :

• Necessary arrangement be made by posting an MO during the period of absence of the MO who has proceeded for training.

• Dispensary should be opened in time no matter from where the MO incharge comes.
Disciplinary action should be initiated against the PHC-in-charge for coming late and opening the PHC late. There should be no compromise with discipline and accountability.

A policy decision should be taken on (a) where the MO incharge of PHC should stay if there are no staff quarters (b) what should be the reasonable distance between the PHC and his place of stay (c) staff quarters should be provided to every PHC incharge at the headquarters of the PHC itself.

Training on health and nutrition education should be imparted to the staff.

Only trained Dais (skilled birth attendants) should be given the responsibility for conducting home delivery as and when the occasion arises.

Breast feeding up to 6 months in the minimum should be insisted (ideally it should go up to a period of 2 years). All possible persuasive efforts should be made with the mothers to make this possible. Composite feeding should begin thereafter.

Full doses of all vaccinations must be given in time.

**Visit to AWC, Kadholi (Tahasil Kurkheda) 1300 hrs.**

Total no. of children registered is 130 with the following breakup.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 -1</td>
<td>13</td>
</tr>
<tr>
<td>1 -2</td>
<td>22</td>
</tr>
<tr>
<td>2 -3</td>
<td>35</td>
</tr>
<tr>
<td>3 -6</td>
<td>60</td>
</tr>
</tbody>
</table>

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130

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- Pregnant and lactating mothers – 7, each
- Number of Gr.I malnourished children – 48 The weight of the following children was recorded in my presence and the findings are as under:
  - **Kumud Mohan Thengare** – age 3 years 4 months.
    Normal weight should be 14.5 kg but actual weight is 8.5 kg.
  - **Mayuri Soma Mohurie** – age 3 years 4 months.
  - **Jayasree Mangesh Jengathe** is a Gr.III malnourished child with a very low weight.
Suggestion Mode:

- Supervisors and CDPOs must visit AWCs regularly and at prescribed intervals. They must record their observations clearly in the visitors’ book.

- Constant advice and guidance about giving adequate diet at appropriate intervals to children be given to mothers to ensure at least 1000 kilo calorie per child in 3-6 age group of which 300 calorie is expected to be met from supplementary nutrition at the AWC, the balance 700 kilo calorie being met at home.

- Medical officer of the PHC must examine all malnourished children at the AWC and must record his observations (diagnosis, line of treatment, dosage of medicine, interval at which the medicine is to be given) clearly in the register meant for this purpose.

- All malnourished children must be brought to PHC or RH as the case may be, for treatment. Both the AWW and ANM must play a crucial role in this regard.

- Spacing must be observed. In case of Mayuri who was examined as above and who happens to be the third child, (the first child being 7 yrs, the Second being 5 years and 3rd being 3 yrs.) no proper spacing was observed.

- In situations where both parents go out for work crèche services must be introduced in rural areas and managed by the State. A policy decision to this effect needs to be taken by the State Government.

- The source of drinking water at Kadholi was found to be contaminated. The source should be banned and supply of water by tanker should begin until such time the source has been fully cleared of contamination.

- A visit to the residential premises of Kumud (malnourished child) revealed that rice, dal, vegetable, milk and eggs occasionally are being given to the child but there is no perceptible improvement. This case should be thoroughly examined by bringing the child to the PHC and reasons for non-progression from Gr.I to normal ascertained.

- The above is a fit case where the head of the household should be given assistance under IAY.

Visit to AWC centre, Ghati (Tahasil Kurkheda) 1300 hrs:

No. of registered children – 52

Attendance at the time of visit – 38

Two Gr.II children -

1. **Nikhil Ramesh Humane** (3 yrs 5 months)
   
   Weighing 10 Kg against standard weight of 14.5 kg.
2. **Durangana** (4 yrs 2 months)
   Weighing 12 Kg against standard weight of 16 kg
   - There is a difference of 100 gms between digital weighing machine and spring weighing machine (saler type). It may be desirable to go in for digital weighing machine in all AWCs (72000) of the State.
   - SHG is not willing to provide cooked food to the children of anganwadi centre at Rs. 1.98 per head as the same is found insufficient (due to stiff rise in prices of vegetables and other commodities in the market). Besides, the SHG does not receive the payments towards SNP feeding in time which could cause a lot of dislocation in the entire process.

**Visit to ANM subcentre at Ghati 1330 hrs.:**
- Total ANC registration is 11; ANC register is maintained properly.
- ANM - Smt. Lute is on contract basis.
- Medicines are supplied from DHO, ZP, Gadchiroli
- No positive malaria cases have been detected.
- Despite all possible efforts home delivery is 80 pc and institutional delivery is 20 pc.
- Examined a female child Manisha Mahadeo Lade (1 yr 6 months) who was present at the sub-centre along with her mother. She has low weight and acute vitamin A deficiency which may lead to blindness. The ANM was advised to bring this fact to the knowledge of the mother and advise her to give such green leafy vegetables and fish to the child which have Vitamin A. The green leafy vegetables and fruits which have plenty of Vitamin A in them are:

**Vegetables:**
- Amaranthus;
- Bathua;
- Carrot and Carrot leaves;
- Colocasia leaves;
- Coriander leaves;
- Radish leaves;
- Spinach;
- Turnip green;
- Drumstick green;
- Cowpea leaves;
- Curry leave;
- Fenugreek leaves;
- Mint;
- Mustard leaves;
- Spinach;
- Beet greens;
- Green chillies;
- Kankod;
- Tomato ripe;
- Pumpkin.

**Fruits:**

- Raspberry;
- Jack fruit;
- Mango ripe;
- Orange;
- Papaya;
- Sweet potato yellow

**Visit to PHC Koregaon (Tahashil Kurkheda) 1600 hrs.:**

- There are two sanctioned posts of MOs of which one – Dr. Chintawan is a case of unauthorized absence. He is absconding without sending any intimation to the DHO or CEO since last 3 days. He stays at Brahmapuri which is 25 Kms away from Koregaon. Collector directed the CEO to place him under suspension with immediate effect.

- The PHC is in a bad shape with water profusely leaking from ceiling on all sides. There is seepage of water all around. Medicines kept in the store will be of no use after some time as they will be soaked in water.

- In all such cases estimates of cost of repair should have been prepared sufficiently in advance of the rainy season, tenders invited, work orders issued, repairs carried out and completed before the onset of rains.

- In actual practice, however, due to the peculiar procedure in vogue in Zilla Parishad, the works get delayed. There are a number of layers and sub-layers of sanctioning authorities. There is a practice to get the work done in bits and pieces of Rs. 50,000/-
or fragments thereof as the same does not require tendering. In the process any work will involve a time frame of 3-4 years/ apart from being of questionable quality.

• This is how even though a sum of Rs. 5 lakhs has been sanctioned for repair of this PHC building for quite some time it is still at the tender stage. It is not known when the process will be carried to its logical conclusion.

• The other dilemma with the PHC is that both the MOs are BAMS (Bachelors of Ayurvedic Medicine and Surgery). DHO explained this by stating that there is acute shortage of MBBS doctors and they have to go in for recruitment of BAMS graduates to keep the PHC going.

• As against a total requirement of 45 MBBS graduates only 20 MBBS graduates could be recruited, he observed.

Suggestion mode to LHV and ANM at the end of the visit:

• During field visits constructive counselling should be given to pregnant /lactating mothers.

• They should be clearly apprised of the risks and hazards of home delivery (possibility of infection, no arrangement to attend to a patient in a critical condition or emergency etc) and should be advised to come to PHC where trained staff and equipments are available.

• ANC registration must be 100 pc.

• Pregnant mothers should also be advised not to do hard manual labour during their advanced stage of pregnancy. they should not also climb high altitudes.

• Breast feeding should be started immediately after delivery, should be done within an interval of 2 hours and should not be discontinued under any circumstances whatsoever before expiry of 6 months.

Role of parents:

• The ANM stated that parents pay scant attention to the malnourished children in terms of diet, care and attention.

• They themselves as well as other members of the family eat the food provided through the AWC under supplementary nutrition programme but are indifferent to the needs of children for their timely and adequate feeding.

• Nutritious and balanced diet on a long term basis becomes difficult when the family is below poverty line, employment is unstable and not durable, earnings are meager and purchasing power extremely limited.
• In addition to ensuring stability and durability of employment and payment of minimum wage which should be need based and substantial portion of which should be paid in cash, there is need for the AWW and ANM doing continuous interaction in course of their home visits to promote mother’s education. Differences between 2 children – one healthy and strong and another malnourished along with the short term and long term adverse consequences of malnutrition on the physical, mental and cognitive development of children should always be highlighted and demonstrated wherever possible through such interaction.

• The MO in charge of PHC should have monthly meetings of AWW, ANM and LHVs in course of which he should impart a complete orientation to them while doing the routine stock taking with them.

Success stories of ANM turning the table:
  • She has succeeded in ensuring progression from Gr.IV to Gr.III in 3 months.
  • A mother was not paying any attention to breast feeding of the 4th child since all the 4 children were girls. The ANM initiated the mother to breast feed the child by demonstrating its positive fallouts.
  • In yet another case it was the first issue and the mother did not know about breast feeding. She on account of her ignorance used to give biscuits and water of cooked rice to the child. The ANM taught the mother how to hold the child and how to breast feed. Within 9 months the child had a progression from Gr.III to Gr.II

How to ensure accountability:
  • The Sarpanch of the village complained that on 25th Feb. 07 out of 18 employees in the PHC only 7 were present and 11 were absent. Supervision from the PHC in charge and the DHO has been conspicuous in its absence. Show cause notice should have been issued to all 11 absenting employees by now.
  • The meeting of the Advisory Committee i.e. Rogi Kalyan Samiti headed by the Zilla Parishad Councillor has not been convened by the PHC in charge even once since Constitution.
  • All villages in the jurisdiction of PHC should be visited by the ANM, LHV and MPHW at least once every month in the minimum either individually or as members of a group. This invariably does not happen due to (a) long distance (b) non-availability of transport/weak public transport (c) other preoccupations at the sub-centre/headquarters of PHC.
Visit to rural hospital, Wadsa (30 bedded) 20/06/07 5 30 PM:

- Rural hospital is running in the old PHC building.
- The land for construction of hospital building has been allotted by the Municipal Council, Wadsa
- The land was reserved for a public garden.
- For change of land use, proposal has been submitted to Govt. in UD Deptt. and its approval is awaited.
- After the sanction is received, other formalities (plan and estimates, administrative approval and technical sanction etc.) will require to be completed which will take approximately 1 to 2 years.
- Posts sanctioned – MS (1), MO (3), Pharmacist (1), Lab Technician (1), Lab Assistant (1), Staff nurse (7); 5 of them have been filled and 2 are vacant.
- X ray machine sanctioned but not yet received; The post of X-ray technician is yet to be sanctioned. Even if the X-ray machine is procured and installed it will be infructuous without the X-ray technician. The latter should, therefore, be sanctioned expeditiously.

Major areas of concern:

- Common ailments – viral fever, diarrhoea, filariasis and leprosy
- Large scale anaemia in children
- March 07 – 3 children in Gr.III malnutrition category were treated. There was a 8 month old female child whose weight was 3.75 kg. The case was brought to the hospital by the MPHW. The child was suffering from acute pain and bronco-pneumonia. The mother of the child who is retarded took away the child from the hospital on her own responsibility when the child had not been formally discharged from the hospital. The child died later.
- June 07 – a malnourished child was admitted, given treatment for 7 days and then referred to General hospital, Gadchiroli. There is no follow up and feed back about the present health status of the child.
- During 2006-07, 45 cases of Gr.III and IV malnourished children have been treated and they are all alive except the one case as above. The MS and MO concerned should verify the present status of these cases.
- No NICU has been sanctioned. As a matter of Principle NICU should be sanctioned for all rural hospitals.
• The post of a paediatrician has been sanctioned for the hospital. The paediatrician has been posted but subsequently transferred elsewhere. He should not have been relieved without his substitute joining.

• Food is being supplied by the contractor for all the in-patients of the hospital including malnourished children and accompanying mothers. For children the food should have a minimum calorie value of 1000 and for adults it should be 3000. This aspect is not being verified by the hospital authorities. A chart should be given to the contractor indicating the food items (to be served for breakfast, lunch, dinner and calorie value to be fulfilled) which should be easy to eat, neither overcooked nor under cooked, easily digestible and should have all the micro-nutrients.

• To deal with the problem of load shedding, a generator set has been provided which runs with koil. Adequate quantity of Koil should be provided to make use of the generator set as and when needed. The District Civil Supply Officer should pay special attention to make this possible.

Redeeming features:

• Immunisation status with 100 pc DPT, 100 pc Measles, 100 pc BCG, 96.5 pc Pulse polio is good. There is no difficulty in storage of Vaccines.

• Institutional deliveries are 46 in number so far and no casualty has been reported.

• The pregnant mothers (440 cases of ANC registration) themselves come to RH for checkup.

Suggestion mode to the staff:

• Pregnant mothers should be counselled not to do hard manual labour in advanced stage of their pregnancy; they should not climb high attitudes either.

• In the walls of the hospital (ANC Registration room, gynaecological ward, paediatric ward, charts outlining what the pregnant mothers should do and what they should not should be clearly displayed.

• In whatever the health staff say and do, there should be a clear corelation between food, nutrition and health.

• Haemoglobin percentage should not be allowed to come down; it should be constantly under observation and all possible measures should be taken to ensure that (a) it is maintained at the normal level and (b) it is not allowed to fall.
Meeting at the Circuit House, Gadchiroli 20.06.07 2000 hrs to 2200 hrs:

Issues discussed:

1. Repair and maintenance of buildings:
   - Responsibility for repair and maintenance of Sub-centre and PHC buildings is on the Zilla Parishad.
   - The quality of work can be ensured only through intensive supervision, monitoring of quality control and overseeing the pace and progress of execution.
   - If the supervision is lax the contractor will take the ZP for a ride. That has precisely been the case in Gadchiroli district.
   - If the Chairman ZP and councillors have entrusted the work to a contractor who is not able to execute the work according to prescribed specification, quality and within the allotted time, the CEO should bring it to the notice of the Govt. without any loss of time.
   - Estimates for all repair work should be prepared sufficiently in advance of the rainy season and repair work should be carried out before the onset of rains.
   - If the PHC building is left in such a bad state as in Koregaon no patient would be willing to come for examination.
   - The local self governing bodies will forfeit the trust and confidence of the public for whom the PHC has been created.
   - Similar attention is required to be paid for repair and maintenance of anganwadi centre buildings.
   - The existing practice of splitting up repair works of PHC and subcentre buildings into bits and pieces to avoid tendering should be thoroughly discouraged.
   - If not that will be indicative of total lack of transparency.

Testing of water:
   - Water is tested to make sure that it is free from excessive iron, sulphur, sodium magnesium, potassium as also from chemical and bacteriological impurities.
   - Samples of such water will have to be sent to approved laboratories for testing.
   - Necessary corrective action should be taken to purge water of all such impurities by installing a reverse osmosis plant (RO); this is an established technology for foolproof filtration.
   - This is not being done and contaminated water is a major source of water borne diseases like diarrhoea, dysentery, jaundice hepatitis and gastroenteritis.
• With provision of potable water and with adequate care and precaution it is possible to prevent water borne diseases.
• Sufficient stock of bleaching powder should be available with every GP for chlorination of water.
• If facilities for testing of water through approved laboratories are not available, the samples of water should be sent to Nagpur.

**Awareness of the health officials and others about nutrition:**

The officials of WCD Deptt, Health Deptt and all officials of ZP should be clear about the following concepts:
- What is nutrition?
- What is mal-nutrition?
- What is under-nutrition?
- What is a nutrient?
- What is macro and micro-nutrient?
- What is Kilocalorie?
- How much nutrient and kilocalorie is contained in X fruits and vegetables?
- What are the different forms of malnutrition?
- What are the causes and consequences of malnutrition?
- How is nutrition co-related with health?
- How do we measure malnutrition?
- What is mother’s education and counselling?
- Mothers may be illiterate; they may not be able to understand the language we speak. How do we transmit the central message about malnutrition to mothers in a language which is intelligible to them?

We are in a situation where the ignorance of functionaries of various deptts of govt. (health and family welfare, women and child development, tribal development, food and civil supplies etc.) and that of the civil society on the whole about malnutrition is as pervasive as it is with parents and guardians of children. It is important to ponder over as to what needs to be done to generate awareness among all concerned about understanding nutrition, undernutrition and malnutrition and making all possible sincere efforts to bring down malnutrition and malnutrition related diseases and deaths. It is necessary to address the following questions to ourselves in this regard:
• Who checks the accuracy of grading of malnutrition?
• Who finally certifies them?
• Are all cases of malnutrition reported?
• How do we unearth cases of malnutrition which are not reported?
• How do we ensure involvement of the community in management of AWCs, PHCs and sub-centres? By community we mean parents/guardians, teachers, students, women, youth, elderly, NGOs, Voluntary Social Action Groups, Cultural, Charitable and Philanthropic organizations and so on.
• By and large these bodies are indifferent to
  - ensuring 100 pc attendance of all children, pregnant/lactating mothers at the AWC;
  - growth monitoring;
  - check up of health of children;
  - supplementary nutrition
  - pre school education;
  - skill training.
• There is no monthly or quarterly or half yearly review meeting on the activities of AWCs in the true sense of the term.
• There is no synergy between WCD and Health Deptt.
• AWW single handed cannot conduct all activities relating to health and nutrition of pregnant and lactating mothers and children in 0-6 age group.
• For her it is practically a round-the-clock schedule which is both exacting and exasperating. She is required to maintain 14 registers. She is required to make home visits. She is required to attend to visits of CDPOs, Supervisors and other officers. She is required to prepare the monthly reports.
• The remuneration that she gets is a pittance (Rs. 1400/- per month).
• The remuneration is also not disbursed in time; that itself may lead to a lot of demotivation and demoralization.
• The accommodation is small; there is no proper lighting and ventilation in most of the anganwadis.
• Too many items (foodgrains, medicines, records/registers, visitors’ inspection reports) are huddled together.
• Conceptually having an AWC in a village/hamlet/pada is very sound and sensible; it is a model of integration (preschool education, health check up, immunization, nutrition, recreation, mother and child care etc.) at the lowest level i.e. village. Today ICDS which is 32 years old is the world’s single largest programme for mothers and children.

• We need to identify the shortcomings and provide corrective measures in a positive and proactive manner with the total involvement of the community.

Who should bring malnourished children to hospitals for treatment?

- ANM and LHV should persuade and motivate mothers to do so.
- They should inform the parents about the financial incentives available,
- They should explain clearly that there is no alternative to hospitalization in terms of dealing with malnutrition for positive results; if not, slightest delay would mean disaster and death for the child.
- PHC in charge and MOs should also arrange to refer cases of children to a hospital where the PHC could not provide the treatment and make arrangement to physically transport them;
- No child should be refused admission in any sub divisional or rural or district headquarters hospital under any circumstances whatsoever.

Visit to district headquarters hospital: Date 21/06.07 time 0800 hrs

Cases of malnourished children visited:

9. **Ranjana Kumretti** – 23 months old with 7 kg weight whereas it should be 11.5 kg. The mother is having 7 female issues and Ranjana is the 8th issue. She is in Gr.IV of malnutrition. The following is the dietary pattern for Ranjana:

   8 AM - Satuche Pith
   10 AM - Milk, paste with sugar, banana
   12 noon - khichdi, chapatti with vegetable
   4 PM - Laddu with Jaggery and groundnut
   7 PM - Rice, Chapati, Dal and Bhaji
   8 PM - Milk with sugar.

**Ranjana** is having an infection in left ear. Her haemoglobin count is 7.5 gm %

II. **Shobha Udaram Madavi**

The child is 10 months old with a weight of 3.5 kg. as against 9 Kg which should be
the normal weight at that age. This is a case of PEM or Gr.IV malnutrition. The mother of the child is a TB patient. Shobha is the first issue.

At the end of the visit, the CDMO brought the following facts to my notice:-
- During 2006-2007 188 children were admitted. Of them Gr.III were 150 and Gr.IV were 38. Six cases have been referred to Nagpur. There has not been any casualty so far.
- Approximately 180 deliveries take place every month. The average weight of a new born child ranges between 2.00 kg to 2.5 kg.
- There were 3 paediatricians but all have been transferred. They should not have been relieved without posting of a substitute.
- Need for additional 10 beds for Gr.III and Gr.IV and one NICU was emphasized.

All the above suggestions of the CDMO deserve serious consideration.

Visit to AWC, Shioni, Taluk Gadchiroli:
- AWC is 20 years old and is attached to a tola called Kripala.
- Attendance of pre-school children was found to be 32.
- The AWW opens the centre at 7 30 AM, cleans it, brings fresh water and thereafter sends the helper (sahayika) to the households to get the children to the centre.
- The working of AWC starts with a prayer which the children sing in a chorus and which has a lot of stabilizing effect on their body and mind.
- The children examined were all found under weight as under:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Actual Weight</th>
<th>Desired Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipali Mukhuru Shende</td>
<td>2.5 years</td>
<td>9.3 kg.</td>
<td>12 Kg</td>
</tr>
<tr>
<td>Ashok Anand Wankhede</td>
<td>5.8 years</td>
<td>11.4 kg.</td>
<td>17 Kg</td>
</tr>
<tr>
<td>Ashis Rushi Sakhare</td>
<td>2.7 years</td>
<td>9.5 kg.</td>
<td>14 Kg</td>
</tr>
<tr>
<td>Akash Purusottam Gondhare</td>
<td>2.9 years</td>
<td>10.8 kg.</td>
<td>14.1 Kg</td>
</tr>
<tr>
<td>Bali Vasant Bhoyar</td>
<td>1.6 years</td>
<td>7.6 kg.</td>
<td>10.8 Kg</td>
</tr>
</tbody>
</table>

- Since the SHG is not willing to cook meals for the supplementary nutrition, (as it finds the per capita allocation of Rs. 1.98 per day to be too low and uneconomical) the meals are being prepared by the AWW and Sahayika. Meals are being served twice daily namely 9 30 am and 11 30 am. They comprise of Chana, beans, wheat, groundnut and jaggery.
• The foodgrains have been stored for 4 months which will take care of the entire monsoon period as under:-

- Chavali - 161 Kg.  Haldi - 4 Kg.
- Chana - 161 Kg.  Oil - 29 Kg.
- Groundnuts - 50 kg.  Broken wheat - 84 kg.
- Soyabean - 47 kg.  Jaggery - 57 kg.
- Salt - 19 kg.

Interview with mothers:

I. Urmila Purusottam Chaudhury

She is a lactating mother, has 2 children, one 2 years and second 4 months. The first child is unable to walk. At home she gives rice, bread, milk, dal to the first child while the second one is breastfed. Both she and her husband work as farm labourers and get Rs. 30/ and Rs. 50/- per day for 8 hours of work respectively. They leave the children in charge of an elderly couple in their neighbourhood.

II. Chaya Vasant

She is having 3 children. The first child is 7 years of age and goes to school. The second and third children are 4 and 1.6 years old. All of them are girls. She gets about 10 Qtl of rice from 3 acres of land but the produce is not enough to keep body and soul together. She is unable to provide milk to children which she finds unaffordable.

III. Mangala Anandrao Wankade:

She is having 2 children and both are in Gr.III of malnutrition. She has 2 acres of land but the agricultural produce is limited. However, she owns a cow and gives cow milk to children. Additionally, the children are fed dal and rice.

IV. Smita Dipak Meshram

She is a member of SHG for 6 years. Initial contribution @ Rs. 10/- has now been raised to Rs. 20/- per month. The present balance is Rs. 6000/- All members of the SHG are having toilets at home. Members of the SHG group receive loan @ 2 pc interest from the common corpus created out of their contribution.

What does the AWW do with regard to these mothers?

• During house visit she tells the pregnant and lactating mothers about causes and consequences of malnutrition.
• She advises them not to put in hard manual labour at an advanced stage of pregnancy.
• She advises them to go in for 100% ANC registration.
• She advises them to take care of personal and environmental hygiene and cleanliness.
• She supplies medicines to mothers.
• She advises women to go in for tubectomy after the 2nd child if their husbands are not going in for vasectomy.

The AWW has maintained the following registers in a proper manner:-

I  Children’s Weight register;
II  Stock register;
III  Attendance register;
IV  Immunisation register;
V  Visitors’ Book;
VI  Survey register;
VII  Vitamin A register;
VIII  Adolescent girls weight register;
IX  Pregnant and lactating mother’s registration register;
X  Health check up register;
XI  Growth register;
XII  Tablets distribution register;
XIII  Stock register of medicines;
XIV  Birth and deaths register.

Visit to AWC, Kurul, Tahasil Chamorsi:

• AWC is 24 yrs old.
• The SNP which is served twice a day comprises of soyabin, jaggery, broken wheat and laddoo.
• The building is made of tiled roof with support of wooden ballis. There are large holes in the roof giving rise to the possibility of rain water getting inside the AWC.
• The room lacks adequate lighting and ventilation; consequently children appeared to be feeling uncomfortable due to a state of acute congestion.
• The total space is grossly inadequate to accommodate 35 children.
• Vice Chairman, Panchayat Samiti, Chamorshi complained that the quality of the food supplied left much to be desired.
Children examined:

1. Rahul Ramesh Satpute born on 12.02.05 (2 yrs 4 months) was found weighing 8.85 kg as against normal weight of 12.5 kg. He has been classified as a case of Gr. II malnutrition.

2. Suvarna Baburao Tunkalwar born on 3.11.03 (3 yrs 7 months) was found weighing 11.3 kg as against normal weight of 15 kg. She also has been classified as Gr.II malnutrition.

3. Bhumika Barlawar 9 months old was found weighing 6.3 kg which is below standard weight. She is the 3rd issue. The first child died after 15 days. Remaining two children are alive. The 2nd issue is a male child (4 years old)

The parents own 2 acres of land where they grow rice. Both the parents also work as agricultural labourers leaving the children in another house. While the husband earns Rs. 50/- for 8 hrs of work a day, the wife earns Rs. 30/- to 40/- per day. With this they are barely able to ensure their biological survival.

Visit to Primary Health Unit (PHU), Bhemdala, Taluka Chamorshi:

• Against 9 sanctioned posts all incumbents are in position.
• The outturn of patients between 8 AM to 11 AM was 7. These were patients of fever, simple injury, joint pain, skin diseases, loose motion etc.
• No malnourished child was found to have been admitted.
• During 2004 to 2006 there have been 2 casualties involving 2 children.
• No positive case of malaria has been found so far.
• The ANM and LHV together visit 16 villages once a month.
• During the visit, they guide the pregnant as well as lactating mothers on how to fight malnutrition and how to go in for 100% immunization.
• There are trained dais who are conducting deliveries at home.
• The ratio between home (16) and PHC delivery (8) is 2:1
• People prefer home delivery as there is no arrangement for transporting the patient to the PHC (which will be 5 to 10 Kms away)
• Out of the 24 deliveries, 4 children were cases of LBW (low birth weight) at the time of birth.
• Out of 24 deliveries again death of a child was reported last month involving Swati Tukaram Bhakre. At the time of death she was 2½ yrs. old. The cause of death has not been properly recorded, nor is there any evidence of what treatment was given.
Instructions given to the health staff:

- Home delivery is full of risks and complications; it should be discouraged.
- Early child marriage which is banned by law, which exposes girls at a tender age to severe stress and strain by way of drudgerous and arduous domestic work and the trauma of early motherhood should also be discouraged.
- Mothers should be counselled again and again to observe proper spacing between 2 deliveries (at least 3 to 4 years) which is in the interest of their health as well as in the interest of health of their children.
- If the family size is large, employment is unstable, earnings are low and deliveries take place in quick succession malnourishment of children will be the inevitable outcome.
- Leafy vegetables contain a lot of iron, calcium, vitamin A and are a must along with iron tablets in cases of high anaemia.
- Chlorination of the village well should be regularly done to ensure safe and potable drinking water.
- Chloroquine tablets should be regularly distributed through AWWs.
- For all this what is needed is a massive information, education and communication programme to be conducted by functionaries whose heart should be in the right place, who should have a flair for natural and spontaneous communication, who can co-relate life to realities on the ground and whose words will inspire trust and confidence.

Interaction with the public:

- They demanded that a lady doctor with MBBS as the basic qualification (not BAMS) should be posted to the PHU.
- The stock of medicines was put in order only after knowing that officials were going to visit PHU.
- Spraying/fogging has not been done since last 20 years.
- There is a scheme of free supply of impregnated mosquito nets by GOI for tribal areas but mosquito nets are yet to be distributed.
- There was an attack of Chicken guniya last year. Hardly any educational activity has been carried out to spread the message about preventive and corrective measures against Dengue and Chicken guniya.
- The PHU should be upgraded to a PHC since it is catering to a population of around 20,000.
Visit to SHG at Markanda:

- Five SHGs have formed a Mahila Arthik Vikas Mahamandal. It was established on 24th Feb. 1975.
- There are 10 to 15 members in each group. In Markanda and Faraad there are 29 such groups.
- In Chamorshi taluka there are 179 SHGs and one Federation containing 200 groups.
- Construction of a meeting hall by Tejaswini SHG is a success story.
- A sum of Rs. 1.19 lakh was sanctioned by the local MLA for construction of the meeting hall.
- The talathi was initially reluctant but eventually allotted 10 decimals of land under pressure.
- The members of the group themselves took up construction of the meeting hall without engaging any contractor to make the work more economical.
- The interaction which took place with members of 5 SHGs was educative and insightful.
- The President of the Mahamandal – Indira Suresh Boinwar was a source of great inspiration and motivation. She was a first rate human resource- strong willed, affable, energetic, principled, articulate, easy to communicate, empathetic and inspires the trust of members.
- She has passed class VIII by enrolling herself with National Open School Society but is otherwise a mine of rich information.
- She holds the meeting of the Mahamandal every month.
- Interest on the loans/advances is charged at a nominal rate of 3 pc.
- The Mahamandal meticulously verifies the genuineness of the needs of the loanees before actual sanction of loan.
- The loanees repay between 6 months to 1 year; the recovery rate is 100 pc which reminds us of the success story of Grameen Bank of Bangladesh Pioneered by Nobel Laureate Mohammad Yusuf.

Advice given to the members of the group:

- The contribution of the members should increase to strengthen the corpus.
- The groups were advised to concentrate on malnutrition, mother and child’s health care and prevention of communicable diseases. They should volunteer to provide cooking service and prepare meals for supplementary nutrition for every AWC in the village, wherever the same exists. This would help eliminate malpractices. This is also the direction of the Supreme Court.
Visit to ANM sub-centre, Khamancheru, Taluka, Aheri:

The sub-centre caters to:
- Khamancheru;
- Italcheru;
- Subhas Nagar,
- Jamgaon;
- Chintal peth;
- Apapalli.

- There are 8 ANCs.
- Allocation for Matrutwa Anudan for 2007-08 is yet to be received (Rs. 2500/- only was received last year).
- Allocation under Janani Surakshya Yojana is also yet to be released by the ZP.
- The charts displayed on the wall are not very meaningful and relevant. They do not speak adequately about importance of micro-nutrients like protein, iron, calcium, Vitamin A, what should be the source and how to have easy access to fruits and vegetables which contain these micro-nutrients.
- The villages in Gadchirolli (South) are scattered and fragmented and about 8 to 16 Kms away from the sub-centre building. Over 91 villages in Godchirolli (South) are also not connected by all weather roads. They are totally inaccessible.
- Mobility is restricted on account of long distance, lack of public conveyance, villages being located in remote, interior and inaccessible areas.
- Jamgaon is 13 KMs away. It has a small population of 240. To reach Apapalli village (10 KMs away) it takes 2 ½ hours by foot.
- Previous LHV has not vacated the staff quarters even though she has been transferred to Deulgaon in Armori Tehsil.
- There is incidence of malaria but it is well under control.
- Bore well is in working condition.
- Women prefer to go to Aheri for delivery instead of coming to the sub-Centre. Critical cases are also referred to Rural Hospital, Aheri.

The following registers are maintained in the sub-centre:

I Matrutwa Anudan Register;
II Eligible couple survey Register;
III RCH Register;
IV Master Plan;
V Movement Register;
VI Janani Surakshya Register;
VII Visitor’s Book;
VIII OT Test Register;
IX Stock Book;
X ANC + MCP Clinic Register;
XI Anganwadi Centre Inspection Register;
XII Leprosy Register;
XIII SF-7 Register (positive);
XIV SF-2 Register (Malaria);
XV Water Sample Register.

Visit to Ashram School, Khamancheru:
- The school has 1 to 10 standard.
- There is co-education of boys and girls from 5\textsuperscript{th} to 10\textsuperscript{th} standard.
- Total no of students – 400 with a team of 13 teachers.
- The doctor of PHC visits the Ashram school monthly once to check the health status of students.
- The weight of students is taken at odd intervals and each student is issued a health card.
- There is no case of malnutrition.
- The performance of the school is 65 pc pass and 35 pc fail. Distt. average is 52 pc.

Skill training:
- There is one ITI proximate to the Ashram School compound which is run by the Tribal Development Deptt.
- Sewing machines have been provided free of cost.
- The students are evaluated by the instructor.
- The intake capacity of the Electronics Deptt is 16 but only 4 tribal students have taken admission to this stream.
- Dress designing section is better from the point of view of self employment of students.
There is a scheme of provision of school uniform to primary school students.
This work can be allotted to these students and got executed by them if a cooperative society is formed by them.

**Visit to rural hospital Aheri:**
- This is a 50 bedded hospital with 60 pc occupancy rate with 21 posts sanctioned and 1 post vacant.
- The RH caters to 150 villages, average population of each village ranging between 250 to 300.
- During 2006-07, 54 cases of malnutrition have been treated of which Gr.III were 50 and Gr.IV 4. No mortality has been reported so far.
- Bronco-pneumonia is most common in this area. There are also a few cases of positive TB and malaria.
- It is difficult to maintain cold chains and preserve vaccines due to frequent load shedding.
- Total deliveries during 2006-07 are 307.
- The hospital has an X-ray machine with an X ray technician and is in working condition.
- Blood bank with blood storage and transfusion facility is also in place.

**Directions issued:**
- The pregnant and lactating mothers should be properly guided to cope with malnutrition, adopt a systematic and methodical approach to grapple with and overcome malnutrition with strength, courage and confidence.
- Mothers should be discouraged to serve such food to children which do not promote nutrition.
- Ambil (liquid food made from jower) which is the food locally prepared at home is no substitute for the desired nutrients (iron, protein, calcium, vitamin A etc.)
- Low earning inhibits mothers to provide nourished food to children.
- Still birth takes place (9 such cases in 2006-07) due to difficult terrain and long distance as also the fact that pregnant mothers do put in a lot of hard manual labour even in an advanced stage of pregnancy despite advice to the contrary by the health functionaries. This should be thoroughly discouraged. Hospitalisation of pregnant mothers in time is advisable. They should be persuaded and motivated to do so.
- The fact that there are no neo-natal deaths constitutes an important silver lining in the management of this rural hospital.
Visit to PHC, Lagom:

- The PHC was Constructed in 1990.
- It has 25 villages with a population of 15,588 within its jurisdiction.
- Except one post of ANM all other posts have been filled up.
- Excellent charts and posters pertaining to womens’ rights have been displayed. The charts are very appropriate, relevant and appealing. Replica of this should be made out and displayed in every PHC and sub centre.
- Two ANMs have been posted under NRHM namely
  - Chetana Gosavi Dongare;
  - Layda Dhanraj Pillai.
- There are 24 trained dais.
- On an average 8 to 10 pregnant women come to the clinic. Women of high risk are referred to Aheri RH.
- In June-07 normal deliveries were 25 and high risk deliveries were 7.
- Case of only one malnourished child (Gr.I) was found.

Visit to Rural hospital, Asti:

- There is acute shortage of water due to failure of bore well; additionally, there is shortage of doctors and shortage of medicines.
- Out of 4 doctors, 2 have left their job and only one doctor is in position.
- Out of 7 staff nurses only 4 are working, while 3 are vacant.
- During May-07 10 deliveries were conducted while, during April-07 it was seven.
- There is one still birth but no case of malnutrition and not a single malnutrition related death has been reported.
- Two children **(Akhil Dewanand Zade 2-6 years weighing 10 kg and Rahul Dewanani Zade 5:6 years weighing 13 kg)** were reported to be of low weight.
Thane district
(2.07.07 to 4.07.07)

• Thane district has a total geographical area of 9558 sq. km. with a population of 81,31,849 spread over in 5 sub divisions, 15 talukas, 968 GPs, 1890 revenue villages and 17,55,124 households. The breakup of the population is as under:-

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>5,90,2473</td>
</tr>
<tr>
<td>Rural</td>
<td>2,22,9376</td>
</tr>
<tr>
<td>Men</td>
<td>43,77,747</td>
</tr>
<tr>
<td>Women</td>
<td>37,54,102</td>
</tr>
<tr>
<td>SC</td>
<td>3,39,720</td>
</tr>
<tr>
<td>ST</td>
<td>11,99,290</td>
</tr>
</tbody>
</table>

• The breakup of the child population in 0-6 age group in tribal areas is as under:-

<table>
<thead>
<tr>
<th>Age group</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>30,131</td>
</tr>
<tr>
<td>1-2</td>
<td>32,072</td>
</tr>
<tr>
<td>2-3</td>
<td>34,584</td>
</tr>
<tr>
<td>3-4</td>
<td>37,574</td>
</tr>
<tr>
<td>4-5</td>
<td>41,636</td>
</tr>
<tr>
<td>5-6</td>
<td>12,322</td>
</tr>
</tbody>
</table>

• The MMR, IMR, CMR and MMR for the district as a whole and for tribal areas is as under:-
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Item</th>
<th>District as a whole</th>
<th>Tribal areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>MMR</td>
<td>19.45</td>
<td>21.34</td>
</tr>
<tr>
<td>2.</td>
<td>IMR</td>
<td>33</td>
<td>46</td>
</tr>
<tr>
<td>3.</td>
<td>CMR</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>4.</td>
<td>MMR</td>
<td>0.67</td>
<td>0.85</td>
</tr>
</tbody>
</table>

- The literacy rates are as under:-

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>86.53%</td>
</tr>
<tr>
<td>Rural</td>
<td>64.45%</td>
</tr>
<tr>
<td>Men</td>
<td>75.56%</td>
</tr>
<tr>
<td>Women</td>
<td>52.59%</td>
</tr>
<tr>
<td>SC</td>
<td>77.07%</td>
</tr>
<tr>
<td>ST</td>
<td>43.96%</td>
</tr>
</tbody>
</table>

- There are 5 sub divisions, 15 talukas, 968 GPs and 1748 villages. Most of the hamlets are scattered and fragmented.

- On the side of ICDS, there are 14 projects with 9 CDPOs in position (remaining 5 being vacant). Similarly of the 132 supervisors, 129 are in position and of the 3395 AWCs sanctioned 3356 AWWs are in position, the remaining lying vacant.

- Of the 3395 AWCs, 2096 have their own building and 1299 do not have their own building.

- On the side of Public health, there are 2 sub-divisional hospitals, 11 rural hospitals, 79 PHCs and 487 sub-centres. There are vacancies in all cadres i.e. Medical officer Grade A and B, LHV, ANM, Multi purpose Health Worker, the vacancies ranging between 10 to 20%.

- 68 PHCs and 326 sub centres have their own buildings while 11 PHCs and 161 sub centres do not have their own building.

1. **Visit to AWC at New Dapcheri, Palghar Taluka, Distt. Thane:**

   - Name of the AWW - Smt. Shobha Krishna Gadag.
   - Total No. of families - 127
   - Total population - 760
   - Total No. of children in 0-6 years - 114.
Break up

<table>
<thead>
<tr>
<th>Age group</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 6 month</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>7 month – 1 year</td>
<td>4</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>1 - 2 years</td>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>2 – 3 years</td>
<td>16</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>3 – 6 years</td>
<td>28</td>
<td>27</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>53</td>
<td>114</td>
</tr>
</tbody>
</table>

AWC timing 9 AM to 2 PM - Food served (SNP) twice i.e. 9:30 AM and 1:00 PM

ANC 12 - Amount of food each time 40 gm.

PNC – 8

Adolescent girl – 60

Gradation of children according to status of malnutrition

- Normal - 17;
- Gr.I - 46;
- Gr.II - 50;
- Gr.III - 01;

Their health has been checked on 19.05.07.

Out of 110 children 81 children could only be examined; remaining 19 had migrated along with their parents.

Ten out of 12 ANCs and six out of 8 PNCs were examined.

1 SHG with 10 members at Dapcheri established on 13.12.99.

Children were randomly weighed. The findings are as under:
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Gradation</th>
<th>Weight</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suraj Gadag</td>
<td>3.9 yrs</td>
<td>II</td>
<td>10.8 kg</td>
<td>5 kg. lower weight than the normal</td>
</tr>
<tr>
<td>Deepak Gadag</td>
<td>4.6 yrs</td>
<td>I</td>
<td>15.1 kg</td>
<td>2 kg lower weight than the normal</td>
</tr>
<tr>
<td>Nagesh Kharad</td>
<td>3.1 yrs</td>
<td>I</td>
<td>10.5 kg</td>
<td>3.5 kg lower weight than the normal</td>
</tr>
<tr>
<td>Vishal Bhoir</td>
<td>1.11 yrs</td>
<td>II</td>
<td>7.25 kg</td>
<td>4.5 kg lower weight than the normal</td>
</tr>
<tr>
<td>Ruchita Kharad</td>
<td>5.3 yrs</td>
<td>III</td>
<td>9.8 kg</td>
<td>7 kg. lower weight than the normal</td>
</tr>
</tbody>
</table>

- Enquired into the family profile of Ruchita Kharad. Her mother had 3 children with a gap of 1.5 years. The earnings of father and mother being Rs. 40/- and Rs. 35/- respectively (though not on a regular basis) are not adequate. They are BPL card holders entitled to receive 30 kgs of rice and 5 kgs of wheat.
- The village does not have a sub-centre which is located 8 kms. away.
- The MO has to visit 72 AWCs for check up of health of pregnant and lactating mothers and children. The span of supervision is very wide and the MO cannot cover more than 1 AWC once in 3 months in addition to discharge of multifarious responsibilities at the PHC headquarters. There is need for a fresh look at fixing jurisdictions and targets keeping the geographical distance, workload and total time available.
- Out of 100 deliveries 70 deliveries took place at home and 30 in PHC.
- The rural hospital at Manar is at a distance of 15 Kms.

**Redeeming features of AWC**

- AWW has read up to class VIII, has undergone training, is a local worker conversant with the area, is quite at home in the company of mothers and children, conducts the feeding programme according to the scales prescribed as also in conformity with variety of local tastes, knows how to record weight of children, knows how to maintain registers, assists the medical officer to do check up of health of children and undertakes home visits to impart counselling on a host of issues to mothers ( immunization, nutrition, pregnancy, spacing, planned parenthood etc).

**Grey Areas:**

- The general standard of health of mothers is OK but not so with regard to that of children. Most of the children were found underweight. Despite repeated
counselling of mothers, the weight did not show any appreciable improvement which is a matter of concern.

• Surprisingly the register where the outcome of examination of the status of health of children has been recorded does not show any major ailment afflicting the children. This leaves a question mark as to whether the health of children is being correctly checked or not.

• On being asked where the mothers work, what they earn, how much grain they get from the fair price shop, what are the food items they cook at home and what they feed the children the following picture emerged.
  - most of them are landless;
  - they work as agricultural labourers;
  - there is no stability and durability of employment;
  - there is disparity in wages payable to men and women for same or similar nature of work;
  - they have not received any assistance from govt under IAY; they are putting up in improvised structures;
  - they are in possession of BPL cards;
  - the ration that they receive from the PDS is lower than their entitlement;
  - the quantity is also quite inadequate for large families (average number of members 5 to 7); the quality is invariably poor.
  - at home, mothers prepare rice, bhakri, dal (tur) and vegetables as and when they are available.
  - In case of a 8 month old child, it was found that (a) the child was being breastfed (b) it was under weight and (c) composite feeding has not started.

Redeeming features about formation of SHGs:

• Despite low wages women were able to contribute Rs. 20/- per month into the corpus of the SHG.

• The SHG is managing the feeding programme in the AWC.

• Four months stock has been kept during the rainy season.

Redeeming features about a few households:

• Few households have biogas, toilet and solar energy.

• While a small patch of land was available to be developed as kitchen garden practically nothing was being grown except drumsticks plant (whose leaves and flowers have high beta carotene).
• This calls for a lot of extension efforts on the part of officers of Agriculture and horticulture departments.

IEC – a grey area:

• The AWC contains some charts but much more needs to be provided on the following:
  - what is colostrum?
  - what are the advantages of breast feeding?
  - what are the nutrients available in rice, chapatti, fruits and green leafy vegetables?
  - what constitutes a balanced food?
  - what is the correlation between age and growth?
  - how growth is to be measured and monitored?
  - what is spacing?
  - which are the water borne and air borne diseases?
  - how to ward off infection?
  - how to store vegetables so that they do not perish?
  - at what interval children should be fed?
  - how to prevent malnourishment?
  - how to deal with grade III and grade IV malnourishment?

2.07.07 Visit to PHC at Gholwad in Dahanu taluka:

• Established in 1984 by Smt. Dhanbai Pestonji Hakimji and later transferred to Zilla Parishad.

• The staffing pattern, incumbents in position and posts vacant are indicated below

<table>
<thead>
<tr>
<th>Designation</th>
<th>Sanctioned Post</th>
<th>Incumbents in position</th>
<th>Vacant posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Health Asstt (M)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab Technician</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Leprosy Technician</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>ANM (F)</td>
<td>11</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>MPHW (M)</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>
Redeeming features of PHC Gholwad (Dhanau):

- The MO incharge is well familiar with the area, the socio-cultural-economic forces operating therein, why children die, what is malnutrition and what is malnutrition related death.

- A calendar of visits has been prepared for all ANMs and LHVs. There are 15 villages and 95 padas. Each village is to be covered once a week and each pada is to be covered once a month.

- The ANMs stay between 9 AM to 5 PM while visiting a village or a pada. They contact pregnant and lactating mothers and provide the following counsel:
  - How to go in for ANC registration?
  - How to go in for institutional delivery in preference to home delivery?
  - At what interval they should turn up at the PHC for check-up of pregnancy?
  - What is the food both in terms of quantity and quality (in relation to nutrients) that a pregnant mother should take?
  - When to get admitted to a PHC for delivery?
  - What constitutes a complicated delivery?
  - Who is a high risk woman for delivery?
  - What is Matrutwa Anudan Yojana and how to avail of its benefits?
  - What is Janani Surakshya Yojana and how to avail of its benefits?
  - What should be the normal weight of a new born baby?
  - What are the causes of neonatal death (between 0-4 weeks); how to prevent them?
  - What are the causes of IMR (4 weeks to 1 yr); how to prevent them?
  - What causes deformity of a child?
  - What causes mental retardation; how to prevent it?

Grey areas:

- pervasive ignorance;
- high level of illiteracy;
- low level of aspirations;
- bundles of tribal customs and traditions;
- addiction to alcohol;
male members take away the earnings of women and fritter away the same in liquor;
poverty, unemployment and under employment;
Pandurang Athavale’s pervasive spiritual influence over members of the fishermen community (he has a very large following) not to kill fish as a means of prevention of cruelty to animals.

Suggestions:
• There should be an aggressive campaign for repeated dissemination of some of the central messages related to nutrition for mothers.
• Each and every case of death should be thoroughly investigated to rule out the element of negligence (on the part of anyone- MO, staff nurse, LHV etc).

Peculiarities of the tribal community:
• ANC registration in tribal areas is less.
• In the tribal community the boy and girl mix freely and girls become pregnant before marriage.
• The formal marriage takes place only after living together for some time and after having children.
• The girls of 18 years and above go in for ANC registration but girls below 18 years do not come.
• Addiction to alcohol is one of the main causes of malnutrition amongst tribal communities.
• Even during pregnancy most of the tribal women consume alcohol with very low dietary intake due to which LBW babies are born giving rise to increase in malnutrition.

Causes of neonatal mortality:
• Septicemia
• Aspiration pneumonia
• Low birth weight with septicemia.
• Premature delivery
• Bronco Pneumonia
• Febrile convulsions
• Hypothermia with non-acceptance of food.
The PHC was awarded Dr. Anandibai Joshi award for the year 2006-07 by the State
govt. for doing excellent work among adivasi women and children.

The redeeming features of PHC are:
- no maternal death has been reported;
- the number of malnourished children has dropped from 45 in 2005-06 to 10
  in 2006-07.
- the CBR has come down to 24 and CDR to 07.

**Sub-district hospital, Dahanu:**
- This is a 100 bedded hospital.
- Of 94 medical and para-medical staff, 11 posts are lying vacant.
- Of 8 specialist posts 3 are in position, the rest being filled up by general duty
  medical officers.
- There is no paediatrician to deal with Spl. Problems of malnourished children.
- The paediatrician has been transferred and relieved and no substitute has been
  posted in his place.
- One gr.III and another gr.IV malnourished child has been admitted in the 2\textsuperscript{nd} week
  of June. They have been given high protein diet and protein syrup antibiotics and
  have since been discharged.
- The following malnourished children were admitted and treated in 2006-07:-

<table>
<thead>
<tr>
<th>Name</th>
<th>Grade</th>
<th>Weight</th>
<th>Age</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sabina Ramesh Zope</td>
<td>III</td>
<td>8.7 Kg.</td>
<td>3.3 years</td>
<td>Lower respiratory track infection</td>
</tr>
<tr>
<td>Neelesh bhagu Padi</td>
<td>III</td>
<td>5.5 kg.</td>
<td>1 year</td>
<td>Upper respiratory track infection.</td>
</tr>
<tr>
<td>Nirmala Sukhdev</td>
<td>III</td>
<td>6.2 kg.</td>
<td>2.1 year</td>
<td>Fever</td>
</tr>
<tr>
<td>Tushar Vikam Ibhad</td>
<td>III</td>
<td>9 Kg</td>
<td>2.1 year</td>
<td>Fever</td>
</tr>
</tbody>
</table>

- Most of the mothers admitted for delivery are found to be anaemic and in a state
  of poor health.
- In one case the haemoglobin content was as low as 5 mg %
- Mothers by and large have no education and are unaware of the basic facts about
  maternal and child health.
• The scale of expenditure for a mother and child staying in the hospital is Rs. 105/- (Rs. 40/- + Rs.40/- + Rs. 25/-)
• Most of the mothers are unaware of this.
• There is no matron to oversee the performance of staff nurses.
• Most of the Children delivered in the hospital have LBW.
• This is on account of the poor state of mother’s health.
• Incidence of TB is quite high.
• There was one case of entric fever as well.
• This goes to show that water source is polluted or contaminated.
• There are a few charts and posters displayed on the wall of the hospital but their content needs to be explained to the mothers.
• Health education has to be vibrant; this by and large was found wanting.

It should be a continuous process, should begin on the date of admission of the pregnant mother for delivery, should continue till the date of discharge and even after the mother has gone back to her home.

3.07.07 (forenoon)

Surprise visit to cottage hospital, Jwahar (3/07.07 9 30AM):

At Jwahar Circuit House on 3.7.2007 at 8.30 AM, I received a complaint about death of a child. Immediately after receipt of the complaint I proceeded to the hospital to investigate into the cause of death of the child named Balu Rukesh Govind. This is the case of a one month old prematurely delivered child whose weight at the time of birth was only 1000 gram (as against the normal weight of 2500 gms). This was a case of home delivery. The child was admitted to Cottage Hospital, Jwahar on 2.06.07 for treatment of septicemia. The mother went away with the child against medical advice on 9.06.07. Due to the persuasive efforts of the staff nurse the mother came back from her village (7 to 8 KMs from the hospital) with the child who was readmitted on the same day i.e. 9.06.07. The child was kept at the NICU. He was treated with antibiotics and with increased feed and was showing signs of recovery (he had gained a weight of 400 gms). Unfortunately at this crucial stage, the mother and her elder sister insisted to take away the child for the second time. Despite advice to the contrary, they succeeded in removing the child on 11.06.07 (2 days after the child was readmitted). The child died at home on 2.07.07.
In course of discussion the MS brought to my notice the following:

- Leaving against medical advice (LAMA) is quite common during agricultural season;
- When a mother or any other relation wants to take away the child from the hospital she cannot be prevented by force not to do so; there is no law by which the hospital authorities can compel the mother to keep the child in the hospital; they can only make persuasive efforts;
- The hospital authorities came to know about the death of the child during home visit of AWW, ANM and supervisor, ICDS;
- No formal investigation into death of the child has taken place so far. This is because the mother and other relations of the child would be in a state of shock and would not be in a position to cooperate with the enquiry even if the same is ordered to take place now.

The above incident which is tragic reinforces the need for a massive social and community level campaign to drive home the fact to mothers that in the larger interest of survival of their children they should not remove their children once they have been admitted to hospitals.

- The PHC building is old dating back to 1962
- The staffing pattern comprises of PHC incharge and another MO, LHV(2), ANM(2), Lab Technician -1, Pharmacist-1 and pada workers (94).
- There are 33 villages and 74 padas with 5279 households (all tribal)
- The 30,000 population is scattered and fragmented.
- All sub-centres are approachable but not all villages/padas.
- A calendar of visits (month wise) for the ANM and LHV has been drawn up.
- The ANMs and LHVs belong to the Adivasi community and know the dialects spoken by members of that community.
- The first ANM covers 3 villages once a week while the second ANM conducts OPD at Jwahar.
- The first ANM in course of her field visits (between 8 30 AM to 5 PM) undertakes visit to AWC, GP office, house holds and meets about 25 to 30 mothers, enquires about their health and health of children, quality of food they get at the AWC, food prepared at home, advises them about eating green leafy vegetables and giving food at least 4 times a day to grade III and grade IV children.
• She did not, however, appear to be very clear and confident about causes and consequences of malnutrition, what mothers should eat, what children should eat and what should be the ideal nutrient content of food. The following is a broad picture of the outcome of the service rendered by the PHC so far.

- Total deliveries since April 07 – 19; hospital – 15, home – 4;
- LBW – 2 (2000 gm to 1500 gm as against normal 2500 gm);
- Home deliveries are conducted by trained Dais;
- Premature delivery – nil;
- Still born - nil;
- Maternal mortality – nil;
- Abortion – few (despite advice mothers prefer to work in farms even in an advanced stage of pregnancy which results in abortion);
- ANC registration – 100 pc;
- Visit of pregnant mothers to PHC – 5 times;
- Waiting period – minimal;
- All details about pregnant mothers are contained in a register called ANC register;
- There is a separate register for high risk mothers;
- Team work between AWW, ANM, LHV, MPW and pada worker is encouraging; they meet once a week.

Grey areas:

• Women get Rs. 30/- with food while men get Rs. 40/- with food.
• They prefer to consume Urad dal and not tur dal (which has more protein)
• Consumption of green vegetables which have high beta carotene (vitamin A) is generally less.

Visit to Ranshet Sub-centre (3/07/07 at 8:30 AM):

This is one of the 64 sub-centres in Dahanu block. It is a small sub-centre which caters to only 2 villages and 14 padas with 771 families. The sub-centre building has been transferred to the Health Deptt. recently. The ANM in charge of the sub-centre visits every village on a weekly basis. Majority of the 771 families are BPL who live in unhygienic conditions. They grow green vegetables (including drumsticks) but mostly sell them instead of consuming them. Only one child in the sub-centre area was found to be a victim of malnutrition grade III. The child is 11 months old with a weight of 5770 gram. It has
picked up this weight from 4550 gram and can easily show further progression to Gr.II if the existing trend continues and there is addition of another 400 gm. In all 8 deliveries have been conducted in April and May 07. All deliveries were safe and the weight of all children at the time of birth was found to be normal. A sum of Rs. 400/- in 4 instalments has been paid to the pregnant mother. On an average 15 to 20 pregnant mothers attend the sub-centre daily.

**Visit to AWC at Sakur Tal Jwahar (3/07/07):**

- This is a new building and the problem of repair and maintenance is minimal. Space is adequate but lighting and ventilation was found to be poor.
- AWW is one amongst the tribal community. She sings, plays and dances with the children; she identifies herself totally with the mothers and children.
- The SHG runs the supplementary nutrition programme.
- The type of food served varies from day to day but the overall quality is good. The desired level of nutrients is ensured.
- LBW, however, continues to be a source of major concern.
- Most of the children weighed (except one) are in grade I and grade II
- Most of the mothers (even the pregnant and the lactating ones) work as agricultural labourers.
- They earn Rs. 30/- with food while men get Rs. 40/- with food.
- They prepare rice, dal and bhakri at home.
- Most of them have got their own houses but without any assistance under IAY; there is no kitchen garden.
- Invariably most of the mothers who go away for work as agricultural labourers do not bring children in 0-1 age group to the AWC.
- Whenever they come they carry the food with them.

**Mother and child protection sessions:**

- PHC organises village wise mother and child protection session (MCP) for pregnant women and 0-6 age group children in which immunization and Vitamin A are given to them. The female health worker distributes iron and folic acid tablets to ante-natal and post-natal mothers and children.
- All children of 0-6 years are given deworming tablets, syrup vitamin A and syrup IFA.
- To bring down the mortality of children a meeting of trained dais once in every 3 months is organized at the sub-centre level.
• Due to appointment of 3525 mahila pada workers in tribal areas epidemics have come down and supplementary diet given to beneficiaries in proper time is being monitored regularly.

• In high risk pockets in tribal areas 35 rescue camps have been started.

• Under Nav Sanjivani scheme all AWCs in 5 Nav Sanjivani districts have been provided with nutritious therapeutic food.

• The health check up of grade III and IV children is being done by the paediatrician in PHC once every month. Medicines are given after check up and if needed referral services are provided to them.

• There is, however, a huge gap between planning and implementation and this was evident at the time of visit to 100 bedded sub-divisional hospital at Jwahar on 3.07.07 as would be evident from the following:
  - this is an old building;
  - there is profuse leakage and seepage;
  - wards, verandahs, patients’ examination rooms are flooded with water;
  - working conditions are deplorable;
  - how can we expect grade III and IV children to receive any worthwhile treatment when the floors are wet, walls are wet, the overall surrounding both inside and outside is untidy and unhygienic and there is so much of overcrowding and congestion?

• Such problems should have been attended to well in advance of the onset of rains.

• Repair and maintenance problem of such premises regretfully have been allowed to drift.

Visit to Morhanda PHC (3/07/07):

• This is one of the 4 PHCs in Mokhada block.

• The jurisdiction extends to 4 GPs, 9 villages, 48 padas with 21,888 population.

• Human settlements are scattered and fragmented.

Malnutrition status in the PHC:

• Institutional delivery is only 25 pc

• Home delivery is 75 pc

• Average weight of children at the time of birth
  - 90 pc normal weight
  - 10 pc LBW.
Reasons for malnutrition:

- pregnancy before 18 years;
- more than 3 to 4 issues;
- pregnancy even during the lactating period; no spacing;
- composition of food package is such that it does not become balanced food;
- manner of cooking (food is either overcooked or under cooked) leaves much to be desired;
- frequency at which food is to be taken is largely unknown and both cooking and feeding practices are full of blind beliefs.

Consequences of malnutrition: 2006-07 – 33 deaths.

Detailed breakup:

- Pneumonia 5
- Septicemia 4
- Aspiration asphyxia 2
- Acute abdominal complication 1
- Pulmonary pneumonia 1
- Congenital anomaly 1
- Snake bites 2

Potable water:

- 57 wells and 9 hand pumps have been provided for 9 villages and 48 padas.
- Samples of water are being sent for testing.

Sanitation:

Household toilet – 3 pc

Reporting system:

The DHO clarified that about 3 years back there was under reporting of the following:

Malnutrition status in last 3 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Weighed children</th>
<th>Number of children in Gr. III</th>
<th>Number of children in Gr.IV</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>2,33,975</td>
<td>1097</td>
<td>145</td>
<td>0.53</td>
</tr>
<tr>
<td>2006-07</td>
<td>2,42,639</td>
<td>498</td>
<td>70</td>
<td>0.23</td>
</tr>
<tr>
<td>2007-08</td>
<td>2,43,898</td>
<td>569</td>
<td>72</td>
<td>0.26</td>
</tr>
</tbody>
</table>
Child mortality in last 3 years

<table>
<thead>
<tr>
<th>Year</th>
<th>0-1 year</th>
<th>1 to 6 years</th>
<th>Total deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>1358</td>
<td>503</td>
<td>1862</td>
</tr>
<tr>
<td>2006-07</td>
<td>1563</td>
<td>479</td>
<td>2032</td>
</tr>
<tr>
<td>2007-08 (May 07)</td>
<td>175</td>
<td>55</td>
<td>230</td>
</tr>
</tbody>
</table>

- Now there is substantial improvement in the reporting system.
- The monthly report prepared by AWW is checked in the fortnightly meeting of ANMs, LHV's, MPHWs and Gram Sevaks.

Visit to Rural hospital, Mokhada: (3/07/07 AN)

Grey areas:
- The post of Medical Superintendent is vacant.
- Heavy load shedding; no power back up (due to non-availability of Koil for the generator set). Dist. Civil supply office moved for adequate provision and supply of koil but to no effect.
- Operation Theatre has not been electrified.
- There is profuse seepage /leakage; rooms are flooded with water.
- Staff quarters are also flooded with water for 4 months of the rainy season and not fit for habitation.
- Occupancy is 25 out of 30 beds.
- There are no specialists (gynaecologists, Paediatricians)
- The following posts are vacant:
  - Staff nurse-1, office Supdt -1, ward boy -1, Lab Technician -1.
- The hospital according to a decision of Health Deptt is to be raised to a 50 bedded one (this is on the strength of an assurance given by the Minister on the floor of the house) but the decision is yet to be communicated, far less being implemented.
- No garage for ambulance van has been provided which makes maintenance of the vehicle extremely difficult.
- There is no permanent source of potable water for the hospital. There is a well with sufficient water but pipelines are yet to be laid.
Between January and June 07, status of Gr.III and Gr.IV malnourished children admitted in the hospital is as under:-

<table>
<thead>
<tr>
<th>Jan - 07</th>
<th>18 Gr. III</th>
<th>7 Gr. IV</th>
<th>Total 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb - 07</td>
<td>6 Gr.III</td>
<td>4 Gr.IV</td>
<td>Total 10</td>
</tr>
<tr>
<td>March 07</td>
<td>8 Gr.III</td>
<td>1 Gr.IV</td>
<td>Total 9</td>
</tr>
<tr>
<td>April - 07</td>
<td>18 Gr.III</td>
<td>4 Gr.IV</td>
<td>Total 22</td>
</tr>
<tr>
<td>May - 07</td>
<td>16 Gr.III</td>
<td>5 Gr.IV</td>
<td>Total 21</td>
</tr>
<tr>
<td>June – 07</td>
<td>3 Gr.III</td>
<td>2 Gr.IV</td>
<td>Total 5</td>
</tr>
</tbody>
</table>

- All of them have been brought to the hospital by parents or relatives.
- No paediatrician is available in the hospital.
- One Dr. Marade from Jwahar is coming for expert advice.
- He has treated all these children and discharged them.
- Total no of deaths – 18
- The MS-in-charge certified that he has personally looked into each and every case of death and has satisfied himself that (a) all possible efforts were made to save the lives of children and (b) there was no case of culpable negligence.
- There are, however, a couple of cases where patients (children) were taken away by mothers against medical advice with serious consequences.

**Visit to Gora PHC at Wada (4/07/07 FN):**

- The PHC has within its jurisdiction 36 villages and 117 padas.
- The PHC has 10 sub-centres with 10 ANMs with one extra ANM attached to the PHC.
- She has been allotted 2 villages and 7 Padas for tour every month.
- Additionally she sits in the clinic (of PHC) every Tuesday.
- She has so far toured 11 villages.
- While on tour
  - She makes it a point to visit the anganwadi in the village:
- She sits in the pada workers’ home in the pada;
- She makes it a point to contact 5 to 6 pregnant and lactating mothers; the visit and interaction with mothers is according to mutual understanding and convenience.

What are the central messages being disseminated by the ANM?

The central messages are:

I  - Do not let loose your children alone even when you are at home;
- Do not leave children alone while going for work.

II   - Feed the children at appropriate intervals;
- Feed the children adequately;
- Do not discontinue breast feeding before 6th month;
- Make use of colostrums; do not have any inhibitions about the same;
- Observe personal and community environmental hygiene and sanitation.

III  - In the event of illness of children, report the same to sub centre/PHC;
- Secure timely admission;
- Do not remove the ailing children under treatment at the PHC/ hospital against medical advice;
- Please ensure strict and timely compliance with the medicines prescribed by the treating physician;
- Please do not drink polluted/contaminated water in the open or from an unauthorized/banned source;
- Make the Panchayat spray disinfectants on the available and approved source for drinking water;

IV   - No pregnancy before 18;
- No marriage before 18;
- Not to go in for pregnancy after the 2nd child
- Observe desirable spacing.

V   - No addiction to alcohol;
- Not going to quacks (Like Bhumkas);
- Do not propitiate unseen forces;
- Do not give into make beliefs, fads, superstitions etc.

VI  - Go in for institutional delivery which is safe compared to home delivery;
- Go in for the prescribed dosage of immunization of the new born.
VII  -  Adopt a rational, secular and scientific temper;
-  Brush aside customs and traditions which are bizarre and which have outlived their utility.

Deaths:

Deaths of children in 0-6 age group in the PHC could be attributed to the following:-
-  Premature delivery
-  Delivery of twins,
-  Still born (intra uterine foetal death)
-  ARDS
-  Hypothermia
-  Severe pneumonia
-  Intestinal obstruction

In Wada taluka measurement of weight of children is being jointly done by Vidhayak Sansad Sramjeevi Sangathan and the health functionaries. The impact has been perceptible in 2006-07. There were 257 children in Gr. III and Gr.IV malnutrition. Their number has come down to 75 on account of the joint efforts of the NGO and PHC staff.

Visit to rural hospital, Wada (on 4/07/07):
-  This is a 30 bedded hospital which was established in 1978 at a distance of 50 Kms from Jwahar.
-  This is located on about 3 acres of land and serves a population of 150,000
-  Originally started as a PHC (1980) it was converted to a rural hospital in 1987.
-  There are serious problems of maintenance; poor maintenance has given rise to leakage and seepage.
-  The staffing pattern comprises of :

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MS</td>
<td>1</td>
</tr>
<tr>
<td>Lab. Technician</td>
<td>1</td>
</tr>
<tr>
<td>Wardboys</td>
<td>4</td>
</tr>
<tr>
<td>MO</td>
<td>3</td>
</tr>
<tr>
<td>Lab. Asst.</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
</tr>
<tr>
<td>Staff nurse</td>
<td>7</td>
</tr>
<tr>
<td>X ray technician</td>
<td>1</td>
</tr>
</tbody>
</table>
There is a mobile unit with one ambulance van which is funded by the Tribal Development Deptt and which caters to the need of Ashram Schools in addition to the needs of 1,50,000 population within its jurisdiction.

No. of deliveries conducted by the hospital staff between Jan-06 to Dec-06 is as under:-

<table>
<thead>
<tr>
<th>Month</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>45</td>
</tr>
<tr>
<td>March</td>
<td>66</td>
</tr>
<tr>
<td>May</td>
<td>32</td>
</tr>
<tr>
<td>July</td>
<td>41</td>
</tr>
<tr>
<td>Sept.</td>
<td>37</td>
</tr>
<tr>
<td>Nov.</td>
<td>46</td>
</tr>
<tr>
<td>Feb</td>
<td>63</td>
</tr>
<tr>
<td>April</td>
<td>48</td>
</tr>
<tr>
<td>June</td>
<td>49</td>
</tr>
<tr>
<td>Aug</td>
<td>53</td>
</tr>
<tr>
<td>Oct.</td>
<td>44</td>
</tr>
<tr>
<td>Dec.</td>
<td>53</td>
</tr>
</tbody>
</table>

- All deliveries were normal.
- There were 6 to 7 premature deliveries.
- Mothers were brought to the hospital by ANM and LHV through personal contact and persuasion.
- The gynaecologist comes from Thane twice a week.
- A paediatrician was engaged on contract basis. He has since left and has started his private practice. A regular substitute has since been posted but he is yet to join.
- The total number of malnourished children:

<table>
<thead>
<tr>
<th>Period</th>
<th>Malnourished Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>April -06 to Dec. 06</td>
<td>187</td>
</tr>
<tr>
<td>Jan-07 to Mar-07</td>
<td>18</td>
</tr>
<tr>
<td>April-07 to June-07</td>
<td>2</td>
</tr>
<tr>
<td>Right now</td>
<td>none</td>
</tr>
</tbody>
</table>

**Causes and factors contributing to malnutrition:**

- Large families, early child marriage, inability to feed adequately, no knowledge and awareness of nutrients and interval at which food is to be served.
- Mothers are anaemic.
- Mothers go to brick kilns sometimes leaving the children at home and at times carrying the children with them. The children without the mothers at home will not have anyone to look after them and, therefore, there is a possibility that they will be malnourished. If the children accompany the mothers to the destination point and the mothers go away for work there will be none to look after the children who
in that situation characterized by dust, heat, fume, gaseous and toxic substances, without nutritious diet and potable water will be easy victims of malnutrition. The mothers themselves become victims of sexual exploitation at the work place.

• No idea about pattern of food, frequencies and nutrients contained in food.

Causes and factors contributing to malnutrition related deaths:

• Total number of deaths – 33. These are mostly on account of home deliveries which are unsafe; trained Dais have a vested interest in conducting home deliveries.

• Vulnerability to infection is greater in home deliveries.

• Want of adequate number of vehicles for transportation of patients

• NICU has recently been set up to take care of Gr.III and Gr.IV malnourished children but is not yet fully functional.

• Incidence of malaria is very high.

• Pneumonia, septicemia, LBW, premature delivery are the major causes of death.

• No. of deaths come down as the child grows.

• Most of the patients are referred from outlying stations; Condition of the patients deteriorates and is beyond recovery by the time they arrive at Wada.

• There is no blood storage facility; the proposal is still pending with Director of Health Services (DHS).

• Load shedding takes place every Friday.

Some redeeming features:

• Potable water - no scarcity

• Ambulance van - mobile

• Staff quarters - all have been provided

• Medicines - adequate

Proposals pending with DHS:

• Sanction of continuance of mobile unit.

• Sanction of blood storage facility.

Meeting at the Collectorate Conference hall, Thane (4/07/07 2 PM to 5 PM)

In course of interaction with Collector, Chief Executive officer, Zilla Parisha, all divisional and district level officers the following issues were raised by me.

Infrastructure and logistics support:

• Poor quality of PHC and sub-centre buildings.
• Sorry state of affairs relating to repair and maintenance of these buildings.
• Lack of electrification (like OT in RH Mukhada)
• Inadequate water supply corresponding to the need of the hospital.
• Severe load shedding.
• No power backup.
• Non-allotment of the requirement of Koil and diesel by the Food and Civil Supply Department for generator set which provides the power back up.
• Staff quarters in a bad shape.
• No fresh allotment for construction of new staff quarters.
• The PHC in charge stays far away from PHC.
• PHCs do not open in time.
• No sylvan surrounding in the PHCs.

Vacancies:
• MOs and paramedical staff transferred but no substitute posted.
• Substitute posted but not joined.
• Substitute joined but proceeded on leave soon thereafter.
• Substitutes avoid to join due to remoteness of the location and lack of educational facilities for children.
• No Spl. Allowance like Gadchirolli for being posted in remote, interior and inaccessible pockets.

Human Resource Development:

Training:
• ASHA workers under NRHM mostly not appointed; wherever appointed not trained.
• No recurrent training/no refresher training either.
• Poor quality of training by way of not imparting relevant skills.
• Poor communication with target groups.
• No proper guidance as to how to communicate, how to build up rapport and bonhomie with the target groups, how to be more civil, courteous, kind, compassionate and considerate in dealing with patients and their relatives.
• No evaluation of the content, process and impact of training.
• No mechanism for evaluation of the work, conduct and performance of the MOs and Para-medical staff.
• Acts of omission and commission go unnoticed and unpunished.

**Geography, topography and demography:**
• Scattered and fragmented human settlements.
• Low density of population.
• Absence of all weather road connectivity.
• Target groups not easily accessible and approachable.
• Mobility of MOs, ANMs, LHV and MPHWs severely restricted in remote, interior and inaccessible pockets.
• Bundles of accumulated fads and taboos, obscurantist ideas and practices.
• Teenage pregnancy (before 18)
• Early child marriage (before 18)
• No spacing; even pregnancy occurs during the lactating phase.
• Large families (on an average 5 to 7)
• Pervasive ignorance and illiteracy of family members (children, adolescents and adults).
• Low level of awareness and aspiration.
• Greater faith and belief in occult powers in preference to sensible, rational and scientific advice.
• Migration of parents with children mostly accompanying.
• No food, education, nutrition and health security for the children at the destination point.

**Information, Education and Communication:**
• Absence of software (IEC for tribal mothers).
• Limited utility for print medium of communication in view of pervasive illiteracy.
• No print materials available in the dialects (Gondi, Villori, Madhia) spoken by the people (as these dialects do not have scripts).
• IEC materials designed by some of the social activists like Dr. Abhay Bhang or Dr. Ashis Satav have not percolated down to the masses.
Land issues:

- No clear decision as yet regarding allotment of agricultural land (by way of regularization) which the tribals have been cultivating.
- Pervasive landlessness (both homestead and agricultural).

Employment:

No stability and durability of employment despite NREG works for 100 days.

Wages:

- Generally low i.e. lower than the notified minimum wage.
- Differential wages for male and female workers for same or similar nature of work, the female workers being always at a disadvantage.
- Wages paid partly in cash and partly in kind; in a highly monetized economy this creates serious problems.
- No spread over, weekly off and overtime being paid even in contingencies where they are justified.
- Purchasing power of the money earned towards wages is extremely limited.

Public distribution system:

- There are instances where wage earners who are also card holders (BPL or Antyodaya) are receiving much less than their entitlement.
Nashik  
(9.9.2007 to 11.9.2007)

Geographical, topographical and demographic profile as also the profile related to ICDS and public health pertaining to tribal population in general and tribal children in particular:

The district lies between 19.33° to 20.53° north latitude and 73.16° to 75.16° east longitude. It has a geographical area of 15,530 sqkm, a population of 49,93,796 of a medium density (322 per sq.km). It has 4 sub divisions, 15 talukas/Panchayat Samitis, 1373 Gram Panchayats, 1931 habitations, 1429 padas (hamlets) and 9,15,137 total households of which 5,48,027 are tribal. Predominantly rural (61.20%), it has 11,94,271 tribal population (23.92% of the total population) with an average family size of 4.02. In all 973 villages in 8 talukas are within the tribal sub-plan area.

The total land area in Nashik is 15,63,000 hectares of which a little over 50% of land is under cultivation (8,65,161 hectares) while the extent of waste land is sizeable (1,42,000 hectares). The forest cover is 3,21,000 hectares (20.54%). The number of landholders is 4,03,817 and land under irrigation is 2,60,225 hectares (30.08%). The average annual rainfall of the district is 1057 mm.

Nashik is well known for high quality grapes and pomegranates and is one of the major exporters of grapes and onions. There are in all 843 primary agricultural cooperative societies providing a boost to cash crops. The farmers of Nashik have a progressive and innovative image. Strawberry and jatropha plantation by tribal farmers are few such innovative initiatives.

In all there are 16 ICDS Projects and 3949 AWCs with 1 position of CDPO and 57 positions of Supervisors lying vacant. Forty out of 57 Supervisors have been selected but could not be given the appointment and placement due to a stay order of the High Court (it is understood that the stay order has since been vacated paving the way for filling up the posts). While 1572 AWCs have their own departmental buildings the remaining AWCs
are functioning in primary school (576), Samaj Mandir (583), Zilla Parishad buildings (703) and Private (515).

On the side of public health, there is one civil hospital, one sub-divisional hospital, 14 rural hospitals, 103 PHCs (52 tribal and 51 non-tribal), 6 PHUs and 577 sub-centres (tribal 298 and non tribal 279). Of them only 46 tribal PHCs and 193 tribal sub-centres have got departmental building and 4 new tribal PHCs and 62 tribal sub centre buildings are under construction. The rest are functioning in hired premises.

On the side of ICDS 3636 AWWs and 3457 AWHs are in position. An AWC is inconceivable without AWW and AWH. It is not clear as to how these AWCs are functioning in a situation of 300 and 500 vacancies. The process of selection and training of these functionaries needs to be expedited. The AWWs & AWW and AWH have received induction training at KJ Mehta Training Centre at Nashik and Dhule.

On the side of public health, of 990 sanctioned posts (MO Class II and III, Health Assistant (M) and (F), Multipurpose Worker (Male) and Female, Lab Technician, Pharmacist), 916 posts have been filled up and remaining 74 are vacant.

The number of children in 0-6 age group and its break up is as under:-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Children (tribal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 year</td>
<td>43,939</td>
</tr>
<tr>
<td>1-2 year</td>
<td>42,675</td>
</tr>
<tr>
<td>2-3 year</td>
<td>45,334</td>
</tr>
<tr>
<td>3-4 year</td>
<td>41,117</td>
</tr>
<tr>
<td>4-5 year</td>
<td>41,225</td>
</tr>
<tr>
<td>5-6 year</td>
<td>41,334</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,55,624</strong></td>
</tr>
</tbody>
</table>

Field Visits

10.9.2007

Visit to AWC, Anjneri Tal, Triambakeswar:

Redeeming features:

- The AWW – Smt. Lilawanti Prahlad Sony is an old and experienced worker continuing in the centre since 10.10.89.
- This is a building constructed out of World Bank Grant.
• It has 300 sq.ft. built up area with adequate lighting and ventilation.

• The CDPO and Supervisor visited the AWC last on 7.9.2007 and impressions of their visit are available on the Visitor's Book.

• The children in 0-6 age group are being regularly weighed in the salter scale and on the basis of weight so recorded are being graded (normal, malnourished Gr. I, II, III and IV). The number of children in various Grades who have been enrolled in the AWC are:-

  Normal - 21
  Gr. I   - 46
  Gr. II  - 38
  Gr. III - Nil
  Gr. IV  - Nil

• The check up of health of children is being regularly carried out by the Medical Officer from PHC.

• On the basis of such check up 3 and 6 malnourished children have been referred to PHC and Rural Hospital respectively.

• At the time of visit it was a refreshing experience to observe that a half yearly birthday of Sunita Laxman Badade was being celebrated as a mark of commencement of supplementary feeding along with breast feeding.

• The AWW undertakes regular home visits (5 households per day) and counsels the pregnant and lactating mothers and adolescent girls. The mothers generally listen to the AWW and have reposed a lot of trust and confidence in her. During the last one year (2006-07) she has conducted 1465 home visits, contacted 300 pregnant and 528 lactating mothers and 360 adolescent girls.

• While the honoraria for the AWW and AWH have been paid upto August, 2007, the grant under SNP has been paid to the SHG till June, 2007.

• The supplementary nutrition feeding programme conforms to the scale laid down by the Supreme Court in its interim orders dated 28.11.2001 in W.P. (Civil) 196 of 2001 filed by PUCL, Rajasthan. There is diversity in the dietary pattern on a day-to-day basis and the general response of the mothers present to both the quantity and quality of food is encouraging.

• SNP is distributed in 2 instalments in the AWC for normal children and in 4 instalments for Gr. III and Gr. IV children.
The recipe comprises of (on alternate days):-

- **Khichadi** – Rice (54 gms) + Moong dal/Masoor (14 gms) + groundnut oil (4 gms) + soyabean (7 gms) + iodized salt as per required quantity (raw weight of food articles is 79 gms while cooked food weight is 214 gms).

- **Usal of beans** – Beans and one of the four - Matki, Moong, Chavali, Chana) 67 gms + Soyabean 7 gms + Soyabean oil 4 gms + iodized salt as per required quantity (raw weight 78 gms, cooked food weight 166 gms).

- **Lapsi** (a thick paste/kshir) broken wheat 67 gms + jaggery 27 gms + soyabean 7 gms + soyabean oil 4 gms + iodized salt as per required quantity (Raw weight 105 gms, cooked weight 214 gms).

- **Sweet rice:** Rice 40 gms + Moong dal/Masoor 7 gms + sugar/jaggery 20 gms + groundnut oil 4 gms + soyabean 7 gms + iodized salt as per required quantity (raw weight 78 gms, cooked food weight 201 gms).

**Grey areas:**

- Even though the average size of a tribal family was reported by the Collector to be 4.02, the size reported at Anjheri AWC was as high as ten. Of them 6 go for working while the rest stay at home.

- At the average rate of Rs. 50/- per working member the average earnings of 6 working persons comes to Rs. 300/-. With a proper planning a major portion of this amount could be put in to the food basket of the family to ensure that the food that is consumed is adequate, balanced, has all the desired micro nutrients and is taken at appropriate intervals. This, however, does not happen. Major share of the family earnings goes in for non-food items (tobacco, gutka, liquor) and that is the beginning of the tragedy of malnutrition.

- Right to food is meaningless without right to water. Such water must be free from chemical and bacteriological impurities and must also be free from excess of iron, sulphur, magnesium, sodium, calcium and floride. There is no assured source of potable water in this locality while the water table is going down day by day. Consumption of water at polluted/contaminated sources causes water borne diseases like diarrhoea, dysentery, gastroenteritis etc. particularly during June – September.

- Pushing pregnant mothers to hard manual labour at an advanced stage of pregnancy results in premature delivery (7-8 months after pregnancy) which may result in LBW (1800 gm to 2000 gm as against normal weight of 2500 gm), abortion and still birth.

- The following children were got weighed by me during visit:-
• Vanita Ramdas Shid, weight – 10.5 kg, date of birth – 15.11.2004 about 3.5 kg lower than normal weight for a girl of that age, shown as Gr. I in the growth monitoring register; the correct grading should be Gr. II).

• Puja Ram Shid, weight – 11.6 kg, date of birth – 5.6.2002 (about 5 kg lower than normal weight for a girl of that age, shown as Gr. II in the growth monitoring register; is a borderline case between Gr. II and Gr. III).

• Ganesh Tanaji Badade, weight – 9.4 kg and date of birth – 10.10.2005 (about 3 kg lower than normal weight for a boy of the same age, shown as Gr. I in the growth monitoring register; correct grading should be Gr. II).

• Krishna Madhukar Badade – weight 12.3 kg – date of birth – 25.1.2002 (about 7 kg lower than normal weight for a boy of that age, shown as Gr. II in the growth monitoring register; is a borderline case between Gr. II and Gr. III).

**Specific suggestions:**

• Even though some charts and posters relating to pregnant and lactating mothers have been displayed on the wall, the same are neither comprehensive nor arranged in a proper order. The following is the order in which charts and posters should be displayed:-

**First Cycle:**

First month after conception to 9th month (280 days to be precise), age of marriage, dangers of teenage pregnancy, PNDT Act, 1994 (came into force from 1996), ANC registration, health check ups to be undertaken and intervals thereof, precautions to be taken such as not climbing dongar heights, not crossing steep threshold levels (from one room to another), not doing hard manual labour, taking daily balanced diet which should be adequate, at appropriate intervals (at least 3 times a day) and with all the desired micro nutrients.

**Second Cycle:**

Delivery, likely complications during delivery, home vs. institutional delivery, postnatal care of the mother and the child, breast feeding, colostrum, understanding causes of neonatal (0-4 weeks) deaths and measures to prevent them, growth monitoring (height, weight, circumference of the forehead and armpit), how to do correct grading according to recorded weight and reflect it accurately in the register.

**Third Cycle:**

Stage of infancy - 4 weeks to 1 year, understanding causes of infant mortality, how to prevent them, supplementary nutrition at the 6th month, while allowing breast feeding
to continue up to 2 years, nutritional requirements of the body (importance of chemical compounds like iron, calcium, protein, vitamins and other minerals), scales of diet (RDA), how to make a balanced combination of nutritious diet on the basis of what is locally produced and locally easily available for consumption and which have got all or some of the micro-nutrients etc.

**Fourth Cycle:**

Stage of childhood - 1 year to 6 years, understanding causes of child mortality, how to prevent them, illustrating concepts of stunting and wasting, nutritional requirements of the body, scales of diet (RDA), illustrating various forms of malnutrition such as LBW, anaemia, Vitamin ‘A’ deficiency and IDD (iodine deficiency disorder).

**10.9.2007**

**Visit to Anjneri Sub-centre under PHC Amboli:**

**Redeeming features:**

- The ANM incharge of the sub-centre – Smt. Kate who is in charge of this sub centre since 1995 was found to be proactive and responsive.
- ANC registration is 100%; 124 pregnant women have been registered under ANC since April 2007.
- Between April, 2007 and the date of visit, 13 deliveries have been conducted. All the deliveries are safe except one which being complicated was referred to Triumbakeswar Rural Hospital. The transport allowance (Rs. 150/-) has been paid.
- In 12 cases the average weight of children recorded was 3 kg which is very good. There was only one case of LBW.
- In one case there has been a progression from Gr. III to Gr. II (name of the child is Bharabai Bachhu Khandu).
- No other case of Gr. III or Gr. IV was found in the 2 villages and 3 hamlets under the ANM’s jurisdiction.
- MMR is negative.
- The ANM has a moped, is sufficiently mobile and is able to cover all villages and hamlets once a month in the minimum. The area is small, compact and manageable.
- The stock of medicines is adequate.
- Arrangements for examination of patients and delivery are satisfactory.
Grey Areas:

- Size of the family is large (5+).
- Despite advice/counselling at the time of home visit, women continue to do strenuous work at an advanced stage of pregnancy which results either in abortion or still birth or birth of children with low weight (LBW).
- Village Health and Sanitation Committee has been constituted and has met 4 times but is yet to create any perceptible impact.

Suggestions:

- The same charts and posters corresponding to the 4 cycles in the life of a child from 0-6 years as have been suggested for display at the AWC at page 125-126 should also be displayed at every sub-centre in an organized and systematic manner.
- Every ANM incharge of a sub-centre should be given a good health diary where all basic informations and instructions about health, food and nutrition should be provided by the PHC. The ANM should record her impressions in the diary at the end of her visit to every household, the gist of the advice she had given to the mothers at the time of the first visit and should crosscheck the extent of compliance with the advice given at the time of the subsequent visit to the same household.

10.9.2007

Visit to Rural Hospital, Triumbakeswar:

Redeeming features:

- There has been no death of children in the hospital.
- The line of treatment is scientific and effective. A 4 year old child (Gr. IV) Sunita Mukund Chahare weighing 7 kg (much lower than the standard weight of 16 kg) was admitted to the hospital on 30.8.2007 and within a week there was a weight gain of 200 gm.
- In the paediatric ward life support systems are available to deal with all critical cases.
- MMR is negative.

Grey areas:

- The pace and progress of recovery could be much better if children could be allowed to remain in the hospital till the full course of treatment is over. This invariably does not happen. During 2006-07, 59 malnourished children in Gr. III and IV were admitted but only 2 fully recovered. In a number of cases mothers have been found to take away the children against medical advice. Large size of the family,
other children of the family who have been left behind and who are in need of care and attention, agricultural operations (including harvesting) and husbands not taking enough care of children who are left behind at home are some of the factors responsible for the scenario of LAMA (leaving against medical advice).

**Suggestions:**

- There is no law by which LAMA (leaving against medical advice) can be prevented. Oral persuasions do not work. Besides, the LAMA operations take place rather surreptitiously and often go unnoticed. The only way to deal with the situation is to demonstrate through audio-visual means to mothers the serious repercussions which may follow in the event of children being taken away by them against medical advice. Such repercussions when properly explained through audio visual means may produce the desired impact in the mother’s mind and hopefully the incidence of LAMA may come down.

**10.9.2007**

**Visit to Thanapada AWC:**

**Redeeming features:**

- The AWC has a departmental building constructed by the Zilla Parishad with a proper space (520 sq.ft.) to carry on all the activities. Lighting and ventilation in the building are adequate.
- The recipe for the SNP feeding programme has diversity (2 days khichdi, 2 days usal, 1 day lapsi and 1 day sweet rice with laddoo) which is liked by the mothers.
- Adequate stock of Protovita which is a combination of soyabien, wheat, sugar, cereals, pulses, vitamin premix, milk powder and ghee is available for distribution.
- The CDPO, ACDPO and Supervisor visit the AWC regularly.
- Their impressions are recorded in the Visitor’s book.
- The last such visit was on 8.9.2007.
- Weight of the children is taken every 15th day of the month and is reflected in the growth monitoring register. 95 out of 105 children surveyed have been weighed and the breakup is as under:-

<table>
<thead>
<tr>
<th>Grade</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>31</td>
</tr>
<tr>
<td>Gr. I</td>
<td>38</td>
</tr>
<tr>
<td>Gr. II</td>
<td>26</td>
</tr>
<tr>
<td>Gr. III</td>
<td>Nil</td>
</tr>
<tr>
<td>Gr. IV</td>
<td>Nil</td>
</tr>
</tbody>
</table>
Grey areas:

- The average attendance at the AWC was low (40 against 50).
- The average size of the family is large in the village where the AWC is situated.
- Women do not want to go in for tubectomy even after 4 children. They do not have the autonomy to take such a decision which is often influenced by men.
- A large number of adolescents or teenage girls become mothers before marriage and do not go in for checkups and eventually end up with abortions.
- In the absence of spacing even lactating mothers become pregnant without being aware of the threat to their life posed by such pregnancy.
- Inadequate rainfall, large scale unemployment (65%), low wages, less purchasing power and pervasive landlessness are responsible for the scenario of malnutrition.
- Amongst the malnourished children girls are more vulnerable than boys. This is reflective of the discriminatory treatment meted out to girls in a traditional rural society.

Suggestions:

- The suggestions with regard to charts and posters depicting the 4 cycles in the life of a child in 0-6 age group and the care and precaution which need to be taken in each cycle as indicated at page (113-114) should apply to all AWCs including this.
- In course of home visits, the AWW should make it a point to enquire according to the following checklist of points:-
  - size of the family; scope for having a planned parenthood;
  - number of deliveries and spacing; scope for reducing the number and increasing the spacing (minimum 3 years and no more delivery after 2 children);
  - all precautions and safeguards which need to be taken during pregnancy in terms of (a) work schedule (b) dietary schedule (c) ensuring that the diet has the desired micro nutrients, is balanced and adequate;
  - access to potable water, environmental hygiene and sanitation;
  - how many times food is cooked in the house;
  - how many times food is served to all members including children; higher frequency of serving food to children than adults;
  - extent of consumption of green leafy vegetables, fruits, milk, egg, fish etc.;
  - whether there is any malnourished child (particularly Gr. III and Gr. IV) at home whose case has never been referred to a PHC or RH or sub-hospital or civil hospital as the case may be;
- if so, such children should be arranged to be sent to PHC or RH or sub hospital or civil hospital, as the case may be;
- whether adequate preventive measures are being taken against malaria, other air borne and water born diseases;
- whether there is any early child marriage in the family;
- whether there is any addiction to narcotics, alcohol, gutka etc. and how the same needs to be thoroughly discouraged.

- The AWW should give proper counselling to all mothers on the above points at the time of home visit, should cross check the extent of compliance at the time of the subsequent visit and through repetitive counselling ensure that the desired impact has been created.

10.9.2007

Visit to Thanapada PHC:

Redeeming features:

- Both the LHVs (2) and ANMs(7) are in the middle age group, have been trained at the district level training centre for one week, are mobile and have a broad general and social awareness.
- The calendar of visits has been drawn up and in course of visits to villages according to the calendar (which is being generally adhered to except in a few contingencies which occur every now and then) have been meeting and counselling pregnant and lactating mothers.

Grey areas:

- Of the 2 sanctioned posts of MOs, one is vacant; this adversely affects the functioning of the PHC.
- There are 5 sub-centres, 20 villages and 54 padas. In other words, the jurisdiction of the PHC is rather large. While the distance from the PHC to the sub-centres is 20 kms, the same from the sub centres to the villages is 5 to 7 km on an average.
- For timely and effective coverage of all the villages and padas and the households located therein at least once a month the following points need to be borne in mind: -
  - management of time so that the LHVs and ANMs are able to cover atleast one village in a month;
- a checklist of points which should be given to them and be reflected in their diary so that they can make use of the same while visiting a village and households therein and interacting with the mothers.

- This by and large is not happening.

- The quality of counselling mothers leaves much to be desired as despite years of persuasive efforts and contacts the tribal mothers look up to quacks like Pujaris, Bhagats and Bhumkas for counselling and medication.

- The neonatal and infant mortality rates are quite high i.e. 47 per 1000 live births while children’s mortality rate is 50 per 1000.

- Pregnant women being pushed to work at an advanced stage of pregnancy results in LBW of the newborn; it also results in premature delivery, abortion and still births;

- There is acute scarcity of drinking water in the following padas which are located far away from the main village:-
  - Dolgad;
  - Dolohol;
  - Kakadpana

- New born children are not to be given any bath for one month. Violation of this principle results in hypothermia while lack of continuous and exclusive breast feeding upto 6 months results in hypoglacemia.

- Children get drenched, their body temperature does not get maintained at 36.5º C and this results in bronco-pneumonia.

Suggestions:

- In a PHC in addition to ANMs and LHVs, we have multipurpose health workers. The total jurisdiction comprising of villages and hamlets may be divided among these functionaries and a calendar of visits may be drawn up in such a manner that one functionary is able to go to the same village and visit the same household for follow up as was visited for the first time. The objective of the follow up is to ensure that the advice/counsel given at the time of first visit is being complied with/acted upon at the time of subsequent visit. Such a strategy will lead to total familiarization of the health functionaries with the households visited and will also result in building up of a rapport and bonhomie between them.

- For every such visit to be meaningful as also for proper management of time an illustrative checklist of simple indicators may be drawn up and given to the functionaries for adoption after a brief orientation. The indicators could be:-
First step:

Drop in at the AWC, meet the AWW and AWH, talk to the pregnant/lactating mothers who have assembled there, see the quality of food prepared as a part of the supplementary nutrition programme, discuss with the AWW about immunization programme and checkup of health of children by the MO deputed from the PHC, status of nutrition of children, manner in which such nutritional status is being monitored, need for referring case of any child suffering from Gr. III or Gr. IV malnutrition to PHC, RH or civil hospital, time being the essence no delay in making such reference and getting the child admitted and treated, maintaining a follow up even after discharge of the child from the PHC/hospital.

Second step:

Undertake visit to households, meet pregnant and lactating mothers, enquire about their health, whether they have gone to the sub-centre/PHC for check up after ANC registration on the 3rd, 5th, 7th and 9th months, whether any complication has been detected and if so whether such cases have been referred to a hospital; whether tribal women are getting the benefits under Matrutwa Anudan Yojana and Janani Surakshya Yojana etc. in time and without any hassles.

Third step:

Play a proactive role about

- discouraging pregnancies at the lactating stage;
- observance of spacing;
- going in for tubectomy after 2 children;
- advising the householder to earmark major portion of earnings to buy foodgrains, fruits, vegetables, milk, egg and fish, adequate feeding and feeding at appropriate intervals etc.

Fourth step:

Make a friendly entry to the household and observe the following:-

- quantity of foodgrains stored, conditions under/which stored (heat, humidity, moisture etc.), how long this will last and manner of storing (whether on the bare floor, whether exposed to pest attack);
- how many times food is cooked;
- how many times children are fed and in what quantity;
- whether the nutritive value measured by 700 kilo calorie for children (0-6 age group) at home is being fulfilled;
- source of drinking water, whether water is being boiled;
- whether sufficient water is available for preparing food, drinking and cleaning utensils and clothes;
- whether sufficient fuel is available to cook food and boil water;
- conservancy facility (in shape of home toilet);
- whether the family members take bath regularly;
- whether norms of personal and environmental hygiene are being observed;
- whether they have a mosquito net and whether the same is being used;
- whether prophylactic measures are being taken against malaria.

10.9.2007

Visit to Nutrition Rehabilitation Centre (NRC), Thanapada:

This is a new concept in which unlike in an anganwadi or sub-centre mothers who bring their Gr. III and Gr. IV malnourished children for treatment remain with the children till the latter have been effectively and fully treated and brought back to normal. NRC represents a strong institutional approach to solve the problem of malnutrition. This approach has all the freedom and flexibility as also the conceptual soundness to deal with the problem. It also represents an integrated and intensified approach to fight malnutrition.

Visit to NRC, Thanapada (established on 15.8.2007) was, therefore, a refreshing experience. The centre is being managed by an NGO called Bachan with Dr. Shakuntala Mankar as the coordinator and Nirmala Gavit as the caretaker. Dr. Mankar had worked with Dr. Abhay Bhang, an expert in nutrition staying and working at Gadchiroli. She is at present managing 2 such centres at Thanapada and Harsul. In all 20 malnourished children in Gr. III and Gr. IV have been admitted to the Centre which is functioning in a hired premises on payment of Rs. 2000/- as rent per month. All accessories (cushions, blankets, quilts, durries, children’s cradle) have been provided to make the stay of mothers with children normal and comfortable. The walls of the centre are full of pictures on a host of themes relevant to both mothers and children (safe delivery, breast feeding, supplementary nutrition, personal and environmental hygiene and sanitation, importance of pure air and potable water). They also reflect a high level of imagination and creativity. The professionalism and sobriety displayed by both the coordinator as well as the caretaker in talking to mothers is bound to motivate the mothers to stay in the centre unlike the experience of PHCs and hospitals where mothers have been reported to be taking away the children before the full course of treatment is complete.
In course of my visit to the centre I met the following children along with their mothers:-

1. **Pratiksyaa Vishnu Bhooye**  
   Age 2 years  
   Grade III malnourished  
   Name of the Mother - Sushila Vishnu Bhooye  
   Size of the family – 10 members.

2. **Priyanka Savliram Mokashi**  
   Age - not known  
   Gr. III malnourished  
   Name of the Mother – Tara Savliram Mokashi  
   Size of the family – 8 members.

3. **Jyoti Dhavlu Ghatal**  
   Age – 2 years  
   Gr. III malnourished  
   Name of the Mother – Chimni Dhavlu Ghatal  
   Size of the family – 6 members.

4. **Deepali Gunjali Bangal**  
   Age – 2 years  
   Gr. III malnourished  
   Name of the mother – Kakadi Gunjabi Bangal  
   Size of the family – 10 members.

5. **Dharmesh Pandu Tumble**  
   Age – 2 years  
   Gr. III malnourished  
   Name of the Mother – Lata Pandu Tumble  
   Size of the family – 9 members.

6. **Onkar Somnath Bhonde**  
   Age – not known  
   Gr. III malnourished  
   Name of the mother – Mangal Somnath Bhonde  
   Size of the family – not known.

7. **Dashrath Gotarene**  
   Age - 1½ years  
   Name of the mother – Sushila Gokarne  
   Size of the family – 7 members.
8. **Vinod Laksmi Baraf**
   Age – 2 years
   Gr. III malnourished
   Name of the mother – Lakshmi Baraf
   Size of the family – 9 members.

   There was one Gr. IV malnourished child but he was away with his mother to participate in Pola festival (festival dedicated to bullocks) which is a premier festival of Nashik and hence no interaction with the mother was possible.

   What distinguishes the NRC most from PHCs and hospitals (where malnourished children are also admitted and treated) is the observance of the basic principle that dietary pattern for such malnourished children has (a) to conform to RDA prescribed by the ICMR (b) it has to be at frequent intervals and (c) it has to be sumptuous and nutritive. The dietary pattern at NRC, Thanapada is in full conformity of this principle and comprises of:-

<table>
<thead>
<tr>
<th>Time</th>
<th>Meal</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00 hrs.</td>
<td>boiled eggs</td>
</tr>
<tr>
<td>8.00 hrs.</td>
<td>100 ml of milk (half glass)</td>
</tr>
<tr>
<td>10.00 hrs.</td>
<td>Khichdi (made out of rice, mung dal and other accompaniments).</td>
</tr>
<tr>
<td>12 Noon</td>
<td>Shevga Thalipith</td>
</tr>
<tr>
<td>1400 hrs</td>
<td>Lapsi</td>
</tr>
<tr>
<td>1600 hrs</td>
<td>one banana</td>
</tr>
<tr>
<td>1800 hrs</td>
<td>boiled potato</td>
</tr>
<tr>
<td>2000 hrs</td>
<td>meals with mother</td>
</tr>
</tbody>
</table>

   Visited the kitchen and surveyed the arrangements for preparation of food as also the variety, taste and quality of food. What impressed me most, apart from the immaculately neat and clean environment obtaining in the kitchen was the total dedication and sincerity with which food was being prepared and served by the kitchen staff of the NRC. This was the best motivation for the mothers to stay with the children at the NRC.

   **10.9.2007**

   **Visit to Nutrition Rehabilitation Centre (NRC) Harsul:**

   This NRC is being run by the same NGO Vachan with the same coordinator but a different caretaker (Aruna Shardul). In all 16 children have been admitted. The children are from Kokana, Mahadeo Koli from Harsul and Worli and Katkadi from Thanapada.
The day in the centre begins with a song from the caretaker which is sung in chorus by all mothers. As in the earlier centre (Thanapada) the walls of this NRC are interspersed with a number of charts and posters as also hand drawn sketches which are imaginative, creative and meaningful. An interaction with the mothers brought out the following:-

- Average size of the family ranges from 5 to 6 (in some it ranges between 7 to 8).
- The average age of marriage ranges between 15 to 16.
- The general response about girl children going to school was positive. Girls go either to Ashram school or to Zilla Parishad School. It was encouraging to know that one mother was having a daughter of 15 years who was studying in 10th Standard, the second daughter was in 6th Standard and third one was of 6 months. Proper spacing has been observed.
- Mothers were having children between two to four and no more.
- Some of the mothers can also read and write, understand and internalize the messages contained in charts and posters.
- The children who are not ill but only malnourished would stay in the centre till they are brought back from Gr. IV and Gr. III to Gr. II.
- There have been cases only of progression and no regression.
- A dietician comes from the civil hospital, Nashik and trains the cook and the supervisor.
- As in the case of earlier NRC (Thanapada) food is being served to children 8 times a day at appropriate intervals (i.e. 2 hours) while mothers are being fed 3 times. The food comprises of naglipaste, laddu (made of ragi), rice, dal, kanjee, usal, khichdi, chivda etc. The food served contains all the micro-nutrients necessary for nutrition.
- Water samples are being sent regularly for testing to make sure that it is potable and is free from chemical and bacteriological impurities.

10.9.2007

Visit to Nutrition Rheabilitation Centre, Karanjali:

This is being run by another NGO called Nashik Social Services Society with Smt. Nirmala Keshav Gavli as caretaker. The centre was opened on 15.8.2007. In all 18 mothers have been admitted with children. The accommodation in the centre comprises of 4 rooms namely one office room, 2 rooms for stay of mothers with children (one out of this is meant exclusively for severely malnourished children who are in a critical condition) and one room for kitchen-cum-store. As a matter of fact, 2 children who are severely malnourished
and also critically ill were lying in a room (one was kept in a cradle made of cloth while the second was kept in a wooden cradle). I perused the records of the following children who were staying in the centre with their mothers:

1. **Tara Ambadas Bhoye**, daughter of Janabai, date of birth 26.5.2006, Gr. IV weight – 4kg.

The DHO who was accompanying me was advised to refer all the four cases which were more severe than the rest to the RH or civil hospital, as may be proximate for their immediate admission and treatment.

- Unlike the first 2 NRCs where food was being served 8 times to children, it was served only 4 times in Karanjali and the dietary pattern was also quite different. Since, apart from regular care and attention, diet holds the key to recovery and rehabilitation of children (Gr. III and Gr. IV malnourished), it is desirable that a set of uniform guidelines are adopted and implemented for all NRCs. The DHO was advised to collect, compile and analyse the information pertaining to dietary pattern and number of times when food is being served and issue a set of uniform guidelines on both.

### 10.9.2007

**Visit to Karanjali PHC:**

**Redeeming features:**

- All sanctioned posts (14) are in position.
- All the PHC staff (LHV, ANM, MPW) have been trained at the district headquarters.
- A monthly calendar of visits has been drawn up for ANM, LHV and MPW. According to this calendar, they are required to visit 5 sub-centres, 26 villages and 12 padas.
- The calendar has been so drawn up that the health functionaries (12) attached to the PHC are able to visit all villages and padas at least once every month.
- The ANM and LHV form a unit to visit the households in a village/pada.
- Starting with 8 deliveries in 2002-2003, the number of institutional deliveries has progressively gone up to 137 in 2006-07. This indicates a welcome shift from home delivery approach and practice to institutional delivery approach and practice. The year wise breakup of deliveries during the last 5 years which shows a progressive
and encouraging increase in institutional deliveries may be stated as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>08</td>
</tr>
<tr>
<td>2003-2004</td>
<td>20</td>
</tr>
<tr>
<td>2004-2005</td>
<td>46</td>
</tr>
<tr>
<td>2005-2006</td>
<td>50</td>
</tr>
<tr>
<td>2006-2007</td>
<td>137</td>
</tr>
</tbody>
</table>

- Immunization Programmes are being carried out as per schedule and the percentage of coverage in pulse polio ranges between 98 to 100.
- The disbursements to pregnant women under the Matrutwa Anudan Yojana and Janani Surakshya Yojana are as per schedule and there has not been a single complaint of delayed disbursement.
- The out-turn of patients at the OPD of the PHC ranges between 120 to 140. All of them are attended to within the scheduled OPD working hours i.e. 8 AM to 12 Noon and none is left out. This is indicative of both the efficiency as well as the popularity of the PHC.
- The Rugna Kalyan Samiti has been formed and registered and the first meeting was to be held last month but had to be postponed due to non availability of the Chairperson.
- The structure for monitoring and overseeing the activities at the PHC level has been well laid down such as:-
  - there are 2 meetings which are held at the district level;
  - the first one relates to medical officers of all PHCs and are taken by the DHO in which the latter undertakes a thorough review of the activities and tasks mandated for the PHC;
  - another monthly meeting is taken by the Civil Surgeon which is attended by Medical Superintendents of all Rural hospitals (28), District Malaria Officer, Distt. T.B. Officer, Taluka Health Officer and District Health Officer. This meeting makes a thorough review of all health programmes in the district (including immunization and nutrition) both from the physical and financial angle. The review takes place according to indicators which are drawn up by the DHO and Civil Surgeon respectively.
  - There is yet another Committee under the Chairmanship of Civil Surgeon with DHO, Pathologists, Paediatrician, Gynaecologist, Anaesthetist and Physician as members.
All reports on death which go from the PHC are discussed in the meetings of the Committee (it is eventually the responsibility of the Civil Surgeon to accept the report of the Medical Officer investigating into and reporting the cause of death). After discussion responsibility is fixed if it is found that there is any culpable negligence. The basic objective of the entire exercise is to ensure that such deaths do not recur in future, that there is total transparency (in such death audits) and that the best possible care and attention is given to the ailing children with a view to ensuring their recovery and preventing death.

**Grey areas:**

- The mortality rates are rather high such as:-
  - neonatal – 26.7 per 1000
  - IMR - 33.5 per 1000
  - Child Mortality Rate – 42 per 1000
  - Maternal Mortality Rate – 150 out of 100,000

- The causes of such high mortality were attributed to:
  - hypertension
  - convulsion
  - eclemensia
  - high blood pressure
  - haemorrhage

- The ANM, LHV and MPW who are undertaking field visits are clueless about the order of priority which they need to follow in covering certain institutions and households and taking a stock of certain activities such as immunization, conducting safe delivery, providing nutritious food to children at appropriate intervals, access to potable water, access to domestic toilet, kitchen garden scheme for tribal households for growing fruits and vegetables etc. They need to adopt a step by step approach and draw the order of priorities in such a manner that given the constrains of mobility, outreach and time management they should be in a position to cover the maximum possible ground and provide maximum benefit to the maximum number.

**11.9.2007 (8 AM to 9 AM)**

**Visit to Civil Hospital, Nashik:**

**General:**

I visited Civil Hospital, Nashik for about an hour in the morning, met the Civil
Surgeon, all medical officers and para medical staff and had in particular a thorough review of the status of health of malnourished children who have been admitted to the paediatric ward of the hospital as also who are under treatment in NICU. There are 30 beds in the paediatric ward and 10 beds in the NICU. Some of the children who have been admitted are from outside Nashik district (Thane, Nagar, Akola etc.) while most of the cases have been referred by PHCs, Rural and Sub-Divisional Hospitals and private hospitals within Nashik district. Some cases within Nashik have been brought by the anganwadi workers and some by the mothers themselves. While the normal duration of stay should be 10 days, there are cases where on account of family problems (other children in the family to be looked after, farming operations etc.) mothers prefer to take away the children against medical advice (LAMA) even before the full course of treatment has been completed. In such cases the average duration comes down to 4 to 5 days.

Redeeming features:

- In all cases of treatment of acute illness arising out of ARDS, Pneumonia, bronc-pneumonia etc. the response of ailing malnourished children has been encouraging.
- The malnourished child under treatment is reported to gain weight @ 10 to 20 gms per day. This is encouraging.
- Its only such cases where haemoglobin count in blood has been very low (5 to 7 mg%) the problem is being addressed 5 to 7 days after admission and treatment and that is the correct course of action (it normally takes about 3 months for the low haemoglobin count to be normal).

Grey areas:

- Apart from poor, ignorant and illiterate mothers taking away the children before the full course of treatment there are a few other grey areas such as:-
  - the response to treatment in cerebral palsy with PEM is time consuming;
  - multiple congenital anomalies are equally difficult to treat and time consuming;
  - in all 57 cases involving congenital cardio-vascular complications have been referred to Sirdi Sansthan hospital while 32 similar cases have been referred to KEM hospital, Mumbai. The duration of treatment in all these cases is long and it is the responsibility of the civil hospital to maintain constant liaison and coordination with the referral hospital(s) to get uptodate status reports on the health of the children whose cases have been referred and keep the records relating to treatment of children uptodate. Such liaison and coordination is fraught with difficulties but is extremely desirable.
Review of cases of a few malnourished children:

1. Lalita Balu Kadu Kurnoli, Tal Igatpuri age 2½ years admitted on 5.9.2007 with a weight of 4.6 kg. This is a case of cerebral palsy with PEM but contrary to expectations the malnourished child has responded well to the treatment and has gained 200 gms of weight in barely a week’s time.

2. Ujwala Bhika Girnare, age 1½ years date of admission 6.9.2007 with a weight of 5.6 kg. The malnourished child suffering from PEM (LBW) has responded well to the treatment and gained about 100 gms in barely 5 days.

3. Mangala Prahlad Gangurde, Kharda Tal Deola aged 2½ years. This is a case of PEM (LBW) with a weight of 5.6 kg and a low haemoglobin count of 7.5 mg%. Barely within a week since admission the weight has come up to 6.5 kg or a gain of 90 gm. The more wearisome aspect about this case is that Mangala’s mother who is also anaemic is having 3 children at the following intervals:-
   - first child 4 years
   - second child 2½ years
   - third child 9 months

   In other words, there is no spacing as far as second and third children are concerned which has added to the complexity of the situation.

4. Rahul Shankar Bhoye, Savalbari age 1 year. This is the case of a prematurely born child with PEM (LBW) i.e. a low weight of 4.5 kg on the date of admission. The mother is 22 years old and is anaemic. However, the child has responded well to the treatment and has gained a weight of 200 gms in 10 days.

5. Sukdeo Gopinath Pardhi, age 10 months, Kochargaon. Tal Dindori. This is yet another case of PEM (LBW) with a low weight of 5.1 kg in the 10th month and very low haemoglobin count of 6.8 mg%. The child has responded well to the treatment and has gained 400 gm in 10 days.

6. Yogesh Prahlad Gangurde, Dixi, Tal, Niphad age 2 years with a low weight of 5.1 kg and 3.05 mg% low haemoglobin count on the date of admission (8.9.2007). The child is a victim of acute anaemia and requires prolonged treatment for bringing haemoglobin count to normal levels which may take several months.

What impressed me most after visiting the Civil Hospital, Nashik was the sincerity and devotion of the team of paediatricians attending the malnourished children on the one hand and the professionalism and commitment of the dietician – Ms. S.A. Patki. Her imagination, meticulous care and attention to balanced diet for malnourished children and
sensitive handling of cases of malnourished children are evident from the following couplet which she has composed in Marathi and displayed at the entrance wall of the paediatric ward (original marathi translated to English:

‘Supplementary feeding will increase the strength of children

From 5\textsuperscript{th} month give them fruit juice so that they will know all tastes

Green and leafy vegetables, tomato coloured soup will boost their health.

Rice and dal, water, rava and ragi banji (porridge) are the nectar of health.

Massed fruits, matlent, sattu atta and all other forms of solid food will inculcate in them habit to eat.

Chapattis, dal, rice, lemon, home made ghee, full meal with give them health, energy and develop their personality’.

S.A. Patki, Dietician

11.9.2007

Visit to Khatwad, Tal Dindori

Review of one time foodgrain distribution scheme:

Salient features of the new scheme:

• Beneficiaries of PDS will get their quota of foodgrains of three, six and twelve months directly at their doorsteps instead of on monthly basis (as is the current practice).

• Genuine needs of the consumers are taken into account and ration card holders are asked in the first instance to decide their requirement of foodgrains in advance.

• The consumers are thereafter asked to be in readiness to pay for the required amount of foodgrains.

• On a date fixed by the Tahasildar the amount collected by the consumers is deposited with the supply officer/village Talathi and receipt given to the consumers.

• The amount collected for the entire village is deposited in the treasury under a proper budget head.

• Place and date are fixed for distribution of foodgrains and foodgrains are distributed to the ration card holders before the villagers and representatives of the people to ensure transparency in distribution.
• Foodgrains are distributed in the form of standardized sacks of 50 kg each according to the following scales (for 3 months):

  o Annapurna - 30 kgs (15 kgs rice and 15 kgs wheat) free of cost.
  o Antyoday - 100 kgs (50 kgs rice and 50 kgs wheat) for Rs. 250/-. 
  o BPL - 100 kgs (50 kgs rice and 50 kgs wheat) for Rs. 550/-. 
  o APL - 100 kgs (50 kgs rice and 50 kgs wheat) for Rs. 850/-. 

• Initially it has been introduced as a pilot scheme in 3 talukas of Nashik namely Surgana (tribal), Dindori (tribal) and Niphad (non tribal).

• The primary purpose of visit to Khatwad in Dindori Taluk was to interact with the people and ascertain their reaction to the scheme. The interaction was backed by a visit to 2 tribal households. The overall assessment and outcome thereof is as under:--
  - the scheme was implemented in Khatwad in June, 2007; 
  - the beneficiaries welcome the scheme as (a) it caters to their needs (b) they are assured of direct food grain supply at their doorsteps without any intermediary (c) the scheme is meant to eliminate blackmarketing of foodgrains (the fair price shop dealer used to have the offtake of rice and wheat according to the number of cardholders in a village. The actual number of people who lift their allotted quota may be much less than the number of cardholders as some cardholders might migrate and some may be incapacitated or taken ill. The dealer used to dispose off the foodgrains which are not lifted in the black market. Since the cardholders will have to deposit the money first before collecting the foodgrains, there will be no scope or occasion for black marketing in PDS food grains) and (d) it promotes thrift in as much the money which was being spent on liquor is now being spent in buying foodgrains.

• Few other interesting aspects came out in course of the interaction:-

• cultivators and agricultural labourers go out for work after a morning cup of tea but without any breakfast. The mid day meal comprises of bhakri roti and sukha bhaji while the dinner comprises of rice, dal, baigan ka bharta or plain bhaji. The food is not balanced; it comprises mostly of carbohydrates, starch and some oil (fat) but very little protein, iron, calcium etc.;
people are mostly vegetarians and do not eat fish or egg nor any substitute thereof (mushroom and soyabin). They would prefer to eat bajri and jower (Sholapuri) but the same is not grown while the market price is Rs. 11/- and Rs. 15/- per kg respectively;

- Agricultural minimum wage is Rs. 50/- for men and Rs. 30/- to Rs. 35/- for women in time rate. In piece rate and beyond 8 hours of work the wages may, however, go up to Rs. 100/- to Rs. 150/-;

- The size of the family ranges from 5 to 6 members;

- The earnings, therefore, are not adequate in as much as in addition to bulk purchase of foodgrains, a number of non-food items (edible oil, soap, salt, hair oil, groundnut) are required to be purchased from the local kirana shop and often the cost exceeds total earnings.

11.9.2007

Visit to anganwadi centre at Khatwad:

Grey areas:

- The AWW – Ms. Pushpa Suresh Jadhav has not yet undergone either the induction or the refresher training.

- AWC does not have its own building but is functioning in a GP building.

- The attendance is barely 50% (only 25 children were present as against the normal strength of 50). The reasons assigned for low attendance are (a) children run away at the sight of vehicles (b) they do so thinking that people have come for immunization (c) there are ceremonial festivities at home or in the village.

- This is disquieting as pre-primary and early childhood education which is one of the components of the AWC programmes is supposed to inculcate in children freedom from Psychosis of fear.

- Five children were weighed and they were all underweight and malnourished. The children are:-

  - **Yogesh Malewar** – date of birth - 10.10.2003 – weight 11.5 kg (5 kg lower than normal weight);

  - **Akshay Khrjul** – date of birth - 29.5.2002 – weight 12.8 kg (6 kg lower than normal weight);

  - **Ajay Sukdeo Khrjul** – date of birth - 11.2.2003 – weight 11.2 kg (6 kg lower than normal weight);
- Yogesh Dhyaneswar Jadhav – date of birth - 4.1.2004 – weight 11.7 kg (4 kg lower than normal weight).
- Rocky Dilip Gave – date of birth 9.5.2003 – weight 13.9 kg (4 kg lower than normal weight).

- The grade of malnutrition in co-relation with weight has, however, not been correctly reflected in the growth monitoring register.
- The dietary pattern at home (as revealed in course of interaction with a few mothers) smacks of the same traditional diet (dal, chawal, bhaji) as in the main village and elsewhere.
- Awareness of nutrition, malnutrition, undernutrition and micronutrients which is so essential to make a balanced food package is sadly lacking in most of the mothers reinforcing the need for intensive mother’s education.

11.9.2007
Visit to AWC, Ghagarbari Tal Surgana:

Grey areas:

- With a 10’ x 10’ space and roof made of asbestos sheets, the AWC suffers from (a) overcrowding and congestion (b) lack of adequate lighting and ventilation and (c) suffocating environment.
- AWC does not have its own building but is functioning in a building constructed in 80s from out of NREP funds. No proper planning seems to have been done before locating the AWC in this ‘dark, narrow and empty cell’.
- Not surprisingly, therefore, slightly above 50% of the normal attendance in an AWC was found (26 children against 50).
- The timing of the AWC i.e. 9.30 AM to 2.30 PM was equally inappropriate. It was extremely hot and humid at the time of visit (12 Noon) (which by 2 PM would be at its peak) and the children were found to be feeling extremely uncomfortable.
- Eight children were weighed and all of them were found to be underweight and malnourished as would be evident from the following:–

- Jayashree Pandharinath Tungar – Date of birth - 13.10.2002 – weight 11.2 kg (5 kg lower than the normal weight);
- Sonali Govinda Gaikwad – Date of birth – 25.1.2004 – weight 9.5 kg (6 kg lower than the normal weight);
- **Geeta Devidas Shelke** – Date of birth – 11.8.2003, weight 11.8 kg; (4.2 kg lower than the normal weight);
- **Manisha Sakharam Gaikwad** – Date of birth – 17.11.2001, weight 15 kg (3 kg lower than the normal weight);
- **Mangesh Gopal Gaikwad** – Date of birth – 7.8.2003 – weight – 11.2 kg (4.8 kg lower than the normal weight);
- **Reshma Kailash Gaikwad** – Date of birth – 7.5.2004 weight – 9.9 kg (5 kg lower than the normal weight);
- **Abhijeet Sanjay Gawale** – Date of birth 23.9.2005 – weight 9.8 kg (2.5 kg lower than the normal weight);
- **Dattee Davidas Bhoye** – Date of birth – 2.1.2005 – weight 11.3 kg (2.5 kg lower than the normal weight).

- Such low weight was not intelligible considering the fact that a SHG was implementing the SNP which both in terms of quantity and quality was according to established norms and scales. This could possibly be attributed to the low kilo calorie food of reduced frequency being served to children at home.

- There were 4 recipes used according to a prescribed schedule in a week. It was Khichdi on Monday and Thursday, Usal on Tuesday and Friday, Lapsi on Wednesday and sweet rice on Saturday.

- The cooked food was distributed twice a day for normal children and 4 times for Gr. III and Gr. IV malnourished children.

- Mothers appeared to be concerned about the failing health and malnutrition of their children but had no clue as to how to address the problem in a scenario of unemployment/underemployment, limited earnings and limited access to foodgrains, potable water and so on.

- The environment inside the AWC is dull, dreary and unlively. Some change would have come if the AWW would have taken pains to introduce a few avenues of recreation for children and their mothers through dance, drama and music. This as a matter of fact was one of the suggestions of a pregnant mother – Rohni Gawali who was present at the AWC at the time of my visit. The CDPO, Supervisor and AWW should in right earnest implement this simple and rather innocuous but extremely useful suggestion.
11.9.2007

Visit to and interaction with villagers of Ghagarbari:

- They were strongly opposed to the scheme of one time supply of food grains as has been introduced in the 3 talukas of the district since June, 2007 on account of the following reasons:-
  - They cannot afford the luxury of buying the foodgrains for 3 months in advance (not to speak of 6 months or 1 year) as they do not have any assured employment and assured earnings.
  - Most of the able bodied adults are without any job either in farm or non-farm sectors and, therefore, do not have the means to buy food for 3 months.

- There is a dongar adjoining this village where afforestation during the rainy season as now could be a major source of employment but this has not been tried out. The CEO, ZP Nashik was advised to organize this through DFO, Afforestation.

- Additionally, it was represented by the villagers that (a) they have no access to potable water (b) they have paid the charges towards the hand pump but the hand pump has not been installed. The CEO, ZP was advised to ensure that the hand pump was installed without any further delay.

11.9.2007

Visit to PHC, Borgaon Tal Surguna:

- The PHC consists of 5 sub-centres, 20 villages and 16 padas. It has 2 LHVs (one regular and another on contract basis), 5 ANMs, one Health Assistant (male), 5 MPWs and 16 pada workers. There are no vacancies.

- During the current year till date cases of total number of 75 children in Gr. III and Gr. IV have been referred to the PHC from AWCs, Sub-Centres and NRCs. All these cases (except 11 who were admitted to Civil Hospital) have received treatment in the PHC.

- Quite a number of children have progressed from Gr. III to Gr. II. They gained weight @ 10 gm to 20 gm per day but the momentum could not be sustained and the weight came down as there was decline in the scales of dietary pattern as also the quality of food at home and there was no follow up of the instructions given at the PHC. It was reported that in 15 to 20% of children the weight has come down.

- In 2005-06 there was death of one mother who was the mother of eleven children and was highly anaemic.
• The number of institutional deliveries is small (20 in 2006-07 and 38 in 2007-08 till now). There is need for boosting this by offering incentives to all pregnant women (by providing transport from the place of stay to the nearest PHC).

• The average earnings of a woman worker is Rs. 35/- to Rs. 40/- and that for a male worker is Rs. 50/-. It is difficult to ensure balanced and nutritious diet with such low earnings.

• The Rugna Kalyan Samiti has been formed and registered but no meetings have taken place as yet. The first meeting is scheduled to be held on 18.9.2007.

• The ANM and LHV visit villages/hamlets according to a calendar of visits but get an opportunity to talk to the mothers in the households only on such days when a pulse polio campaign is on or it’s a Tuesday when mothers are at home. Otherwise it becomes difficult as even pregnant mothers work in the field till the last moment. They get ready to come to PHC for delivery only at the last moment.

• The PHC incharge stated that he has disbursed Rs. 6600/- to pregnant mothers registered for ANC under Matrutwa Anudan Yojana but mothers always prefer home delivery to institutional delivery and the PHC staff (ANMs and LHVs) have not succeeded in carrying conviction to mothers that institutional delivery is safe, is in their interest as also in the interest of their children.

11.9.2007

Visit to Rural Hospital, Kalwan:

• This is an old hospital but the building is in a good shape.

• Most of the specialists are in position.

• The out-turn of patients is heavy and ranges between 40,000 to 60,000 annually. The patients come from Kalwan, Deoda, Satana, Dindori and parts of Surguna.

• The hospital received Dr. Anandibai Joshi (she was the first medical graduate in Maharashtra) award for outstanding performance.

• The paediatrician of the hospital has been transferred and relieved and in his place a Medical Officer without any specialization on contract basis has been appointed.

• Visited the Paediatric ward. One malnourished girl child Sima Dipak Jadhav by name weighing 3.75 kg (as against a normal weight of 8 kg) has been admitted on 10.9.2007. There is a gap of 4.25 kg in this case which is in Gr. IV malnutrition. Normally with the best of care and attention the child can gain weight @ 10 gm to 20 gm per day and at this rate it will take several months for a malnourished child to become normal. Besides, invariably all such children are being admitted to the
hospital rather belatedly whereas timely admission would be of great help.

- As I was leaving one Shri Karbhari Aher turned up and made the following complaints:-
  - 60% of the medicines as per requirement is not available in the stock of the hospital.
  - Patients are being forced to purchase medicines from outside.

- It was clarified by the Civil Surgeon, Nashik that all Medical Superintendents of rural hospitals have been placed with a lumpsum amount of Rs. 10,000/- to buy medicines in emergencies. There should, therefore, be no occasion for any shortage of medicines (including saline and injectable items).

- The Medical Superintendent was advised to look into the veracity of the complaint. He was also advised to (a) put up a grievance box outside the hospital (b) a board stating that grievances, if any, from the patients and the public that can be put in the box and (c) fix a day in a week to listen to public grievances and redress them.

**Meeting with Divisional Commissioner, Nashik – Dr. Sanjay Chahange:**

The Divisional Commissioner himself being a medical doctor has taken a number of initiatives to bring about qualitative change and improvement in the functioning of ICDS as well as Public Health Institutions (hospitals, PHCs and sub centres). To illustrate, one-such initiative relates to maintenance of case records at the PHC and hospitals in respect of every child admitted (including Gr. III and Gr. IV malnourished children). The case record contains the following entries:-

- name of the child;
- date of birth;
- weight at the time of birth;
- date of admission;
- weight at the time of admission;
- immunization history;
- vitamin dosage;
- deworming schedule;
- case profile;
- birth history;
- road blocks for growth;
During a brief interaction with him at his official residence he made the following observations:-

- the members of the tribal community have their own cultural traits and characteristics, social peculiarities and complexities and no tailor made solution to the problem of malnutrition can be found;

- communicating with the members of the community in their own dialect is a major problem. A lot of homework will have to be done before approaching a tribal household, talking to the mothers who matter most in terms of proper care and attention to malnourished children, carrying conviction to them, watching and recording their reaction carefully before plunging into decisive action.

- One of the surest ways of carrying conviction to them is to (a) strike a rapport and bonhomie with them (b) convincing them that they and their children matter to the society and the nation and we cannot afford to lose them; (c) we are at their doorsteps to promote their health and well being and (d) bringing out tellingly through pictures and audio-visual means the difference between a normal and healthy child and a malnourished child and how important it is for a child to be healthy, strong and active, to acquire cognitive skills and to be a productive, responsible and responsive member of the civil society as the child crosses the threshold of childhood and enters adulthood.

Meeting with the Tribal Development Commissioner, Maharashtra – Shri Rajesh Kumar:

In course of this meeting and interaction at the Circuit House on 11.9.2007 (evening) a number of useful points were made by the Tribal Commissioner such as:-

- the solution to the problem of malnutrition will have to be found essentially at home and not through AWCs, sub-centres or PHCs/hospitals;

- for this a number of steps will have to be taken and as a first step certain basic entitlements will have to be fulfilled. These are:-
  - access to land (both homestead and agricultural);
  - access to avenues of stable and durable employment;
  - access to living wage/income/earning;
- access to foodgrains (through PDS and open market);
- access to potable water;
- access to environmental sanitation;
- access to skills (life skills, communication skills, survival skills, vocational skills, entrepreneurial and managerial skills) credit, technology and market;
- access to a remunerative price for labour and for the product of labour;

- In the second step we need to evolve a process of social communication directed towards
- removal of mindsets;
- removal of fads, taboos, obscurantist ideas and practices;
- developing a rational and scientific temper which places reliance on -
  - right to health is a matter of fundamental human right; it is an integral part of right to life as guaranteed under Article 21 of the Constitution;
  - health, food and nutrition go together;
  - right to food is meaningless without right to water and environmental hygiene and sanitation;
  - nutrition leads to a combination of healthy body and mind;
  - such combination is essential for a productive, responsive and responsible member of the civil society.

- In the third step, we need to evolve a proper strategy and methodology for mobilizing and organizing the rural poor women into -
  - Self Help Groups;
  - Cooperatives;
  - Mahila Mandals.

- In the fourth step, we need to adopt a campaign approach which will be structured, the structure being democratic (as opposed to top down approach) and multi level (at the national, state, district, block and GP level). The structure at various levels will comprise of:-
  - National level:
    - Formation of a National Nutrition Authority with a General Council and Executive Committee.
    - Appointment of a Director General, National Nutrition Mission (already announced since 2002).
State Level:
- Formation of a State Nutrition Authority with a General Council and Executive Committee.
- Appointment of a State Mission Director, Nutrition.

District level:
- Formation of Zilla Poshan Samiti with appointment of a District Mission Leader.

III Similar structures at the taluka/block and GP levels.

Components of the campaign approach will be:-
- environment building
- training of trainers
- training of functionaries
- communication to the target groups – designing IEC packages which will be attractive, relevant and wedded to ground level realities of day to day life
- monitoring i.e. reporting through committees and coordinators at various levels
- evaluation of content, quality and impact of the programme.
Visit to Dhule District:

General:

The district lies between 20.38° to 21.16° north latitude to 73.50° to 75.11° east longitude. It has a geographical area of 8063 sq.km with a population of 17,07,947 and a low density (212 per sq.km). It has 2 sub divisions, 4 talukas/Panchayat Samitis, 551 Gram Panchayats, 681 habitations and 244081 number of total households. The breakup of these institutions in tribal areas is as under:-

- Talukas - 2
- GPs - 156
- Villages - 226
- Hamlets - 379
- Households- 62,144

- The breakup of the population in percentage terms between urban and rural, women and men, SC and ST is given as under:-
  - Urban - 26.1%
  - Rural - 73.9%
  - Men - 51.4%
  - Women - 48.6%
  - SC - 6.39%
  - ST - 25.97%

- The sex ratio is adverse in both urban and rural areas (921 and 952 respectively).
- The average rainfall is 566 mm.
• The area under cultivation is 409,900 hectares of which only 13% is irrigated which has a significant bearing on production and productivity.

In all there are two ICDS Projects at Sakri and Shirpur with 500 AWCs, 27 supervisors and 2 CDPOs. Of 500 AWCs, 170 have their own building, 246 are accommodated in Gram Panchayat/School/Zilla Parishad building while the rest are in rented private premises. 497 AWWs and 25 supervisors are in position and steps are being taken to fill up the rest.

• On the side of public health, there are 2 sub-divisional hospitals, 5 rural hospitals, 41 PHCs and 230 sub-centres. Out of them 40 PHCs and 141 sub-centres have got their own building while 1 PHC and 89 sub-centres are functioning in private premises.

• The position of vacancies of staff in various categories in the public health side as on 31.3.2007 is as under:-

<table>
<thead>
<tr>
<th>Staff Category</th>
<th>Vacancy Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>2%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>5%</td>
</tr>
<tr>
<td>HA (M)</td>
<td>30%</td>
</tr>
<tr>
<td>HA (F)</td>
<td>2%</td>
</tr>
<tr>
<td>ANM</td>
<td>5%</td>
</tr>
<tr>
<td>MPW</td>
<td>36%</td>
</tr>
<tr>
<td>Lab Technician</td>
<td>14%</td>
</tr>
</tbody>
</table>

• The number of tribal children in 0-6 age group and its breakup is as under (according to 2001 Census):-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Children (Tribal) %</th>
<th>For the district as a whole</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>10,637 (17.7%)</td>
<td>33,490</td>
</tr>
<tr>
<td>1-2</td>
<td>12,008 (19.9%)</td>
<td>32,833</td>
</tr>
<tr>
<td>2-3</td>
<td>10,648 (18.0%)</td>
<td>36,381</td>
</tr>
<tr>
<td>3-4</td>
<td>8041 (13.3%)</td>
<td>61,169</td>
</tr>
<tr>
<td>4-5</td>
<td>9113 (15.1%)</td>
<td>61,169</td>
</tr>
<tr>
<td>5-6</td>
<td>9649 (16.0%)</td>
<td>30,866</td>
</tr>
<tr>
<td>Total</td>
<td>60,096</td>
<td>194,739</td>
</tr>
</tbody>
</table>
Field Visits:

Visit to AWC Bodhgaon Tal Sakri

- The AWC was established in 1986 and is functioning in a departmental building with a total area of 300 sq.ft. with adequate lighting but no ventilation.
- The AWC opens at 8 AM and closes at 12.30 Noon.
- No. of children (3-6 years) enrolled – 47
- No. of children (3-6 years) present – 34
- Mothers bring the children at the time of opening of AWC but take them away after the first meal under SNP feeding programme has been served and mostly for farm work.
- All mothers, however, bring their children and remain present throughout on the first Monday of the month which is the vaccination date.
- The SHG (Ambika Mahila Bachat Gat) is implementing the Supplementary Nutrition Programme. The recipes decided for a week are khichdi, lapsi and usal being cooked and served to mothers and children on alternate days.
- It was observed that a nutritive value of 300 kilo calorie for children in 6 months to 6 years and 600 kilo calorie for pregnant and lactating mothers is being ensured through SNP.
- The reaction of mothers to both the quantity and quality of food is encouraging.
- The following children were weighed by the salter scale in my presence and the outcome is as under:-

<table>
<thead>
<tr>
<th>Name of the Child</th>
<th>Age</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeta Gavali</td>
<td>2.8 years</td>
<td>8.9 kg Less by 4 kg than the normal weight</td>
</tr>
<tr>
<td>Vikram Pawar</td>
<td>4.8 years</td>
<td>13.00 kg Less by 3.5 kg than the normal weight</td>
</tr>
<tr>
<td>Himmat Sanjay</td>
<td>2.0 years</td>
<td>9.00 kg Less by 3.3 kg than the normal weight</td>
</tr>
</tbody>
</table>

- The grading of these children in the growth monitoring register needs to be reviewed.
Interaction with a pregnant mother – Ranjana Ahire (pregnant for the second time with a small gap) brought out several aspects – some interesting and some disquieting as under:-

- There are in all 7 members of the family of which 3 are earning;
- The family has a total land holding of 4 acres in which members of the family work as cultivators; some also work outside the household farm as agricultural labourers;
- Crops produced on the land are: groundnut, matki, kulthi and bajra;
- While adult members take food 3 times a day she was not so sure about children. It could not be confirmed if children get 700 kilo calorie value of food at home;
- The food which is consumed at home comprises of dal, roti, khichadi, fish, eggs and milk;
- A well in the village is the only source of drinking water; water table has gone down to low depths (200 feet) and the village hand pump is non-functional;
- Water in the household was reported to be boiled before being consumed.

There are certain redeeming features in regard to check up of health of children in the AWC. These are:-

- One MO from the PHC visits the AWC regularly once every month for check up of health of malnourished children and once every quarter for check up of health of normal children, the last such visit being on 7.9.2007;
- The overall status of health of children is good although they do have occasional complaints of cough, cold, fever, pain in abdomen etc.
- The MO brings the medicines for these common ailments with him and they are dispensed through the AWW;
- Absentee children are being covered in the next visit;
- The overall immunization coverage ranges between 80 to 90%; no adverse reaction of immunization has been reported so far.

There are also a few other redeeming features in regard to home visits by the AWW as under:-

- On an average 5 such visits take place after the AWC hours i.e. in the afternoon.
- In course of visit the AWW advises the mothers on the following:-
  - importance of green leafy vegetables in balanced diet;
importance of ANC registration;
- importance of care to be taken during ANC registration;
- importance of care to be taken during PNC;
- importance of institutional delivery;
- importance of hygiene and cleanliness;
- importance of breast feeding upto 2 years;
- importance of immunization of pregnant mothers and children.

- A day is fixed for every village for immunization by the PHC. AWW tries to contact the concerned beneficiaries for immunization of pregnant mothers and children on the fixed day. First Monday of every month is the day of immunization for Bodgaon.

12.9.2007

Visit to Sub-Centre: Bodhgaon:

The sub-centre coming under PHC Dahivel in Sikri taluka was established in 1986. It has 2 villages and 5 hamlets with a population of 5068. The ANM incharge of the sub centre joined on 30.10.95.

Redeeming features:
- ANC registration is 100%; on an average 7 to 8 pregnant women visit the sub centre everyday;
- Matrutwa Anudan Yojana and Janani Surakshya Yojana are being implemented satisfactorily through the sub-centre; there are no problems in getting the allocation in time as also no complaints about the disbursements in time;
- In terms of percentage and absolute number institutional delivery has gone up compared to previous year in 2006-07. A total number of 91 deliveries have been conducted during this year (home delivery – 49, sub centre delivery – 42);
- Advance tour programmes of ANM and MPW have been displayed so that the literate beneficiaries (pregnant women) who visit the sub-centre know when the ANM is coming to visit them;
- Medicines and injectables as per requirement have been stored.

Grey areas:
- The ANM is attending 2 meetings, one at the PHC and another at the block
level. This consumes a lot of time (both on account of travel as well as time consumed in the meetings) which could be more productively utilized in undertaking field visits.

**Suggestions:**
- While accountability is important the services of the ANM incharge of the sub centre should be made available more to the pregnant mothers than to anyone else; the number of meetings should, therefore, be brought down to the minimum;
- Charts and posters in the manner suggested earlier at page 125-126 of this report should be displayed in the sub centre.

**12.9.2007**

**Visit to PHC at Dahivel:**

**Redeeming features:**

- The PHC has 9 sub centres, 21 villages and 14 padas (hamlets). There are 9 sub-centres with 9 ANMs incharge.
- The space available in the PHC for the PHC incharge, delivery room, surgical room, injection and dressing room, room for HA (male) and HA (female), ward for Gr. III and Gr. IV children is adequate.
- There are 5 vacancies of HA(male), leprosy technician and 3 ANMs.
- The Rugna Kalyan Samiti has been formed and registered and has started working. Required funds have been received for this purpose.
- In all, 20 village health, nutrition and sanitation committees have been formed but not started working.
- In all, 40 ASHA workers under NRHM have been appointed but neither trained nor given placement.
- The work schedule for the ANMs has been drawn up with meticulous care and the same has been displayed in one of the boards of the PHC. The schedule is as under:-
  - Monday – headquarters of the PHC;
  - Every alternate Tuesday – 2 villages/padas;
  - Wednesday – a big village;
  - Every alternate Thursday – 2 villages/padas;
  - Friday – headquarters village and one small village;
  - Saturday – meeting of all ANMs at taluka headquarters.
In course of visit to a village, the ANM has worked out the following schedule for herself:-

- Visit to AWC and spending about an hour with adolescent girls, ANC pregnant mothers, checking gradation of malnourished children, checking quantity and quality of supplementary nutrition feeding programme through the SHG of the village and meeting PNC mothers.

- Covering about 60 households in course of the visit (between 8 AM to 5 PM) to ascertain the following:-
  ✕ size of the family;
  ✕ eligible couple;
  ✕ couple with number of issues;
  ✕ advice on family planning;
  ✕ enquiry about under 5 children;
  ✕ enquiry about illnesses (mothers, any family member, children, both);
  ✕ enquiry about malnutrition (anaemia, LBW, IDD, goiter etc.).

**Grey areas:**

- There are 3 malnourished children in Dahivel PHC area; 2 of them belong to Gr. III and one belongs to Gr. IV.

- **Sapna Jadhav,** Gr. IV malnourished child was admitted in civil hospital on 18.7.2007 but was taken away by her mother against medical advice.

- The second child in Gr. III named **Rina Sonawane** was given prescription of deworming syrup, calcium lactate syrup, one cup milk, one boiled egg, mixture of jaggery and groundnut per day along with regular daily diet. The child has been shifted to civil hospital, Nashik on 7.9.2007. The ANM is expected to visit the child for follow up.

- The third child named **Hira Rathod** was in Gr. III due to repeated attack of diarrhoea. The treatment prescribed is being strictly followed up by MO/ANM.

**12.9.2007**

**Visit to AWC, Ghodade:**

- The AWC was established in 1986 and is functioning in a departmental building with a total physical space of 350 sq.ft. The lighting is adequate but the ventilation is poor. The AWC opens at 8 AM and closes at 12.30 Noon.
Grey areas:

- While the normal attendance of children in 3-6 age group should be 46, the actual attendance is much less (40% for children only).
- Similarly while the eligible beneficiaries for SNP is 110 the actual beneficiaries range between 92 to 102.
- Only 2 mothers were present at the AWC at the time of visit. As usual I was told that mothers came earlier in the morning and after having the SNP meal they went away for attending routine domestic and agricultural farm operations.
- **Savitribai Phule Mahila Bachat Gat** is the SHG laying down the recipe for SNP everyday and preparing and serving food for pregnant mothers and children.
- The following children were weighed in my presence and the findings are as under:

<table>
<thead>
<tr>
<th>Name of the child</th>
<th>Date of birth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vandana More</td>
<td>10.2.2003</td>
<td>12.7 kg</td>
</tr>
<tr>
<td>Sagar Songirkar</td>
<td>16.2.2001</td>
<td>13.2 kg</td>
</tr>
<tr>
<td>Pooja Yogendra Jhadav</td>
<td>27.4.2004</td>
<td>10.6 kg</td>
</tr>
<tr>
<td>Sarala Mali</td>
<td>27.10.2002</td>
<td>13.02 kg</td>
</tr>
</tbody>
</table>

- The first one is under weight by 4 kg, the second one is under weight by 7 kg, the third one is under weight by 5 kg and the fourth one is under weight by 4 kg.
- The gradings do not, however, appear to have been correctly reflected in the growth monitoring register maintained in the AWC.
- While the nutritive value in terms of kilo calorie (300) may be fulfilled at the AWC, it is doubtful if the nutritive value in terms of kilo calorie (700) is being fulfilled at home.
- This was evident by way of interaction with a mother named Mrs. Soni Bhikan Mali who came to the AWC as I was leaving. The findings are as under:
  - There are 8 members in the family and she has 6 children;
  - The earning through farm labour (there is no agricultural produce from land) is grossly inadequate to economically support such a large family;
  - They have a dwelling unit financed under IAY but there is no kitchen garden due to want of space;
  - Foodgrains and vegetables (occasionally) are purchased from the open market but are not sufficient to meet the nutritional requirement of the 8 members of the family including 6 children;
The daily dietary pattern being followed by the family is as under:
- morning - daal roti;
- lunch - daal roti;
- dinner - khichadi

This shows very little input of fruits and green leafy vegetables, so essential for the micro nutrient content in food which is consumed;

It is absolutely certain that children are not getting 700 kilo calorie of nutritive food with obvious consequences of stunting, wasting and low weight.

- That large size of families and want of spacing is wrecking havoc on the health of children was evident from interaction with yet another pregnant mother – Mrs. Anita Shirsath by name.
- She has a baby of one year old and she is now pregnant by nine months and about to deliver any time. She admits that she has received medicines from the PHC and guidance from AWW to the following effect:-
  - to take rest in the afternoon;
  - to take adequate and balanced food at appropriate intervals;
  - to avoid hard manual labour;
  - to go in for institutional delivery.
- She is, however, handicapped as (a) she has got one child who is one year old (b) she has to work as there is no other ostensible means of livelihood and she has to work till the last day of pregnancy for this reason in addition to looking after a toddler (who is being breastfed).

12.9.2007

Visit to Sub-Centre, Ghodade: a story of progression:

Redeeming features:
- The ANM incharge of the centre is running her 9th year in office. There are only 2 villages with a population of 5552 under the sub-centre which she has been able to effectively cover.
- In 1998 she was conducting 2 deliveries in a month; the figure has gone up to 6 now.
- There has not been a single case of abortion or still birth or maternal mortality so far.
- There have been 2 pre-mature deliveries but no abortion.
• On account of the sincere efforts of ANM the ratio between institutional vs. home delivery has been maintained at 50:50.

• While 71 pregnant women have registered themselves for ANC there is a large measure of trust and confidence in the ability of the ANM to conduct safe deliveries.

• She has succeeded in removing mindsets associated with Colostrum.

• She while discharging women after conducting a successful delivery also orients them how to do breast feeding and the exact position in which the mother needs to hold the child while doing the breast feeding.

12.9.2007

Visit to rural hospital, Sakri

Redeeming features:

• Between April, 2007 to September, 2007 26 Gr. III and 28 Gr. IV children have been admitted and treated in the hospital. They have been treated for LBW, anaemia, infection in the upper and lower respiratory tract, vitamin A deficiency etc.

• The children have responded well to the treatment as would be evident from the following:-
  - gain of weight @ 20 gms per child per day;
  - removal of congestion in the respiratory tract;
  - improvement in haemoglobin count from 6 to 8 mg%;
  - movement of body parts/improvement in facial expression;
  - reduction of oedima;
  - improvement in thinning;
  - improvement in cognitive skills.

• There is a dietician who lays down the broad guidelines according to which food should be prepared and served on a day to day basis.

• The dietician gave me to understand that he has laid down the following broad dietary pattern for Gr. III and Gr. IV malnourished children:

**Morning:**

- 1 cup milk
- 2 sliced breads
- 2 bananas
Mid day meal:

- Tur dal – 2 table spoons
- Rice – 50 gm
- Chappati – 2
- Green vegetables (palak, ghobi etc.)
- Khir made of rice.

Night meal:

- Khichadi – 250 gm
- Green vegetables
- Chappati – 2
- Banana – 2

Grey areas:

- On the day of visit i.e. 12.9.2007 a Gr. III malnourished child named Vijay Gonda Ahire was admitted to the Rural Hospital. The child was brought by the staff nurse from Jaitani PHC. The child was 1 year and 4 months and its weight was 5 kg while the weight of a normal child at that age should be 10.5 kg. This was the fifth issue of the mother. In addition to LBW, the child had anaemia, curie primary complex and Pneumonitis. It so happened that the child was admitted at 11.30 AM (the child had come along with the parents) but was taken away by the mother around 1 PM on the ground that she has to attend to 4 other children at home. She has, however, taken the medicines prescribed by the doctor with her (calcium, syrup, FS, provita).

- The case needs to be reported to Jaitani PHC so that the staff of the PHC can keep some vigilance on the health of the child and follow up the extent of compliance with the medicines prescribed.

Suggested course of action:

- There was a discussion with Collector, CEO, ZP, Dy. Director, Health, Civil Surgeon, Dhule and Medical Superintendent of the hospital as to what needs to be done to prevent recurrence of such cases in future. The following course of action was agreed:-
  - There should be closer vigilance and surveillance over all such cases which are admitted in the paediatric ward.
  - All out efforts should be made to explain the possible implications/repercussions of taking away children against medical advice (LAMA) and to carry conviction to mothers not to repeat such practices.
Audio visual means of communication should be prepared and should be distributed to all PHCs/sub centres so that they in turn can spread the message in course of their visits to tribal households.

12.9.2007

Visit to sub district hospital, Shirpur:

- In course of discussion the following was observed to be the trend of Gr. III and Gr. IV malnutrition:

<table>
<thead>
<tr>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>16</td>
<td>39</td>
</tr>
<tr>
<td>2005-06</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>2006-07</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>2007-08 (till Aug.07)</td>
<td>17</td>
<td>11</td>
</tr>
</tbody>
</table>

- These children have been admitted for treatment of
  - gastroenteritis;
  - chronic diarrhoea;
  - pneumonia;
  - febrile convulsion;
  - meningitis;
  - cerebral palsy;
  - primary T.B.

- LBW is associated with all these ailments.

- There has not been a single case of death so far.

- Even though weight of these children at the time of birth has not been recorded, the net gain of weight per child per day on an average is 6 gms.

- Even though there is no dietician, the nutritive value of food in terms of prescribed kilo calories (300 kilo calories for normal children, 600 kilo calories for Gr. III and Gr. IV malnourished children, 500 kilo calories for adolescent girls and pregnant mothers) is being taken care of. The food comprises of 100 ml of milk, sugar, coconut oil, banana, apples, dal, rice and proteins and would be of the order of (120x3) 360 kilo calorie.
• The average duration of stay of a child patient in the hospital is 5 to 6 days.
• There has not been a single case of LAMA so far.

The overall state of affairs in the paediatric ward in Rural Hospital Shirpur is a mixed one. As far as children in 6-12 age group are concerned they are being looked after well but so far as the newborn babies are concerned the following deficiencies were found:
  - In all there are 4 beds. The height of one bed is more than the other one;
  - The linens are unclean;
  - The windows were open and flies and mosquitoes were buzzing in;
  - There is no cradle attached to the bed. Even though according to the latest theory of paediatrics ‘the more proximate is the child to the breast of the mother, the better it is for the growth of the child’ the safety of the child is equally important. In one bed I observed that the mother and the child were fast asleep and the child was lying on the edge of the bed. Slightest movement of the child would result in his fall to the ground which would be fatal.

• New born children are required to be wrapped up with a woolen blanket to ward off infection and cold and to keep the body warm. This has not been provided. The mothers being from poor communities cannot afford this luxury; it is, therefore, imperative that these are provided at the cost of the State exchequer.

• There is no NICU for new born babies who have LBW and other complications. This being a sub hospital, it will be appropriate if the Health Department could sanction one NICU at the earliest.

General observations at the end of the tour in Dhule district:
• AWC cannot even for a day remain without AWW and AWH. According to the practice in vogue, AWWs are being recruited by a Selection Committee headed by the local MLA. When posts are vacant and the Selection Committee needs to meet the MLA is requested to give a date but no date is given for 3-4 months. The Committee cannot meet, the AWWs cannot be selected and the AWCs go without AWWs which is a very unsatisfactory situation. The AWC is physically in existence but without the AWW it is as good as being non existent.

• Charts and posters constitute useful visual media. They can be used for conveying simple and useful messages associated with pregnancy, balanced diet, various forms of malnutrition, causes and consequences, preventive and corrective measures, various stages in the cycle of growth of a child, how to monitor such growth, dos and do nots for pregnant and lactating mothers etc. Such visual media has to be
well visualized and illustrated; it has to cover the complete cycle in the life of a child right from conception till birth, from birth to growth of infancy and childhood. Instead of ICDS Commissionerate purchasing the charts centrally and distributing them to AWCs for display in a mechanical manner, it will be better if workshops are organized at the district level, creative thinkers, writers, artists and cartoonists who are rooted to the soil and who have the imagination and creativity are invited, photographs of malnourished children are taken from the households, simple messages centering round malnutrition are prepared by these artists and discussed in the workshop. The messages thus prepared at the workshop can be sent to the households from where photographs were taken, discussed with the mothers, their reaction solicited, the reaction brought back to the workshop discussed and the message could be finalized for incorporation in the visual media.

- Similar exercise may be undertaken for production and distribution of charts and posters for all sub-centres and PHCs.
- Prototypes of a good design for buildings for AWCs, sub-centres, PHCs etc. may be got prepared by the respective head of the department concerned after taking into account the adequacy of space, lighting, ventilation, kitchen for preparing food, supply of potable water, conservancy facility etc. A phased programme for construction of departmental buildings for AWCs, sub-centres and PHC should also be drawn up, liberal budget provision be made and responsibility for execution of these buildings be entrusted to a good construction agency who will ensure safety and stability of the structure while making the structure aesthetically pleasing and functionally useful.
- It is understood that the PO ITDP provides funds under the Tribal Sub-Plan for construction of sub-centres and PHC buildings but there is inordinate delay in completion of these buildings as also delay in handing them over for being used for the purpose for which they are being constructed. The Collector should have a thorough review of the pace and progress of such expenditure and try to exhort the executing agencies (who function under the Zilla Parishad) to accelerate the pace of execution.
- The procedure for release of funds to AWCs, SHGs (for supplementary nutrition feeding programme) should be simplified and there should be no avoidable delay in such releases.
Geographical, topographical and demographic profile as also the profile related to ICDS and Public Health pertaining to tribal population in general and tribal children in particular.

The district lies between 20º to 21º to north longitude and 74.55º to 76.28º east longitude. It has a total geographical area of 11,765 sq.km., a total population of 36,82,690 and a medium density of 313.02 per sq.km. It has 4 sub-divisions, 15 talukas/blocks, 1152 Gram Panchayats, 1192 habitations and 122 padas (hamlets), 8437 households of which 5935 are tribal. It has a tribal population of 4,35,951 which works out to 11.84% of the total population. While the average size of the family in the district as a whole is 5.02, in tribal households it is 5.59. The tribal population is concentrated in the 3 blocks Chovda, Yavatmal and Raver.

The number of children in 0-6 age group and its breakup year-wise is as under:-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Children ( Tribal )</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 year</td>
<td>2092</td>
</tr>
<tr>
<td>1-3 year</td>
<td>4124</td>
</tr>
<tr>
<td>3-6 year</td>
<td>5584</td>
</tr>
</tbody>
</table>

- In all there are 14 ICDS Projects with 14 CDPOs, 130 Supervisors and 2996 AWWs. Two posts of CDPOs, 5 posts of Supervisors and 30 posts of AWWs are vacant.
- Only 68 AWCs are functioning in departmental building while 20 AWCs are in temporary accommodation (mostly Zilla Parishad building).
- On the side of public health, there is one civil hospital at Jalgaon, 5 sub-divisional and rural hospitals at Chopda, Yawal, Raver, Nhavi and Pal, 11 PHCs (of which 2 are fully tribal), 31 sub-centres (of which 16 are fully tribal). Of the 11 PHCs, 10 have got
their departmental building and one is under construction. Of 31 sub-centres, only 23 have their own building and the rest are functioning in rented accommodation. Out of 137 sanctioned posts on the public health side 119 posts have been filled up and 18 posts are vacant. Staff quarters are available at 10 out of 11 PHCs. The ANM incharge of the sub-centre stays in a portion of the sub centre. All available staff quarters have been occupied by staff.

13.9.2007

Field Visits:

Visit to Rural Hospital, Chopda:

• Started originally as a 40 bedded hospital it has been expanded subsequently to 100 beds. On the day of visit, the Medical Superintendent was away on tour to Delhi. Except the 2 gynaecologists most of the specialist positions (anaesthetist, physician, orthopaedics surgeon, ophthalmologist etc.) are vacant. These being regular and permanent positions need to be filled up from Mantralay, Mumbai at the earliest.

• In course of review the following was observed to be the trend of Gr. III and Gr. IV malnourished children in Rural Hospital, Chopda:-

<table>
<thead>
<tr>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>2005-06</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>2006-07</td>
<td>38</td>
<td>15</td>
</tr>
</tbody>
</table>

• A seven phase screening of Gr. III and Gr. IV is being done. The seven phases are:-
  - Anganwadi level;
  - Village level;
  - Check up by paediatrician;
  - PHC level;
  - Rural hospital level;
  - Civil hospital level;
  - Super speciality level.

• Investigated in detail in to the factors which contributed to the death of Nana Kantya Barela in 2006-07. The facts emanating from this are as under:-
  - The child was admitted to the Rural Hospital on 1.6.2007. He was 3 years of
age weighing 7 kg 400 gm (as against the normal weight of 14.6 kg for a boy of that age):

- On 2.6.2007 the child was having pulmonary pox with a haemoglobin count of 7.2 mg% and was suffering from fever, cough and loss of weight; it was a case of respiratory failure (as confirmed from the x-ray).

- The patient being 3 years of age could not be put in NICU but was treated in a separate ward.

- Despite best efforts the life of the child could not be saved as it came to the hospital at a very late stage when he had developed secondary complications and was in a critical condition.

- The death report has already been sent by the Medical Superintendent to the Civil Surgeon and has been accepted as such by the latter.

- The child lived with his mother in M.P. border and there was no scope for education or counselling of the mother before she brought the child in a critical condition to the Rural Hospital (such cases are outside the purview of survey of children conducted jointly by health and ICDS staff).

Suggestions to minimize the incidence of malnutrition related deaths:

- A proper liaison and coordination should be maintained with the State Government of Madhya Pradesh or with the State Government of all neighbouring States for that matter to have access to the number and names of families migrating from those States to Maharashtra, have the children in such families thoroughly surveyed, screened and take timely preventive and corrective steps so that lives of such children as are critically ill could be saved through timely care and attention.

- All cases of low birth weight should be viewed seriously and preventive measures should include intensive mother’s education and orientation on the following points:-

  - Consumption of green leafy vegetables, fruits, milk and eggs;
  - ANM/LHV should, in course of home visits, check the extent by which the food package contains all the essential micro-nutrients;
  - Special care should be taken to prevent water borne diseases (cholera, entric fever, diarrhoea, gastroenteritis, jaundice, hepatitis etc.);
  - Intensive deworming operations should be carried out;
  - Screening of all primary tubercular infection cases should be done (there should not be any problem in complying with this requirement as there are 2 qualified x-ray technicians);
- All cases of tubercular infection must be effectively controlled at the primary stage.
- Special attention should be paid to dietary management. A dietician to look after such management should be posted to the hospital; vacancies of other specialists should also be filled up;
- Bed strength of the Rural Hospital should be increased;
- There should be effective power back up arrangement to deal with problems of load shedding.
- Different dietary patterns obtain in different hospitals. The Deputy Director, Health and CMO should study these patterns and evolve, in consultation with a qualified and experienced dietician a model pattern (keeping in view the RDA recommended by the ICMR) which could be uniformly introduced throughout the State. The diet should ensure for every child a minimum of 1000 kilo calorie (for Gr. III and Gr. IV it should be much higher).

• In course of visit to Rural Hospital, Chopda, I spoke to the mothers of the following children and discussed their cases with the treating physician:-
  ❖ **Sonal Gokul** - age 1 year 1 month, date of admission – 7.9.2007 – weight at the time of admission – 5 kg as against the normal weight of 9.9 kg – Gr. IV malnutrition – patient does not eat much and is suffering from hypoglycemia.
  ❖ **Nikita Bhaskar Barela** – age 2 years – weight – 6 kg as against the normal weight of 12.2 kg – Gr. IV malnutrition. The child is suffering from respiratory track infection.
  ❖ **Sachin Lalsingh Barela** – date of admission – 12.7.2007 age – not known (as mother left the child after delivery) weight – 5 kg – suffering from dehydration and malaria and at least 4 months would be needed for the child to return to a normal stage.
  ❖ **Om Chotu Bhil** – date of admission – 8.9.2007 – age 1 year – weight 4 kg as against normal weight of 9.6 kg – suffering from loose motion and dehydration. The mother of the child is anaemic and comes from an unclean and unhygienic surrounding. She needs to be given orientation to treat children having loose motion and dehydration with ORS.
  ❖ **Manoj Rumlya Pawara** – fifth male child after four male children – was first admitted to Lassur PHC for treatment of LBW but was brought to Rural Hospital as he did not gain weight. His current weight is 9.5 kg which is lower than the normal weight of a boy of that age. Everything else about the child is normal. He is being given supplementary food and is likely to gain weight soon.
Yogita Shantaram Pawara – one of the four girl children born to her parents along with one male child – age 1 year – weight 6 kg against normal of 9.6 kg – is being treated for lower respiratory track infection – currently under drip which will continue for one full day – mother needs to be counselled on the need for planned parenthood.

Vidya Parshuram Pawara – age 1½ years – weight 5 kg – much lower than the normal weight of 10.9 kg – was born with LBW (2 kg) – due to recurrent infection and loose motion and dehydration weight continues to be low. She is also being treated for eye infection and Vitamin A deficiency.

13.9.2007
Visit to PHC Lasur – Tal Chopda:
Redeeming features:

• Camps are being organized by the PHC at regular intervals. The last such camp was held on 29.8.2007 at Chopda. The camp was attended by CDPO, TMO, MO, PHC. NGOs were also involved. Thirty cases were screened and 22 cases of Gr. III malnutrition have been admitted to Rural Hospital, Chopda after the camp, effectively treated and sent back home.
• Similarly 45 cases of persistent diarrhoea were effectively treated during 2006-07.
• Only 2 cases of Gr. III malnourished children are currently under treatment and these are showing signs of recovery.
• The mother and the child are being served 3 meals (breakfast, lunch and dinner) @ Rs. 65/- per day. Additionally, the mother is being paid Rs. 40/- towards reimbursement of the loss of wages per day. The diet is being prepared by a person on contract basis and brought from outside.
• Minimum duration of 5 days is required to give full course of treatment to an ailing child.
• Observed the 2 children who have been brought by the AWW to the PHC for treatment:-

Hema Kumsingh Barela (Pawara community):

She was admitted on 12.9.2007 for low weight, dehydration and conjunctivitis. This is the case of Gr. IV child born and brought up in a family of 6 persons. The line of treatment comprises of administering amoxicillin and hemalt. The child is responding well to the treatment.
Remal Mangalsingh Pawara:

This is a case of Gr. IV malnourished child who at 4 years and 4 months, is weighing only 10 kg which is much lower than the normal weight of 17 kg. The child is also suffering from conjunctiva. It was reported that the patient is in the process of gaining weight of about 200 gm over a period of 10 days. The line of treatment comprises of administering Cefotaxim and Gentamycin (for the eye).

I spent considerable amount of time with the ANM and LHV to elicit certain basic informations about number of villages allotted to them, the calendar of visits, the institutions and individuals who are visited and personally contacted, the nature and character of counselling given to them on the fight against malnutrition. In course of this interaction and purely in the larger interest of pregnant mothers and children I volunteered to give them some basic inputs as to how they would be able to give a good account of themselves while visiting a household and interacting with mothers in their own native style:-

- What is the size of the family?
- What is the spacing observed between 2 children?
- Are you aware of the disadvantages of a large family such as:-
  - Lack of access to stable and durable employment;
  - Lack of adequate earnings and consequent lack of purchasing power;
  - Foodgrains from the FPS not enough to feed a large family;
  - Paucity of accommodation and lack of privacy;
  - Evolution and growth of children tends to get neglected;
- No. of days of employment, break-up between farm and non-farm;
- Total earnings of all working members in a family;
- Quantity of foodgrains being obtained from the FPS and quantity being purchased from the open market?
- Are they adequate?
- How is the amount earned earmarked between food and non-food items?
- Do liquor, gutka, beedi constitute non-food items?
- Can they be totally shunned?
- Is there any access to potable water?
- Is the supply of water (if there is a piped water supply) adequate both for drinking, cooking and other miscellaneous purposes?
- How many times food is being cooked and served to adult members and to children?
- What does it (breakfast, lunch and dinner) comprise of?
- Are children being exclusively breastfed upto 6 months followed by supplementary nutrition (while continuing breastfeeding upto 2 years)?
- Are children being immunized according to the following schedule?

<table>
<thead>
<tr>
<th>Age</th>
<th>Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>At birth or within 48 hours</td>
<td>Polio first dose</td>
</tr>
<tr>
<td>0-1 month</td>
<td>BCG</td>
</tr>
<tr>
<td>1½ month</td>
<td>DPT (1st dose), Polio (2nd dose), Hepatitis B (1st dose)</td>
</tr>
<tr>
<td>2½ month</td>
<td>DPT (2nd dose), Polio (3rd dose), Hepatitis B (2nd dose)</td>
</tr>
<tr>
<td>3½ month</td>
<td>DPT (3rd dose), Polio (4th dose), Hepatitis B (3rd dose)</td>
</tr>
<tr>
<td>9-12 month</td>
<td>Measles</td>
</tr>
<tr>
<td>15-18 month</td>
<td>MMR</td>
</tr>
<tr>
<td>18-24 month</td>
<td>DPT (4th dose), Polio (booster dose)</td>
</tr>
<tr>
<td>2-5 years</td>
<td>Typhoid (entric fever) vaccine</td>
</tr>
<tr>
<td>5 years</td>
<td>DT (booster dose)</td>
</tr>
</tbody>
</table>

- Is it a home or institutional delivery?
- Are children weighed after birth? If so what is the weight (if the mother is unable to respond, the child should be got weighed in the nearest anganwadi)?
- Are children suffering from cough, cold, fever or any other infection (air or water borne)?
- Whether the mother has consulted anyone in the nearest sub-centre or PHC?
Is the mother aware that there is an arrangement for check up of health of every child in 3-6 age group at the anganwadi itself? If so, is she administering the medicines prescribed by the medical officer of the PHC to the child?

Are the mothers aware of the rich sources of micro-nutrients such as:-

- Beta Carotene or Vitamin A;
- Vitamin B<sub>12</sub>;
- Vitamin C;
- Iron;
- Calcium;
- Folic acid;
- Phosphorus;
- Iodine;

- Are they aware that many of these micro-nutrients are contained in the fruits and vegetables which are locally grown in Maharashtra?
- If mothers are not aware, do the ANM and LHV tell them about the source and how to grow them?
- Do the ANM and LHV encourage the mothers for consumption of green vegetables, fruits, milk, eggs and fish by children?
- Do they tell the tribal mothers that abortion, still birth and premature deliveries are all on account of hard manual labour and climbing heights at an advanced stage of pregnancy and, therefore, should be thoroughly discouraged.
- Do they tell the mothers that in the larger interest of the family and that of children they should take malnourished and ailing children to the nearest subcentre or PHC or hospital in time and not cause the slightest delay in admission and treatment of children?

13.9.2007

Visit to AWC Lasur:

Lassur is a large village with a population of 8000 of which 140 are children and 44 are in 3-6 age group who are enrolled in the anganwadi. I met 5 lactating mothers such as:-

- Bhuribai Ramdas Barela (26);
- Mamta Gangaram Devdas Barela (24);
- Rani Jeevaram Ramcharan (20);
- Hotibai Kheema Revacharan (20);
- Puribai Govind Ramcharan (20).

I also examined the weight of 5 children in the anganwadi with reference to their age such as:-

- **Sandeep Ramdas Barela** – date of birth – 30.5.2007, weight – 5 kg (as against the normal weight of 7.5 kg for that age).
- **Prem Sunil Barela** – date of birth – 18.10.2004, weight 10.3 kg as against the normal weight of 14.6 kg for that age.
- **Sumarya Bhongya Barela** - Date of birth – 4.1.2003, weight – 11 kg as against the normal weight of 17.7 kg for that age.
- **Kunal Ravindra Dhobi** – date of birth – 22.6.2003, weight 10 kg as against the normal weight of 16.8 kg for that age.
- **Prem Devidas Barela** – date of birth – 13.7.2005, weight – 9.5 kg as against the normal weight of 13 kg for that age.

The following impressions emanated out of these meetings and interactions:-

- Most of the women (who are mothers today) were married at an age earlier to the statutory age of marriage (18) for girls.
- All the children I met are underweight.
- The malnutrition grading according to weight does not appear to have been correctly recorded in the growth monitoring register.
- While some children were found to have breathing difficulty (could be on account of respiratory track infection) most of them were having skin infections.
- Neonatal mortality is on the increase while IMR is on the decline. The information about children’s mortality rate is not available.
- As more children die between 0-4 weeks after delivery, mothers (even lactating mothers) go in for more children.
- This is what partly explains the motivation for large families.
- Most of the water borne diseases like diarrhoea are on account of poor hygienic conditions.
- The incidence of malaria and T.B. is quite high. On the basis of sputum test 9 cases were found to be positive for TB. Similarly 3 cases were found to be positive for malaria.
Suggestions:

- Chlorination of all water sources should be done. The Village Panchayat should not lag behind in discharge of this important responsibility. The Zilla Parishad should ensure that the stock of TCL for water purification with the GP is in order.

- Similarly the GP must ensure through the VLW that births and deaths in the village are being registered and are being entered in the birth and death register. The ANM incharge of the Sub-centre (since she conducts the delivery of children at the primary level) being the primary source of information there should be close liaison between her and the VLW.

- A vigorous campaign should be launched to improve the percentage of institutional delivery vis-a-vis home delivery.

- Allocations under Matrutwa Anudan Yojana and Janani Surakhya Yojana should be released in time and monetary benefits be disbursed in time to provide an incentive to more and more mothers to go in for institutional delivery.

- More and more sputum tests should be undertaken to detect the incidence of T.B. so that early and effective treatment can take care of this killer. Similarly blood slides should be regularly collected for malaria and adequate quantities of chlorquin should be distributed to prevent malaria.

13.9.2007

Visit to Sub-Centre Satrasain:

The sub-centre was established in 1985 and is functioning in a departmental building. The ANM joined the sub-centre on 28.10.2006. The ANM was present. She travels by bus to reach the sub-centre and makes it a point to open the sub centre in time. She has 6 villages in her jurisdiction and she makes it a point to cover all the villages at least once every month. Last month she had conducted 2 deliveries which have gone up to 4 this month. The total number of deliveries between 1.4.2007 to 24.9.2007 is 20. She has received training at the district training centre, Buldhana. In course of interaction with the ANM the following points were impressed on her:-

- in course of her visit to a village she should spend at least one hour in every AWC and attend to the following:-
  - full attendance should be ensured;
  - mothers should be motivated to come and bring along with them the children (particularly in 0-3 age group);
the supplementary nutrition feeding programme must conform to the scales laid down and must ensure 300 kilo calorie nutritive value of food for all normal children;
mothers should be advised that they have to ensure the balance 700 kilo calorie nutritive value of food at home;
mothers of children whose health is being checked by the MO of the PHC should receive the medicines; AWW should ensure that the medicines are being used for the purpose for which they were prescribed;
mothers should be told to ensure strict and timely compliance with the medicines according to the frequency and dosage prescribed;

Additionally the ANM should check and ensure the following:-
- immunization of pregnant mothers and children is as per scale and timing;
- people have access to potable water;
- food is neither overcooked nor undercooked;
- green leafy vegetables and fruits should constitute an essential component of every food that is cooked at home;
- pregnant mothers should not climb heights nor subject themselves to hard manual labour at an advanced stage of pregnancy;
- they should report themselves regularly in the 3rd, 7th and 9th month of pregnancy at the PHC for regular checkup as also for collecting Matrutwa Anudan dues;
- all complicated cases (LBW cases, children who are suffering from diarrhoea, dysentery, conjunctivitis, cough, cold, fever etc.) involving children should be referred to the nearby sub-centre, PHC or hospital without any delay.

13.9.2007

Visit to Anganwadi Satrasain:

The AWC was established on 1.10.1994 and is functioning in a departmental building constructed under JRY. The physical space available is 180 sq.ft. which is rather inadequate. There is adequate lighting and ventilation available in the AWC. As against 84 children and 16 mothers who have been enrolled 70 children and 12 mothers were found at the time of visit. The AWC opens at 8 AM and closes at 1 PM.
• Examined the following children, their weight with reference to their age and the outcome is as under:-

1. **Rekha Bholaram Pawara**  
   Age – 3 years 4 months  
   Weight – 11.5 kg as against normal 15 kg.

2. **Pranjal Ramchandra Patil**  
   Age – 4 years  
   Weight – 13.8 kg as against normal 16 kg.

3. **Nita Nana Pawara**  
   Age – 4 years 9 months  
   Weight – 18.2 kg (normal)

4. **Ajay Dharm Singh Pawara**  
   Age – 3 years 11 months  
   Weight – 10.9 kg as against normal 16.2 kg.

**Suggestions:**

• The AWW should persuade and motivate mothers to send their children (0-6 age group) to the AWC;

• The AWH should be the primary instrument of personal contact and mobilization of mothers and children;

• The attendance should be monitored by the CDPO and Supervisor;

• All charts and posters depicting the complete cycle of life upto close of childhood (0-6) should be prepared and displayed as suggested at page (124);

• The content of such charts and posters should be explained by the AWW to the mothers;

• The visits of CDPOs and Supervisors to the AWC should be more frequent than now; impressions of all their visits should be left in the Visitor’s Book. Detailed guidelines for this purpose should be issued by Women and Child Development Department, Government of Maharashtra so that visits are not routine but truly productive.

• The CDPO and Supervisors must make it a point to physically weigh the children and check if the weight has registered any improvement and if not, should bring such cases to the notice of PHC incharge and DHO.
13.9.2007

Visit to PHC, Vaijapuri:

The PHC was established in 1985 and is functioning in a departmental building. The following physical space is available in the PHC:

- Room for PHC incharge - 144 sq. ft.
- Delivery room - 150 sq. ft.
- Injection and dressing room - 100 sq. ft.
- Medicine store room - 150 sq. ft.
- Room for dispensing medicines - 100 sq. ft.

There is no room for the second MO and no surgical room.

The PHC is in the midst of a predominantly tribal and forest area, has 14 villages and 4 sub-centres. Four ANMs incharge of the 4 sub-centres are in position. The 2 MOs are also in position. The post of 1 LHV and 1 Health Assistant (male) are vacant. The ambulance van is in good working condition with adequate stock of POL.

Grey areas:

There are serious problems, constraints and challenges in running a PHC in a remote and interior pocket in which the areas where the target groups live are mostly inaccessible. We need all the functionaries against the sanctioned posts to be in position. We need the functionaries to make them available at the headquarters all the time for the public except when they are out on tour. We need women and men who have the character and integrity, empathy and sensitivity and above all a missionary zeal with which they can serve the ‘exiles of civilization’ who have been scattered across the length and breadth of a nearly 100 kms of forest track i.e. Baijapur tribal and forest area. There are several negative indicators which bring frustration and discontentment in the minds of the people who are in need of service. The grey areas are:-

- The vacancies make the task of comprehensive coverage of the area which is remote and interior extremely difficult;
- The people and their representatives complained that even though staff quarters have been provided the staff prefer to stay at Chopda (20 kms away from Baijapur) and not at Baijapur. In other words, the staff are not available for providing service in emergencies.
- The ANMs represented that there is inordinate delay in receipt of their salaries. The salary is being disbursed in cash through the BDO which takes time. The
PHC incharge could be made the drawing and disbursing officer. The salary of all functionaries must be disbursed between 7th and 10th of the month succeeding the month to which the salaries relate.

- The mobility and outreach of the staff is limited due to the difficult terrain. The FTA is only Rs. 350/- per month for the ANM and Rs. 500/- for the LHV which is grossly inadequate. The CEO indicated that the Zilla Parishad is thinking of provision of a 2 wheeler vehicle and mobile phones in favour of all ANMs, LHVs so that better coverage and contacts could be facilitated.

- Scarcity of potable water is acute.
- Incidence of malaria is very high.

Suggestions:

- All vacancies must be filled up without further delay.
- It should be our endeavour to cover at least all the 14 villages once every month.
- The MOs (2) and other para medical staff should endeavour to stay at Baijapur in the staff quarters constructed for them.
- Two wheeler vehicles and cell phones should be made available to all touring staff to make them more mobile and for improving their contacts with the people.
- Impregnated mosquito nets should be supplied to all tribal households living inside the forest. Simultaneously chloroquin as a prophylactic should be distributed to all tribal families through AWCs.
- Special efforts should be made to tap the water flowing through streams across hills, by gravitational means, impound it and supply it through pipes to the households. This has been tried out successfully at Paderu ITDA in Vizag district in A.P. and it will be worthwhile if CEO ZP Jalgaon could pay a visit to Paderu sometime later at his convenience and see how exactly the problem of scarcity of drinking water has been solved through well proven scientific methods.

Special problems of Gr. III and Gr. IV malnourished children:

- Through camps malnourished children are being identified and thereafter being admitted in the sub-divisional hospital. In all 3 camps have been held and 75 malnourished children (Gr. II, III, IV) have been found with the following detailed breakup:-
  
<table>
<thead>
<tr>
<th>Gr.</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>48</td>
</tr>
<tr>
<td>III</td>
<td>22</td>
</tr>
<tr>
<td>IV</td>
<td>05</td>
</tr>
</tbody>
</table>
  
- All of them are receiving treatment in the sub-divisional hospital.
A few other additional suggestions:

- A monthly calendar of visits for the ANMs and LHVs should be so prepared that they are able to cover all the 14 villages in the PHC area at least once a month, able to spend sufficiently long time with the households and counsel them on a host of issues covering pregnancy, weight of children, diet of children, nutrients which should go into the food, potable water, conservancy, how to ward off infections, timely hospitalization of ailing children etc.

- Since time is the essence and time management in a difficult terrain is extremely difficult (since it takes more time to travel) more time should be spent in field visits and less time in meetings. Instead of calling ANMs and AWWs for too many meetings separately the possibility of calling them to the same meeting together may be explored.

- Since this is a heavy rainfall area, the wear and tear of buildings will be fast and repairs will need special attention. Transportation of brick, cement, chips etc. being difficult in a far flung area during rainy season, all such special repairs should be carried out sufficiently in advance of rains. The stock of sand, cement, chips and bricks should also be stored at least one month in advance of repair work.

- Special vigilance and surveillance should be kept over malaria, filaria and other communicable diseases which occur every now and then in forest areas with a severity which is unknown elsewhere. Malaria department needs to exercise such vigilance and surveillance.

Interaction with the people of the area:

- Most of the people are without any homestead and agricultural land. While they have raised some make-shift structures on the forest land, they are cultivating forest land too and raising crops for some ostensible means of livelihood. They have been doing so for generations but have in the process incurred the displeasure of officials of forest department and in particular after the Conservation of Forest Act, 1980. The displeasure manifests itself in a number of ways and may result in eviction or confiscation of produce from the land and so on.

Suggestion and possible course of action:

This being a genuine problem the district and divisional administration needs to take cognizance of this, take up the matter with the Ministry of Environment and Forests through the State Government and eventually get a formal permission from GOI to get the land (both homestead and agricultural) settled in favour of the tribal household which is in possession of the land. This process should be accelerated with pasing of the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.
13.9.2007

Visit to Civil Hospital, Jalgaon:

The hospital was constructed in 1962 and has 356 beds. Apart from other specialists there is a full fledged paediatrician incharge of the paediatric ward which was the primary centre of my attention. Immediately on arrival I took stock of the number of Gr. III and Gr. IV malnourished children who have been admitted and treated in the hospital. The picture that obtained is as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>38</td>
<td>60</td>
</tr>
<tr>
<td>2005-06</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>2006-07</td>
<td>13</td>
<td>09</td>
</tr>
<tr>
<td>2007-08</td>
<td>42</td>
<td>22</td>
</tr>
</tbody>
</table>

- Between 2006-07 and 2007-08 there has been an increase in the number of Gr. III and Gr. IV malnourished children. It was explained that more malnourished children are coming to surface due to survey and exclusive camps being held for this purpose. Most of the children who have been admitted in the past or are being admitted now have been found to be suffering from LBW, Pneumonia, diarrhea, dehydration, cardiovascular complications.

- Investigated into death of one child Chakule Baliram Jadhav by name. The child belongs to the banjara community and was staying with his mother near MIDC, Jalgaon. He was brought by the mother to the hospital (both the mother and child originally belong to Chalisgaon, a taluka in Jalgaon). The child was admitted on 19.7.2007 and was weighing 5.5 kg for 2½ years of age (against the normal weight of 13.3 kg for that age). He was also found to be suffering from fever, cough, distress, multi-vitamin deficiencies and bilateral tuberculosis with pneumonia and anaemia. All possible efforts were made to treat the child and bring him back to normalcy by giving oxygen, antibiotics, multi-vitamin supplements as also with antitubercular treatment. There was air entrapment of the lungs and one side of the lungs had totally collapsed. That is the reason as to why the child did not respond to the treatment and died on 21.7.2007. The paediatrician has submitted the report to the civil surgeon and he has since accepted the report.

I also visited the paediatric ward and the NICU and examined the status of health of the following children:-
Paediatric Ward:

1. **Kajal Subhas Simare**  
   Address: Maharul Taluka Yawal.  
   Age 2 years  
   Weight – 7.5 kg (lower than the normal 12.3 kg)  
   Admitted on 8.9.2007  
   
   This is a case of Kwashiorkar i.e. LBW, Anaemia and vitamin deficiency and skin infection.  
   
   The loss of weight has occurred due to loss of fluid.  
   
   The child is being treated with blood transfusion, multi-vitamin supplementation, anti-biotic and high protein diet.

2. **Bharat Babulal Bhil**  
   Address: Sakegaon Taluka Bhusawal  
   Age – 1 year 1 month  
   Weight – 5.3 kg (lower than the normal of 9.9 kg)  
   Admitted on 13.9.2007  
   
   This is a case of Pneumonia with Tuberculosis with ventricular septal defect (CHO).  
   
   The child is being treated with anti-biotics, anti-tubercular drugs, multi-vitamin, high protein diet.

3. **Diya Vithoba Jat**  
   Age – 1 year  
   Weight – 4.8 kg  
   Admitted on 12.9.2007  
   
   This is a case of PEM with low haemoglobin count requiring blood transfusion.  
   
   The child is being treated accordingly.

**13.9.2007**

**Visit to NICU, Civil Hospital, Jalgaon:**

   The following facilities have been made available to the NICU:-  
   - Warmer (thermoregulation);  
   - Phototherapy unit;  
   - Pulse oximeter;
- Ventilator;
- Suction machine;
- Woolen linen/blanket for the newborn.

Discussed with the Paediatrician about the condition of the following children in the NICU:-

13.9.2007

Visit to NICU attached to Jalgaon Civil Hospital:

The table below gives a complete picture of the children who have been admitted and who are being treated in the NICU attached to the Civil Hospital, Jalgaon :-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parent’s Name</th>
<th>Mother’s age</th>
<th>Address</th>
<th>Diagnosis</th>
<th>Weight</th>
<th>FINC/LSCS</th>
<th>Hospital/Outer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>MCH Saminabe SK Sattar Rg. 26136</td>
<td>23 yrs.</td>
<td>C/o SK Sattar Bajwan at Pachora.</td>
<td>Birth Asphyxia</td>
<td>2200 gm</td>
<td>LSCS</td>
<td>-do-</td>
</tr>
<tr>
<td>4.</td>
<td>FCH Kavita Vijay Mah</td>
<td>20 yrs.</td>
<td>C/o Kalabai Vishnu Mali Jalmner Ganesh</td>
<td>LBW</td>
<td>1600 gm</td>
<td>Premature delivery</td>
<td>-do-</td>
</tr>
</tbody>
</table>

The following points need special consideration and action:-

- These are all one month old babies with LBW and other major complications associated with malnutrition. Even though they might have been discharged from the hospital, their cases need to be followed up at their respective homes.

- The names of the children along with full residential address may be sent by the hospital authorities to the PHC-in-charge, ANM incharge of the sub-centre of the area and AWW of the AWC located in the area.

- The PHC-in-charge, the ANM and the AWW should make it a point to visit the children, enquire about the status of their health from the mothers and provide the feedback to the hospital authorities for further corrective action, if any.
General

Geographical, topographical and demographic profile as also the profile related to ICDS and public health in relation to tribal population in general and tribal children in particular:

The district lies between north latitude 17.5’ and 19.2’ and east longitude 73.2’ and 75.1’. It has a geographical area of 15,642 sq. km and population of 79,56,727 with a medium density of 354 persons per sq. km. The break-up of the population is as under:-

<table>
<thead>
<tr>
<th>Type</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>31,93,786</td>
</tr>
<tr>
<td>Tribal</td>
<td>1,20,692</td>
</tr>
<tr>
<td>Urban</td>
<td>47,62,851</td>
</tr>
</tbody>
</table>

It has in all 5 sub divisions, 13 talukas, 11 nagarpalikas, 1401 GPs, 1866 inhabited villages, 6811 padas and 5,96,505 number of households. Corresponding figures for tribal areas are as under:-

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPs</td>
<td>128</td>
</tr>
<tr>
<td>Inhabited villages</td>
<td>169</td>
</tr>
<tr>
<td>Padas</td>
<td>409</td>
</tr>
<tr>
<td>Households</td>
<td>45,108</td>
</tr>
</tbody>
</table>

The break up of children in 0-6 age group is as under:-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 months</td>
<td>25,944</td>
</tr>
<tr>
<td>6 months – 1 year</td>
<td>29,732</td>
</tr>
<tr>
<td>1-2 years</td>
<td>55,901</td>
</tr>
<tr>
<td>2-3 years</td>
<td>58,831</td>
</tr>
<tr>
<td>3-6 years</td>
<td>1,64,525</td>
</tr>
</tbody>
</table>
On the side of ICDS there are 13 ICDS Projects (of which one is tribal) with 13 CDPOs and 138 supervisors. There are in all 3446 AWCs. All the positions (CDPOs, Supervisors and AWWs) except one post of Supervisor have been filled up. In all 1547 AWCs have got departmental building while the remaining AWCs are functioning in Primary School, Zilla Parishad, Community Centres and other private buildings. All AWWs except 260 have been trained (which includes both induction and refresher training programmes). The AWWs have educational qualification ranging between 8th (2899) to 10th pass (266), 12th pass (186) to graduation (66) and are of 40 years of average age.

On the side of public health, there are 3 rural hospitals, 8 PHCs, 8 PHUs and 62 sub-centres in tribal areas. Of them 8 PHCs and 34 sub-centres have their own departmental building and the rest (28) are functioning in hired premises. In all there are 21 vacant posts in various categories in tribal areas and steps have been taken to fill up these vacancies. Fourteen ANMs and 2 LHVs have been recruited under NRHM on contract basis. All PHCs have staff quarters and they are fully occupied while the ANMs-in-charge of sub-centres stay in a portion of the sub-centre allotted to them.

26.9.2007

Visit to State IEC Bureau, Pune:

The Bureau was created in 1996 as a result of merger of State Health Education Wing of the State Family Welfare Bureau. Integration and coordination of IEC activities conducted by various Public Health Institutions is the primary objective of the Bureau. Since health and nutrition are closely interlinked and IEC activities are crucial to promote nutrition and fight starvation and malnutrition (apart from the desired level of production, distribution and consumption of food grains of the desired nutritive value), the Bureau has undertaken a number of activities in this direction. The visit brought out the following redeeming features and grey areas in the functioning of the Bureau:-

Redeeming features:

- During the last 10 years or so, a host of IEC materials such as posters, folders, flip books, tin plates, exhibition sets, audio/video cassettes, banners, booklets, video films, T.V. spots, radio jingles having bearing on health and nutrition have been produced.
- Radio jingles and radio programmes and T.V. spots and T.V. programmes are being broadcast and telecast regularly.
- Interpersonal communication through various community groups (women’s groups, youth groups and NGOs) is being established.
• The audience research which is crucial to the success of media is extremely limited.
• A Management Information System is in place for regular monitoring of IEC activities.
• A good physical infrastructure (spacious building, well equipped auditorium and conference hall, information centre, library and exhibition gallery) is in place.
• The Bureau is headed by a media person with a team of professionally qualified and experienced staff.

Grey areas:
• IEC print materials have been brought out under a host of subjects such as environmental sanitation, age at marriage, contraception methods, spacing, maternal and child health, neo-natal care, routine immunization, sex determination tests, nutrition etc. While too many print materials have been prepared under each subject head, the central message behind the effort does not come out clearly and tellingly. The materials are also repetitive.
• Similarly a number of audio – visual materials have been prepared centering round age at marriage, breast feeding, population control, vasectomy, tubectomy, institutional delivery, gender equality etc. While the central message is missing in many of these materials, they also appear to be overlapping and repetitive.
• To illustrate, the central message in nutrition/malnutrition/under nutrition could be divided under the following heads:-
  - concept and definition;
  - causes of malnutrition/under nutrition;
  - forms of malnutrition/under nutrition;
  - consequences of malnutrition/under nutrition;
  - how to promote nutrition and fight against malnutrition/under nutrition.
• The print and electronic (audio visual materials) medium of communication could correspond to each one of these central themes and the messages may be prepared in a logical and coherent manner. This has not been done.
• The use of these materials (both print and audio visual) on the ground was found to be minimal.
• No systematic and organized efforts have been made to go to the field, visit the anganwadis, sub-centres, PHCs and hospitals, assess the extent to which IEC materials produced by the Bureau have been received and used by these institutions, whether the content is being properly explained by the functionaries to the beneficiaries (mothers and children) and whether the target groups for whose health and well
being the materials are intended have been able to understand and internalize these messages and applied them in their daily lives.

- No external evaluation on the content, range and sweep, quality and impact of the materials produced by the Bureau seems to have been conducted so far.

Suggestions:

- Teams of professional photographers should be sent to the field, the photographs of Gr. III and Gr. IV malnourished children either at home or at the anganwadi or at the PHC should be taken and brought back to the Bureau with full details of these children.

- These should be discussed in a workshop of creative thinkers, writers and artistes interested in the area of health and nutrition and pictorial materials should be developed in the following manner and order: -
  - picture of the malnourished child at the top;
  - causes of malnutrition;
  - consequences of malnutrition;
  - remedial measures to fight against malnutrition.

- The materials so produced in the workshop in simple marathi or a tribal dialect (gondi, madhia, villoli etc.) should be sent to the field, got pre-tested through anganwadis, sub-centres and PHCs, reactions of the users/ beneficiaries to these materials should be recorded in an audio-tape and brought back to the Bureau.

- These should be further discussed in a 2nd round of the workshop, the changes/ modifications should be carried out in the light of reactions from the field and materials finalized. Such materials would find instant acceptance among the people (since they have been pre-tested and validated).

- To the extent possible, the materials so produced should cover comprehensively the various dimensions of a problem.

- To illustrate, mothers taking away the children against medical advice from a PHC/ hospital is the problem.

- To create the desired awareness and critical consciousness in the mind of the mother taking recourse to such a highly undesirable practice, IEC Bureau may produce a range of materials covering the following aspects of the problem: -
  - why do mothers take away the children from the PHC/hospital before the full course of treatment is over?
  - Are they aware of the implications/consequences of their action?
Are they aware that the treatment at the PHC/hospital cannot be made available at home?

Are they aware that the child’s condition is likely to take a turn for the worse and he/she may die if shifted to home from the PHC/hospital before the full course of treatment has been completed.

- A mobile van should be attached to the Bureau to enable the team of IEC experts from the Bureau to go out to the field on a regular and continuous basis. In course of this tour they should visit anganwadis, sub-centres and PHCs on fixed days at least once a month, present audio-visual shows on nutrition, malnutrition and under nutrition in presence of pregnant and lactating mothers and explain the implications and consequences of the latter. They should also check the number of charts, posters etc. which have been supplied and being used by the anganwadis, sub-centres and PHCs and make good deficiencies, if any.

- Similar visits should be undertaken to camps being organized by PHCs once a month or a quarter, depending on the need and audio-visual presentations on nutrition, malnutrition and under nutrition be made to drive home the importance of nutrition in health, productivity and nation building as also drive home the fact that malnutrition and under nutrition can be fought and removed in a planned, coordinated and scientific manner.

27.9.2007

Visit to Sassoon General Hospital, Pune (Paediatric Ward):

The purpose of this visit was to see the children who get admitted and treated in the hospital, the facilities available to treat emergency paediatric patients, the pace of recovery, the duration of stay, cases of LAMA, if any, follow up of the treatment at home after discharge and feedback on the basis of this follow up which would be of help in taking further corrective action. I interacted with Dr. Kinikar, Professor and Head of the Paediatrics Department and Dr. Chhaya, Lecturer about treatment of the Gr. III and Gr. IV malnourished children and the facilities available in the NICU for treatment of such children. I reviewed in detail the cases of the following 4 children who have been admitted to the Paediatric ward on different dates:-

**Case No. 1**

<table>
<thead>
<tr>
<th>Name</th>
<th>Baby of Sanath Mehmood Ansari</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>2½ months</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
</tr>
<tr>
<td>Address</td>
<td>Rajgurunagar Ta. Khed (Tribal)</td>
</tr>
</tbody>
</table>
Date of admission : 23.9.2007 for loose motion
Diagnosis : Acute gastroenteritis with LBW and septicemic shock
Line of treatment given: IV fluids, antibiotics
Assessment : This is a case of acute low birth weight with added complications of septicemia, gastroenteritis and loose motion. The mother of the child had a twins delivery on 18.9.2007 when one of the babies died due to SIDS (sudden infant death syndrome) while the second child which weighed 1455 gms only (against a normal of 2500 gms) has been admitted to the paediatric ward on 23.9.2007. Round the clock care and attention is needed to ensure survival of the child admitted under trying circumstances.

Case No. 2 :
Name : Sneha Nandu Bhatt
Age : 14 months
Sex : Female
Address : Bhimnagar, Vishrantwadi, Pune.
Date of admission : 21.9.2007 for cough and fever for 2 weeks.
Diagnosis : Pyogenic meningitis with right hemeiporesis, T.B. meningitis.
Weight on the date of admission : 6 Kg (62.1% of the normal weight. Gr. II malnutrition).
Line of treatment : antibiotics, anti-tubercular drugs, steroids
Present status : Stable.

Case No. 3 :
Name : Rushikesh Ganesh Bedre
Age : 8 months
Sex : Male
Address : Dhankawadi, Pune.
Date of admission : 24.9.2007 for cough, cold, fever and breathlessness.
Diagnosis : Bronchititis
Weight on the date of admission : 6.2 Kg (normal)
Vaccination status : fully immunized (BCG, DPT/Polio and Hepatitis).
Family history : 2nd child. Weaving started at 6 months of age.
Line of treatment : antibiotics, O2.
Present status : Stable.
Case No. 4:
Name : Kajal Vittal Jadav
Age : 5 years
Sex : Female
Address : Parwati Paytha, Pune.
Date of admission : 25.9.2007 for cyanosis, breathlessness and excessive cry.
Weight on the date of admission : 10 Kg (56.5%) Gr. III malnutrition.
Diagnosis : Tetralogy of fallots with cyanotic spell.
Vaccination status : fully immunized.
Family history : 2nd child (3 children in family)
Line of treatment : oxygen, soda-bi-carb, iv fluids, antibiotics and surgical intervention.
Present status : Stable.

I also reviewed the status of health of the following children in the warm room:-

Case No. I:
Name : Pranali Sanjay Ovhal
Age : 1 month
Weight : 3.25 kg (normal)
Haemoglobin : 8 mg% (lower than normal)
Breast feeding commenced soon after birth.

Case No. II:
Name : Maloshri Vithal Sajan
Age : 4 months
Weight : 5 kg (slightly underweight)
Haemoglobin : 10 mg% (normal)
Breast feeding commenced soon after birth.

Case No. III:
Name : Puja Netke
Age : 5 months
Weight : 5.4 kg (lower by 1 kg than normal)
Haemoglobin : 7 mg% (lower than normal)
Case No. IV : 
Name : Anjan Padekar
Age : 3½ years
Weight : 8.5 kg (61%) Gr. II malnutrition
Haemoglobin : 11 mg% (above normal)

Warm rooms have been developed primarily with a view to combating hypothermia. The temperature in these rooms have been maintained at 37º Celsius constantly.

The average duration of stay in the paediatric ward is 20 days. The duration of stay is prolonged if the children do not show any sign of weight gain. The children are not discharged if they have not recovered completely.

27.9.2007
Visit to Neo-natal ICU (NICU):

The following are the main distinguishing features of NICU:
- NICU has 22 beds;
- Normal duration of stay in NICU is 10 to 21 days;
- Average weight recorded soon after birth – 700 to 750 gms (as against the normal weight of 2500 gm);
- Four conditions are required to be fulfilled for taking a discharge decision:
  - Stable condition;
  - No infection left;
  - There has been positive weight gain;
  - The child has been fully immunized.
- The following equipments are available at NICU, Pune hospital (Sassun):-
  - One ventilator;
  - Phototherapy unit (for treatment of neonatal jaundice)
  - Special NICU OPD for mothers and children is organized every Friday;
  - All mothers are counselled about the manner of rearing their babies through breast feeding (upto 2 years with supplementary nutrition to begin after 6 months), immunization, personal hygiene and environmental sanitation, and following an appropriate dietary pattern with frequency of feeding, appropriate quantity and micro-nutrients. During demonstration emphasis is given on the following:-
• How to ensure proper nourishment for the baby;
• Personal hygiene, environmental sanitation and how to ward off infection;
• Breast feeding, position of the baby while feeding;
• Keeping the baby warm to ward off hypothermia;
• Less handling of the baby.

- The following causes of intra-uterine growth retardation (IUGR) are also explained in course of counselling:-
  - Teenage pregnancy;
  - Anaemia;
  - Inadequate and infrequent diet.

- The following ways and means to ward off IUGR are also explained:-
  - Regular ante-natal check up;
  - Supplementary iron;
  - Prevention of early child marriage.

27.9.2007

Visit to Junnar Rural Hospital:

The hospital was established in 2003. It is functioning in an old municipal council building which has acute shortage of space (as it was not designed to be a hospital building). There is no separate paediatric ward and children, as and when admitted are treated along with adults. To construct a new hospital building, a plot of 3 acres of land has been allotted by the State Government as against the normal requirement of 5 acres. A sum of Rs. 1 crore has been allotted and the boundary wall is under construction.

Other grey areas:

• While children have been admitted for treatment of diarrhoea, gastroenteritis, entric fever, cardio-vascular diseases, acute respiratory infection (ARI), bronco-pneumonia etc. not a single child has been referred either from sub-centre or PHC to the hospital for treatment of malnutrition.

• The claim of the Medical Superintendent – Dr. Bhangare that there are no malnourished children in the area nor any malnourished child Gr. III or Gr. IV has been admitted during the last 3 years should be taken with a pinch of salt. This shows that no proper survey of such children has ever been organized.
• One post of Medical officer and one x-ray technician is lying vacant causing avoidable dislocation to the work of the hospital. The post of x-ray technician is urgently needed to screen all cases of chest infections including tubercular infections.

• The following equipments are required to be urgently installed as per norms for smooth running of the hospital:-
  - x-ray machine;
  - boyles apparatus;
  - cardiac monitor;
  - baby warmer.

• There is no pathological laboratory which is an essential and integral part of any hospital. Without this, it is extremely difficult to send slides for test of malaria parasites; even sputum positive tests cannot be undertaken.

Visited the indoor ward, interacted with the admitted patients and treating physicians and the following facts came to the surface:-

**Case No. I:**
Name : Nituja Kailas Varade
Age : 29 years
Sex : Female
Date of delivery : 4.9.2007
Birth weight of the baby : 2400 gms (lower than normal)
  Breast feeding given within 2 hours after delivery.

**Case No. II:**
Name : Sakina Megha
Age : 30 years
Sex : Female
Date of delivery : 27.9.2007
Birth weight of the baby: 3 kg (normal)
  Received all ANC services.

**Case No. III**
Name : Prerna Vasant Barade
Age : 6 years
Sex : Female
  Admitted for fever, cough, loss of appetite for 5 days.
Diagnosis : Bronco-pneumonia
Treatment given : iv fluids, iv antibiotics
Vaccination status : has been fully immunized
Weight of the child after admission : not noted.

The overall assessment of the management of the hospital shows that there is an air of casualness as against a sense of urgency and seriousness of concern among all concerned.

**Suggestions:**

- The Medical Superintendent, the medical and para-medical staff should be sent for training for developing sensitivity in understanding and dealing with all cases of malnourished children. It is only through such orientation that the current casual and insensitive approach can be replaced by a more positive one.

- A diagnostic camp at the headquarters of the Rural Hospital should be organized at least once every month. Such a camp should be preceded by adequate planning and preparation on the one hand and publicity on the other so that mothers will get to know about the camp and come to attend the camp with their children. After necessary screening all malnourished children should be graded, admitted and treated in the hospital.

- A separate paediatric ward should be carried out by reorganization of the space available in the hospital.

**27.9.2007**

**Visit to Sub-centre, Padabi:**

The sub-centre under PHC Aptale was established in 1991. It has 5 villages, 10 AWCs and 8097 population within its jurisdiction. The ANM – Smt. Ghadge has been in position for 4 years. An interaction with her brought out the following redeeming features:-

- during the days when the ANM is in station 5 to 6 pregnant mothers and 1 to 2 lactating mothers turn up for check up;
- the ANM herself covers about 50 to 60 houses in course of her home visits;
- she is able to cover all the 5 villages more than once a month;
- the number of deliveries conducted by the ANM during the last 3 years is quite encouraging. The figures are:-

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189
contrary to trends elsewhere, mothers in the jurisdiction of this sub centre prefer institutional delivery to home delivery.

- ANC registration (73) is 100%.

The following equipments are available at the sub-centre:-

- Stethoscope;
- Fitoscope;
- Delivery kit;
- Gloves;
- Thermocol box;
- Weighing machines;
- Scale for recording height;
- Enema can

- Some charts and posters supplied by the IEC Bureau, Pune have been displayed at the sub centre.

- Reviewed the following 3 case records of children delivered at the sub-centre in detail:-

**Case No. I**

Name : **Sujata Vilas Aher**
Delivered on 10.1.2007 at the sub-centre

Weight at the time of birth : 1800 gm (much lower than the normal 2500 gm)
Treated in a private hospital for low birth weight.
The present status is not known.

**Case No. II**

Name : **Savita Hemant Langhi**
Delivered on 26.1.2007 at the sub-centre

Weight at the time of birth : 1800 gm (much lower than normal 2500 gm)
Being a case of premature delivery it has been treated in a private hospital. Present status of the child is not known (there
is no follow up nor any feedback).

Case No. III
Name: Sunita Nandu Nangre
Delivered on 26.1.2007 at the sub centre
Weight at the time of birth: 1300 gm (much lower than the normal weight of 2500 gm).

Being a case of premature delivery it was referred to a private hospital for further treatment. Present status of the child is not known.

- Additionally the ANM is providing referral services to high risk mothers. One such case relates to Ms. Radhika Rohidas Wagh which has been referred by the ANM to Y.C.M. Hospital on 11.5.2007 and a sum of Rs. 1500/- has been paid under Janani Surakshya Yojana (JSY). The ANM herself carried the mother to the hospital.
- The ANM is notifying all births and deaths to GPs.

Grey areas:
- There are cases of large families, early child marriage, teenage pregnancy and instances of lactating mothers becoming pregnant.

Suggestions:
- The ANM should intensify her counselling to all categories of mothers and adolescent girls and impress on them the dangers of teenage pregnancy.
- Even if cases of LBW children have been referred to private hospitals for treatment under emergent circumstances it is the bounden duty and obligation of ANM incharge of the sub-centre to follow up these cases, get an accurate feedback about present status of health of the child and take further corrective action if there was no improvement.

27.9.2007
Visit to PHC, Patale:

The PHC was established in 1978 and is functioning in a departmental building. It has 11 sub-centres (of which only 3 have departmental building) 28 villages and 50 padas. In addition to the MO Incharge of the PHC – Dr. M.R. Veer, there are 2 LHV's (1 regular and 1 contract) and 2 Health Assistants (Male). The second MO is suffering from breast cancer, has already undergone surgery and is currently undergoing chemotherapy in KEM hospital in Mumbai.
In course of review the following redeeming features and grey areas came to light:-

- The average OPD attendance ranges between 35 to 40. The OPD attendance on the day of visit was 22.

- The field visits take place according to a calendar of such visits prepared in advance. On an average about 16 days are spent in such visits. Every such visit comprises of one village and 2 padas on a day.

- The visits take place by a team/unit comprising of:
  - LHV;
  - ANM;
  - MPW

- The visits are undertaken in an organized and systematic manner. The team drops in first at the AWC, takes stock of a couple of activities such as measurement of weight, correct reflection of weight in the growth monitoring register, correct gradation of malnutrition, supplementary nutrition programme, check up of health of children by the MO of the PHC and record of findings, prescription etc. in the health check up register. The team also interacts with the mothers who are present in the AWC.

- The visit to AWC is followed by the visit to the GP where it verifies the register of births and deaths as also the stock of TCL for chlorination of water sources (to ward off water borne infections).

- The next in order come the home visits where in addition to meeting high risk mothers the latter are counselled on a host of topics such as:-
  - ANC registration;
  - Seven steps to safe delivery;
  - Institutional delivery vs. home delivery;
  - Immunization of children and pregnant mothers;
  - Dietary pattern and management including frequency and adequacy of dietary service;
  - Anaemia management and control (405 mothers and children suffer from anaemia);
  - Haemoglobin management.

- Six children were admitted in PHC for malnutrition for one month and treated; 2 of them improved from Gr. III to Gr. II.

Grey areas:

- The neonatal, infant and child mortality rates are as under:-
- neo-natal mortality rate – 20 (per 1000 live births);
- infant mortality rate – 24 (per 1000 live births);
- child mortality rate – 0.01.

- There was one maternal death due to septicemia in 2005-2006.

Suggestions:

- The neo-natal and infant deaths are matters of concern (5 neonatal and 9 infant deaths). All out efforts should be made to identify the causes of such deaths and prevent them.

- Mother’s education about causes and consequences of various forms of malnutrition and ways and means to bring them under control through sound dietary discipline and management deserves priority attention of the PHC staff.

- Unresponsiveness or disinterestedness of mothers to the counselling provided should not deter the ground level health functionaries; instead, it should renew their determination to forge ahead and to keep on repeating the advice till the desired result has been achieved.

- Visit to villages, padas and households should be a step by step structured approach; it should also be an exercise in time management and management of distress situations.

- Adequate attention to water and sanitation will have to be paid and the IEC package to be counselled must comprise of –
  - diseases transmitted by contaminated water;
  - methods of water disinfection;

27.9.2007

Visit to PHC Inglun:

The PHC was established in 1984 and is functioning in a departmental building. It has 7 sub-centres, 20 villages and 18 hamlets. There are no major problems associated with repair and maintenance of the building. The visit brought out the following redeeming features of the PHC:-

- The PHC building is in good shape, the campus was neat and tidy and there was no problem about adequate availability of medicines.

- Certain central messages about age at marriage, spacing, registration of births and deaths, safe motherhood (ANC registration, TT immunization and ANC check up),
delivery by a trained dai etc. have been graphically depicted on the walls of the PHC building;

- Rugna Kalyan Samiti has been formed, is a fairly representative body and the meetings have been held. Ways and means of implementing NRHM were discussed in the meeting.

- Unlike other tribal areas the average family size ranges from 2 to 3. The spacing between 2 births is also of the order of 2½ to 3 years. That is how in 2006-2007 only 70 tribal women have received a small amount of Rs. 3500/- under JSY.

- The female attendant is fairly well conversant with the geography and topography of the area and has been of great help to the ANM in undertaking visits to villages, padas and households located therein in a planned, coordinated and purposeful manner.

- The incidence of malnutrition was reported to be small in as much as there were only 3 Gr. III cases in 2006-2007 and 2 Gr. III cases in 2007-08.

- The 2 cases of Gr. III malnutrition are as a matter of fact, instances of progression from Gr. IV to Gr. III.

- Water samples are being sent regularly to the approved testing laboratory for examination to certify if water is free from chemical and bacteriological impurities and is hundred percent potable.

- The progression from G. IV to Gr. III could be explained in the following manner:-
  
  | Name of the child          | Trupti Ashok Rawate          |
  | Weight on the date of admission | 5.5 kg                      |
  | Weight gained (subsequent)  | 5.8 kg, 6.1 kg, 6.4 kg, 6.6 kg, 6.8 kg and 7.5 kg |

Grey areas:

- The post of laboratory technician being vacant, blood samples are being collected and sent to Rural Hospital, Junnar or PHC, Aptale for examination and report. This is a very inconvenient arrangement; it is also time consuming. Every PHC must be a self-contained complex which should provide for all types of pathological tests.
27.9.2007

Visit to ICDS Institutions:

AWC Padhi (2.8.79)

Redeeming features:

- The AWC is functioning in a departmental building.
- The SNP feeding programme conducted by the SHG contains all the micro-nutrients essential for a healthy body (rice 50 gm, mung dal 20 gm, soya flour 5 gm, oil, salt and turmeric).
- Food is being served to mothers and children twice a day at 10.30 AM and 1.30 PM. Therapeutic food is served to children in the age group of 6 months to 1 year. The AWC has a kitchen room.
- The required number of charts and posters have been displayed.
- Gas and cooker have been made available by the Gram Pradhan for cooking.
- Uniforms to children have been made available through voluntary contribution.

Redeeming features of tribal households emanating from talks with mothers:

- Piped water supply to households is available as also domestic toilet facility (60%).
- Food is served twice a day to adults but 3 times to children which is essential for promoting nutrition.
- The food served at home comprises of bajra roti, green and leafy vegetables (methi, palak, green peas, drumsticks), matki, tomato etc.
- People of the village are generally peace loving and vegetarian.
- Average size of the household is five.
- The BPL, Antyoday and Annapurna card holders are getting the prescribed quantities of rice and wheat at prescribed rates; there is generally no dislocation in supplies of food stuff.

Grey areas:

- The actual attendance was 34 as against the enrolment of much larger number of children. It was pointed out that some children who are staying 2 kms away from AWC prefer to go to the primary school in their close neighbourhood instead of coming to the AWC.
- The timing of the AWC i.e. 10 AM to 3 PM is inconvenient for both mothers and children, particularly in summer.
• The AC sheet roof without cross ventilation makes the stay of the children particularly during afternoon hours uncomfortable.

• Percapita amount allocated by State Government @ Rs. 1.98/- per day was reported to be grossly inadequate keeping in view:
  - the quantity of food to be served;
  - the micronutrients in food;
  - the number of times food is served.
  - Increase in cost of fuel and edible oil as also of pulses and other commodities (which are not supplied by PDS).

• Despite best of efforts on the part of the AWW, the SHG and mothers there are children with lower than normal weight such as:

I Name - Sahil Rohidas Thombre
Date of birth - 1.5.2003
Weight - 12.2 kg (5.5 kg lower than normal)
Categorized in growth monitoring register as Gr. I.

II Name - Avishkar Harischandra Pawar
Date of birth - 14.2.2004
Weight - 13.9 kg (about 2 kg lower than normal)
Categorized in growth monitoring register as normal.

Grey areas emanating from households:
• Mothers are going for work for supplemental earning due to large size of the family and number of additional mouths to be fed.
• Against a minimum wage of Rs. 67/- notified by the State Government for agriculture the earnings of women range from Rs. 35/- to Rs. 45/- per day.

27.9.2007
Visit to AWC, Surale (5.11.79)
Redeeming features:
• AWC is functioning in a GP building constructed under JRY.
• The Supervisor, Asstt. Project Officer and ANM are visiting the AWC at close and frequent intervals.
• The check up of health of children by the Medical Officer from the PHC has resulted
in timely treatment and recovery of ailing children (this was confirmed from a perusal of case records of 3 children).

- Children are able to count from 1 to 10 correctly, read and identify birds and animals from the charts on the wall.
- As a result of himalt tonic being administered to Gr. II children (3) the weight of the children has picked up.
- No child is in Gr. III or Gr. IV malnourished category.
- The AWW makes 4 to 5 home visits a day.

**Grey areas:**

- As against enrolment of 36 children and average attendance of 28, only 18 children were present at the time of visit (it was learnt that some children were taken away to home by the mothers after the SNP feeding programme).
- The growth monitoring register does not correctly reflect the grading of malnutrition. This was evident from the checkup of weight of one Sidhi Balu Matele with date of birth as 22.11.2004 and weight as 9.6 kg.

**27.9.2007**

**Visit to a IAY home, Surale:**

The beneficiary – Kondaji Ramji Matele constructed the low cost dwelling unit in 2001-02 with financial assistance of Rs. 28,000/- from Government. There are 6 members in the family (while children were away to school, women were away to the field). The beneficiary who was present at home (unable to work due to advanced age) acknowledged that he is able to make both ends meet with the BPL card which entitles him to 25 kg of wheat and 10 kg of rice. From the quantity of grains stored at home it appears to be a case of barest minimum biological survival.

**Redeeming features of district administration, Pune which have an indirect bearing in promoting nutrition:**

1. **Land reforms:**

   - Junner sub-division (which was visited by me) has Ambegaon, Junner and Khed talukas which are notified tribal areas. Revenue records are neglected in these areas due to ignorance and illiteracy of tribal people. Partition and mutation entries of heirs have over the years been neglected due to procedural bootlenecks. Partition is an essential requirement for Padkai scheme which envisages the following:-

     "barren land in hilly and sloppy tribal areas have to be converted to cultivable paddy land under Employment Guarantee Scheme;"
for this purpose a group of people have to come together and develop their own paddy fields together.

• To facilitate partition and mutation at the doorsteps of the tribal people, camps have been arranged at a central place, central to the cluster of villages.

• Records are taken from the taluk office with the Magistrate, Circle Officer and concerned village officer to the household to facilitate the process.

• Twenty nine such camps have been conducted in Ambegaon taluk itself and orders u/s 85 of Maharashtra Land Revenue Code have been issued in 262 cases.

• A pilot project under Padkai Scheme was conducted in 4 tribal villages and conversion work has been completed in respect of 126 plots of land.

II Issue of caste certificates:

Caste Certificate which is an essential requirement for education and employment purposes is issued by the SDO. However, for a member of the tribal community it is tedious and expensive to collect all documents and approach the competent authority for issuing a caste certificate. In consideration of these difficulties a comprehensive drive has been launched under orders of the Collector, Pune to issue the caste certificate in the village itself.

• For this purpose, all records are taken from the taluk office along with a computer, Xerox machine, lamination machine and all concerned officials and a laminated caste certificate is issued at the village level free of cost (one such certificate costs Rs. 25/-).

• So far 7628 laminated caste certificates have been issued through 73 village level camps.

III Special campaign for Katkari Primitive tribal groups:

A special drive was conducted in all the 3 talukas under Junner Sub-division namely Khed, Ambegaon and Junner for a comprehensive livelihood survey of Katkari Primitive Tribal Groups. The survey identified 354 Katkari families in Khed, 250 in Ambegaon and 177 in Junner respectively. The following benefits could be disbursed as a positive outcome of the survey:

- caste certificate - 277
- income certificate - 277
- domicile certificate - 298
- ration card (Antyoday) - 302
- schools bags and uniforms - 277
- houses provided under IAY - 37
- admission provided to tribal students- 30
- fishing nets - 110 families.

IV Access to potable water supply:

According to the information furnished by Rural Water Supply, Sub-Division, Junner visited by me, access to potable water is available in all the 47 GPs and 184 villages/padas either through piped water supply scheme or borewell or dug well. It was also confirmed that there is no incidence of guinea warm, goiter and florosis. Water samples from every village are sent to State Public Health Laboratory for chemical and bacteriological analysis. According to the report submitted by the DHO, ZP, Pune from out of 2390 samples from 410 sources sent to the laboratory for testing in respect of 1590 tribal households 410 were found to be contaminated. The sources were subsequently treated with TCL to ensure access of all tribal households to potable water.

V Access to dwelling units:

During the last 3 years assistance under Indira Awas Yojana has been made available to 972 tribal households in Junner sub-division. Proposal for construction of 284 houses under IAY and 158 houses under Rajiv Gandhi Nirman Yojana No. 1 has been sent to State Government. There are still 6357 tribal families in Pune district who do not have a roof above their head.

VI Production of cereals, pulses and tubers, fruits and vegetables:

National Rural Horticulture Mission is being implemented in the district to enhance the production of fruit crops. Similarly National Oilseed Development Programme and National Pulse Development Programme are being implemented. The species covered are:-

i. Cereals and Pulses :
   Paddy, ragi, groundnut, tur, green gram, udid, soyabean, jawar, wheat, gram and bajra.

ii. Vegetables and tubers:
   Onion, potato, methi, coriander, brinjal, cabbage, tomato, cucumber, peas, chilli and drumstick.

iii. Fruits:
   Mango, chicku, custard apple, grapes, banana, papaya, bair and guava.
VII Special drive launched to improve production of milk, eggs, fish, meat etc.

- Under Kamdhenu Dattak Gram Yojana total milk production in 8 villages of Junner taluk after treatment of JY cross breed, HF cross breed, indigenous cows and buffaloes has gone upto 2450 litres which is equivalent to 1-1.5 litres per animal per day. Distribution of goat scheme (1 unit comprises of 10 she goats and 1 he goat) has helped improvement of economic status of farmers by selling goats for meat. Training programme for 211 farmers in these 8 villages has also been conducted in December, 2006.

VIII Launching of Nirmal Village concept for promoting environmental sanitation:

Of 63,538 total number of households in 47 GPs in Junner taluk, 33,253 are having domestic toilets and 30,286 are without toilets. Few villages have been declared as environmentally clean (Nirmal gram).

IX Contribution made by DRDA, Pune in promoting SHGs and providing bank linkage to them:

In all and from 1999-2000 to 2005-2006 there were 16113 SHGs and in 2006-2007 alone 10,948 SHGs have been formed making a total of 27073 SHGs in 13 rural talukas of Pune of which 22,815 SHGs have been provided linkage with banks, the extent of credit being of the order of Rs. 17.42 Crores (upto 2005-06) 1104 SHGs have been formed in 2007-08 bringing the total 28177 with a bank credit linkage amounting to Rs. 1.26 Crores. Apart from promoting thrift among individual households, SHGs have been implementing supplementary nutrition programme in 3446 AWCs in the district of which 1114 AWCs are in the 3 tribal talukas of Ambegaon, Khed and Junner.

X Contribution made by NGOs:

- Maharashtra Arogya Mandal (MAM) is a voluntary organization established in June, 1960, working in 189 villages/hamets of Ambegaon, Khed and Junner blocks and dedicated to the cause of upliftment of tribals. The initiatives taken by the NGO are:-
  - Social capital building programme;
  - Natural Resource Management Programme;
  - Agriculture;
  - Health;
  - Education;
  - Tribal Produce Processing and Marketing;
  - Micro Finance.
As a result of these initiatives the following grass root level organizations have come into being:-
- NTFP Society - 3
- Village Development Committee - 32
- SHG - 154 (Membership 2114, corpus Rs. 6,79,185/-)
- Grain Bank – 39 (Membership 2411, share capital = Rs. 2,624,698/-).
Ahmednagar
(28.9.2007)

Geographical, topographical and demographic profile:

The district lies between 18.2º to 19.9º latitude and 73.9º to 75.5º longitude. It has a geographical area of 17048 sq.km and population of 40,88,077 with a low density of population at 240 per sq.km. The tribal area has a total geographical area of 1503.79 sq.km, a population of 3,03,048 and a very low density of 177 per sq.km. The breakup of the population between urban and rural, women and men, SC and ST is as under:-

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Category</th>
<th>District Population</th>
<th>Tribal area Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Urban</td>
<td>8,03,697</td>
<td>--</td>
</tr>
<tr>
<td>2.</td>
<td>Rural</td>
<td>32,36,945</td>
<td>2,66,638</td>
</tr>
<tr>
<td>3.</td>
<td>Women</td>
<td>19,81,576</td>
<td>1,31,576</td>
</tr>
<tr>
<td>4.</td>
<td>Men</td>
<td>21,06,501</td>
<td>1,35,062</td>
</tr>
<tr>
<td>5.</td>
<td>SC</td>
<td>4,84,077</td>
<td>11,234</td>
</tr>
<tr>
<td>6.</td>
<td>ST</td>
<td>3,03,048</td>
<td>1,21,566</td>
</tr>
</tbody>
</table>

It has 4 sub-divisions, 14 talukas, 1309 GPs, 1586 revenue villages, 1119 inhabited villages, 2960 padas and 8,00,000 number of households. The corresponding number for the tribal area is as under:-

- GPs: 147
- Revenue villages: 191
- Inhabited villages: 153
- Hamlets: 238
- Households: 48,480

Migration from the tribal areas is extensive (over 50%).
The number of children in 0-6 age group is as under:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>District</th>
<th>Age Group</th>
<th>Tribal Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>67,856</td>
<td>0-1</td>
<td>5431</td>
</tr>
<tr>
<td>1-3</td>
<td>1,36,595</td>
<td>1-2</td>
<td>6183</td>
</tr>
<tr>
<td>3-6</td>
<td>1,94,752</td>
<td>2-3</td>
<td>6262</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,99,203</strong></td>
<td><strong>3-4</strong></td>
<td><strong>6304</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-5</td>
<td>6425</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-6</td>
<td>6378</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>36,983</strong></td>
</tr>
</tbody>
</table>

- The average age of marriage for the district is 18-22 while it is 15-22 for the tribals.
- The average size of the family of tribal households ranges between 5 to 6 while for the district as a whole it is 5 only.
- The dietary pattern of an average tribal household comprises of 3 meals with rice, cereals, pulses, nachni, milk, limited quantity of green vegetables (according to seasonal availability).
- In terms of access to potable water samples are being sent to approved laboratories for test and are reported to contain bacteriological and chemical impurities.
- No perspective plan has been prepared after identifying the list of problem villages in the context of access to potable water and with a phased programme to treat these problem villages with a view to ensuring availability of potable water according to norm i.e. 40 litres per person per day.
- 42.14% of the households in tribal areas are having domestic toilets.

**Profile of Public Health:**

- There is one civil hospital at Ahmednagar, 25 sub-divisional and rural hospitals (of which 4 are in tribal areas), 96 PHCs and 5 PHUs (of which 10 and 5 respectively are in tribal areas), 555 sub-centres (of which 70 are in tribal areas). Of them 83 PHCs and 340 sub-centres have got departmental building and the rest are without any departmental building.
- Of 1345 sanctioned posts [(MO Class II and III, HA(M) and HA(F), MPW (M) and MPW(F)] 1087 posts have been filled up leaving 258 (nearly 30%) vacant.
- In respect of 75 PHCs for the district as a whole and 7 PHCs for tribal areas there are no staff quarters making it difficult for the staff to stay at the headquarters, open the PHC building in time and contribute the best of their service to the people through this premier health institution.
• The Rugna Kalyan Samitis and Village Health, Nutrition and Sanitation Committees are still in the process of being constituted. These are important democratic participatory fora under NRHM and will, if constituted in time and made properly functional go a long way in achieving the much needed synergy between health, nutrition and sanitation at various levels.

Number of Gr. III and Gr. IV malnourished children for the district as a whole and those in tribal areas is large and is a matter of great concern. This is indicated in the following table:-

<table>
<thead>
<tr>
<th>Gr. III malnourished children</th>
<th>Gr. IV malnourished children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distt.</td>
<td>Tribal</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>81</td>
</tr>
<tr>
<td>75</td>
<td>14</td>
</tr>
</tbody>
</table>

• Number of malnourished children who have died both for the district as a whole and for the tribal areas is equally large as would be evident from the following table:-

<table>
<thead>
<tr>
<th>No. of malnourished children who have died</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the district as a whole cumulative figure for 3 years</td>
</tr>
<tr>
<td>2005-06</td>
</tr>
<tr>
<td>1634</td>
</tr>
</tbody>
</table>

• Causes of all the deaths have been investigated by the MO of the PHC or hospital, as the case may be, reports submitted to the competent authority (DHO in case of PHC and Civil Surgeon in case of Rural Hospital) and accepted by the latter.

• One of the major contributory factors contributing to such death is the phenomenon of tribal mothers taking away their children against medical advice even before the full course of treatment was over. The incidence of LAMA (leaving against medical advice) in tribal areas is as high as 25.

• The incidence of TB, malaria, filariasis, jaundice/hepatitis, diarrhoea/dysentry in the district as well as in tribal areas is quite high as would be evident from the following table:-
<table>
<thead>
<tr>
<th>District</th>
<th>Tribal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sputum Positive 6/1,00,000</td>
<td>Sputum Positive 58/1,00,000</td>
</tr>
<tr>
<td>Jaundice/hepatitis 2006-07 - 73 2007-08 - 106</td>
<td></td>
</tr>
</tbody>
</table>

Profile of ICDS:

- Only 1 ICDS Project is currently active with 1 CDPO, 14 supervisors and 381 AWWs. Considering the size of the district, the spread (from one end to another it is 100 km+) and the farflung tribal pockets which are in a hilly terrain with scattered and fragmented human settlements, one ICDS Project is grossly inadequate. This also indicates lack of spatial planning and lack of priority attention for tribal areas.

- Of the 381 AWCs, 222 have departmental buildings and in respect of the remaining 159 various sources of accommodation have been tapped which is not altogether a satisfactory arrangement (from the point of adequacy of space and functional utility). Arrangements for repair and maintenance of these buildings are also not in place.

- 375 out of 381 AWWs have been trained by Pirence at Loni, Tal Rahata and rest by Shantabai Bafina Jain Seva Trust, Kopargaon.

- The district has a large network of mahila mandals and SHGs (379) and they are fully involved with implementation of SNP feeding programme at the AWC.

28.9.2007

Field Visits

Rural Hospital Rajur Tal Akole

- This is a 30 bedded hospital established in 1992. There are 3 PHCs and 60 villages with a population of 75000 (0-6 age group children’s population being 12000). Except one Paediatrician and Anesthetist there are no other specialists according to the staffing pattern. It has also not been possible to get any other specialist on contract basis. Even though there is no gynaecologist normal deliveries are being conducted by the MOs and complicated deliveries are referred to Akole.

- Investigated into one case of death in 2004-05. The outcome of investigation is as under:-
Line of treatment and progression:

The line of treatment was according to prescribed standard and the response of the patient was good. There was definite weight gain too. His condition, however, took a turn for the worse and he developed aspiration pneumonia. He became breathless and died. In the absence of any life support system (ventilator) it was not possible to save the life of the child.

- During 2007-08, 3 Gr. III and 1 Gr. IV malnourished children have been admitted. One child (Gr. III malnourished) has been taken away by the mother.
- Details of 2 Gr. III and 1 Gr. IV malnourished children are as under:

1. **Name** : Sangita Bhagare  
   Age : 1 year  
   Category : Gr. III malnutrition with diarrhoea and mild dehydration.  
   Date of admission : 19.9.2007  
   Present Status : Removed by mother against medical advice.

2. **Name** : Pintu P. Dhadwas  
   Age : 8 months  
   Weight at the time of admission : 4 kg  
   Category : Gr. IV malnutrition  
   Date of admission : 29.8.2007  
   Ailment : On the date of admission, the child was suffering from viral pneumonia. Treatment was given with antibiotics and antipyretics. The child was fed 4 times (rice, chapatti, dal, vegetable, egg and milk). There was a gain of 400 gm in weight at the time of discharge.

3. **Name** : Deepak Hari Padmire  
   Age : 2 years  
   Date of admission : 6.6.2007
Category : Gr. III malnutrition

Weight at the time of admission : 7.3 kg
Date of discharge : 13.6.2007

Weight at the time of discharge : 7.4 kg

The following table shows the number of Gr. III and Gr. IV malnourished children who were admitted and treated in Rural Hospital, Rajur referred to by PHCs:-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Gr.III</th>
<th>Gr. IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2004-05</td>
<td>45</td>
<td>12</td>
<td>57</td>
</tr>
<tr>
<td>2.</td>
<td>2005-06</td>
<td>08</td>
<td>00</td>
<td>08</td>
</tr>
<tr>
<td>3.</td>
<td>2006-07</td>
<td>20</td>
<td>06</td>
<td>26</td>
</tr>
<tr>
<td>4.</td>
<td>2007-08</td>
<td>03</td>
<td>01</td>
<td>04</td>
</tr>
</tbody>
</table>

This table goes to show that there is a perceptible decline in the number of Gr. III and Gr. IV children (malnourished) admitted in and treated in Rural Hospital, Rajur.

**Suggestions made:**

- Extension services should be provided to the people in the area of operation of the RH. Under this health check up camps, screening camps, diagnostic camps, cardiological and paediatric multiple screening camps should be organized once a month at the level of PHC. All subject matter specialists serving various health institutions in the area should be pooled and brought together to the camp and multiple screening of children (ear, nose, throat, eyes, congenital anomalies etc.) should be organized.

- The procedure for maintenance of case records both at the RH, PHC and PHU needs to be streamlined. The folder containing the case record of the malnourished child should have a proper index covering the following:-
  
  - Date of admission;
  - Weight at the time of admission;
  - Pathological testing and finding thereof
    - Haemoglobin count;
    - Any other infection;
    - Any other associated complication;
    - Line of treatment;
- Response of the child to the treatment;
- Progression;
- Weight gain, if any;
- Death, if any;
- Causes and factors contributing to death;
- Whether investigated;
- Whether the report has been sent to Civil Surgeon/DHO as the case may be.

- Training Programme for ANM, LHV and MPW should be arranged with provision for refresher training at the Health and Family Welfare Training Centres at either Pune or Nashik or Aurangabad.
- Promoting skills in social communication with members of the tribal communities (Thakar and Katkeri) should be an integral part of such training programme.
- Adequate quantity of medicines for snake bite and rabies should be kept in the hospital.
- Pathological tests should be conducted in all cases of Gr. III and Gr. IV malnourished children.
- Special care needs to be taken in all cases of malnourished children where there is no weight gain despite proper treatment and diet.
- Maximum persuasive efforts should be made by medical and para-medical staff to discourage mothers not to take away children against medical advice.

28.9.2007

Visit to AWC, Kelungan:

As against a total number of 54 children in 0-6 age group enrolled in the AWC, 20 children were present at the time of visit to the AWC (945 am). Parents of the children work as cultivators (small and marginal) or as agricultural labourers and they often take away the children from the AWC to engage them in work (domestic or agricultural, as the case may be).

Redeeming features:
- Even though formal opening time of the AWC is 900 hrs it is opened one hour in advance for cleaning and making the seating arrangement. The AWC floor is immaculately neat and clean.
• The mothers come to the AWC with children of their own daily.
• The SNP food is served twice i.e. 9.30 AM and 12.30 Noon.
• The recipe for every day is displayed on the black board.
• Food is prepared at the residence of one of the members of the SHG namely Mahalaxmi Mahila Bachat Gat for which no remuneration (for the cook) is charged.
• The AWC receives its daily requirement of water from the village common well which is being bleached by the Village Panchayat regularly.
• SHG meticulously sticks to the timing for serving food.
• Since the amount per child under SNP feeding programme is inadequate (Rs. 1.98) local people do contribute tomatoes and vegetables to enhance the nutritive value of food.
• The MO from the PHC regularly visits the AWC for check up of health of the children once every month for Gr. III and Gr. IV malnourished children and once a quarter for normal children. The medical check up is taking place regularly.
• The CDPO and Supervisor last visited the AWC on 18.9.2007. Impressions of their visit and suggestions have been recorded in the visitor’s book.
• The AWW herself makes visits to 4 to 5 households in the village in the minimum.
• Pregnant and lactating mothers receive medicines and tonics for the children on the strength of prescription of the MO and appear to be generally happy about the quality of SNP food and overall management of the AWC.

I got the weight of the following 4 children checked in the AWC in my presence. Names of the children, date of birth, weight recorded, whether normal or lower than normal are indicted in the table below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the child</th>
<th>Date of birth</th>
<th>Weight</th>
<th>Whether Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lalita Vishnu Bharmal</td>
<td>5.6.2004</td>
<td>11 kg</td>
<td>4 kg lower than normal.</td>
</tr>
<tr>
<td>2</td>
<td>Vishal Sundar Kawade</td>
<td>17.5.2003</td>
<td>13 kg</td>
<td>4.5 kg lower than normal</td>
</tr>
<tr>
<td>3</td>
<td>Sekhar Santosh Gambhire</td>
<td>22.2.2004</td>
<td>10.5 kg</td>
<td>5 kg lower than normal</td>
</tr>
<tr>
<td>4</td>
<td>Pradeep Jagan Mundhe</td>
<td>15.4.2003</td>
<td>11.6 kg</td>
<td>6 kg lower than normal</td>
</tr>
</tbody>
</table>

**Remarks:** There are no Gr. III and Gr. IV malnourished children in the AWC. The fact that despite all care and attention so many children are reporting under weight constitutes an area of deep social concern.
One plausible explanation for this phenomenon could be that while children may be assured of 300 kilo calorie of nutritive value of food served to them twice as a part of the SNP feeding, they may not be so assured of the remaining 700 kilo calorie (as a part of the 1000 kilo calorie package). This was confirmed by mothers who were present at the time of my visit. They were candid enough to state that the foodgrains which they grow in their farm are barely sufficient for biological survival for 4 to 5 months. For the remaining period they work as farm labourers but their earnings are not enough to buy sufficient quantity of foodgrains to contribute to nutrition of children.

Grey areas:

- The average size of the family is large (ranging between 6 to 12). This makes the task of distribution of intra-household income over food and non-food items and promotion of nutrition extremely difficult.
- Foodgrains grown in the household farm land is sufficient barely for 4 to 5 months. For the remaining period of the year they work as farm labourers.
- There is sharp disparity in earnings between men (Rs. 50/- to Rs. 60/-) and women (Rs. 30/- to Rs. 40/-) per day.
- Women and men leave for their farm work too early in the morning leaving no time for breakfast. They eat only 2 meals a day i.e. lunch around 11 AM and dinner around 7 PM.
- It is difficult to reach a conclusion on the basis of the interaction with the women and men that the desired nutritive value in terms of the prescribed kilo calorie (it should be around 3000 to 3500 for persons doing hard manual labour for over 8 hours) is present in the food which they eat (Bhakri, Bhaji and Chatni).
- Consumption of green leafy vegetables is seasonal and minimal.

28.9.2007

Visit to Katlapur Subcentre:

The ANM – Smt. Chavan is working for 8 years (8.3.99) in the Sub-centre which is quite old (1982). It has 5 villages and 50 women have registered themselves for ANC. On an average about 20 to 25 women daily visit the subcentre of which 2-3 women are ANC/PNC. The number is small as the distance between Rural Hospital, Rajur and some villages is less and women prefer to go to the Rural Hospital.

Redeeming features:

- The ANM’s husband has a motorcycle and takes her to the villages; that’s the reason she is able to cover the 5 villages in her jurisdiction atleast 4 times a month.
F.S. Tablets are being provided to pregnant women with lower haemoglobin count in addition to advice about balanced food.

Four deliveries were successfully conducted in August, 2007. There was no premature delivery and no instance of low weight.

The standard weight of new born children was found to be ranging between 2.5 kg to 3 kg.

There has not been a single case of maternal death.

The seven steps to safe motherhood have been nicely depicted in a board at the very entrance to the subcentre. The 7 steps highlighted are:-
- ANC registration;
- Regular checkup of all pregnant mothers (3rd, 5th, 7th and 9th month);
- Vaccination and medication of all pregnant mothers;
- No hard manual labour, no climbing heights;
- Balanced and nutritious diet;
- Institutional delivery;
- Breast feeding upto 2 years; composite feeding after 6 months.

Grey areas:
- The average size of the family ranges between 10 to 12.
- Ignorance about family planning methods is total which is compounded further by adherence to blind faith.
- Early marriage of girls, non-acceptance of family planning methods and absence of spacing are responsible for this phenomenon.
- Ignorance, illiteracy and desire for male offsprings are responsible for non-acceptance of family planning methods. Despite the advice given by ANM, male members of the family do not volunteer to go in for vasectomy. This is more on account of the fear of impotence harbour ed by them without any rational or scientific basis.
- Women tend to be anaemic more than men due to lack of balanced and nutritive diet. Six out of 60 women (10%) registered for ANC have been found to be anaemic.
- The number of deaths of children in different age groups has been as under:-
  - 01 - within last 4 weeks;
  - 01 - within last 1 year;
  - 01 - within last 1 to 5 years.
Poverty and lack of adequate employment and income opportunities are factors which prompt pregnant women to do hard manual labour and to go on working till the last day i.e. day before delivery which is highly injurious to their health. No amount of counselling, however, has produced the desired result in this direction so far.

The ANM has received only an induction training but has not received any in service training.

**28.9.2007**

**Visit to PHC Shendi:**

**Grey areas:**

- The PHC was established in 1972. At the time of visit it was raining heavily (the average annual rainfall in the Western Ghats being of the order of 3000 mm) and the building being old was flooded with rainwater at many points. There was profuse leakage and seepage on the walls. An estimate for repair of the building amounting to Rs. 1.45 lakh has been sent and is awaiting the approval of the Executive Committee of NRHM (of which CEO, ZP is the Chairman).
- The staff quarters too being old are in as bad a shape as the office building of the PHC. Proposal for carrying out repairs along with rough estimates has been submitted and sanction (administrative approval and technical sanction) is awaited.
- Lighting in the patient’s ward was not found to be adequate.
- Oxygen cylinder was not found to be in use.
- Twelve patients were checked on 28.9.2007 in the OPD and 3 were malnourished. They were referred to R.H. Rajur but were not admitted for inexplicable reasons.
- Medicines have been stored in almirahs in a very half hazard manner. They have not been categorized and labelled properly with expiry dates.
- Rugna Kalyan Samiti and Village Health, Nutrition and Sanitation Committees have been formed but are not yet fully functional. The PHC-in-charge has no clue as to what should be the appropriate topic to be taken up for discussion in these Committees.
- A thorough assessment of the contributory factors responsible for malnutrition in the area brought out the following:-
  - poor sanitation and lack of domestic toilet (only 20% households have domestic toilet);
thirty two grade III malnourished children have been admitted and treated in the PHC upto September, 2007. No Gr. IV children have so far been admitted;

- unhygienic conditions are prevalent due to human beings and animals being huddled together in a household which is due to want of separate space for animals;
- absence of drainage and sewerage leading to accumulation of rain water and filth and being the breeding ground for malarial parasites;
- early child marriage (incidence has come down to 20% but still it is considered to be a major factor);
- teenage pregnancy;
- absence of a proper birth spacing (3 to 5 years);
- large scale incidence of unmarried mothers (the age of the mother being 13 to 14);
- large size of the family (5 to 15);
- large scale incidence of children being deserted by mothers after birth (in case of teenage pregnancy or unmarried motherhood) for fear of stigma in a tradition bound conservative society;
- recourse to make beliefs and superstitions;
- migration on account of lack of job opportunities (the whole family migrates, children invariably accompanying the migrant parents).

- Male members of the family are reluctant to accept sterilization on account of unfounded fears and apprehensions. Women members accept tubectomy but only with the consent of male members and that too after many children.
- Bhagats, Pujaris and Bhumkas operate as quacks and exploit the simplicity and guilelessness of tribals. The tribals have lived with these parasitical elements of the society and have developed a lot of andha sraddha (blind faith) for them. These quacks discourage recourse to rational and scientific methods of treatment of men, women and children. There is no law to deal with such quacks or quackery.

**Admission, treatment, discharge and follow up of malnourished children:**

- The Gr. III malnourished children were brought by the mothers. The children are:-
  - Nirmala Rangaram Khade;
  - Payal Suvesh Khade;
  - Archana Dillip Khade.
- They were, however, taken away by the mothers soon after admission on the
ground that (a) September is the agricultural season when mothers have to work in the field (b) they can neither afford to remain with the children in the PHC nor afford to leave them alone in the PHC.

- Between April to September, 2007, 32 Gr. III children have been admitted and treated in the PHC. They have been subsequently discharged. Average duration of their stay in the PHC was 4 to 5 days.
- Their stay could have been a little longer till such time the children with LBW attained normal weight but parents do not agree to a longer duration for the very same reasons as above and take the children away before the latter could receive the full course of treatment.

**Suggestions at the end of visit to PHC Shendi:**

**Suggestions in relation to admission and treatment of Gr. III and Gr. IV children:**

- All ICDS and public health functionaries who go for home visits should themselves be very clear about what constitutes balanced diet, its adequacy and frequency with which it should be taken.
- They should advise pregnant and lactating mothers repeatedly about the same.
- Those children who are unable to eat, unable to breathe with LBW and low grade fever should be admitted to hospital without any delay and without Zfs and buts.
- The PHC building is in a very bad shape, has developed cracks, there is profuse leakage and seepage. The building may give in to heavy rains and collapse one day. Undertaking repairs, therefore, will be an infructuous proposition and will amount to sheer waste of scarce resources.
- A much better and wiser proposition will be demolition of the existing structure and construction of a new structure in its place.
- Adequate care will have to be taken to ensure the quality of the new structure with special care for a solid foundation as also for treatment of the roof (with grading plaster and bitumen treatment) which is likely to wear out soon due to heavy rains.
- Alternatively we could go in for a slanted roof with tiles so that water could come down and not accumulate.
- There should be a confidence building exercise for parents so that they allow the children to receive the full course of treatment and do not take them away before the treatment is over.
- After admitting malnourished children in the hospital it should be ensured by the hospital authorities that children are getting balanced, nutritious and wholesome
food.

• All malnourished children must be provided baby blankets to ward off hypothermia.
• Rugna Kalyan Samiti and Village Health, Nutrition and Sanitation Committees should be functional as early as possible. Funds required for this purpose under NRHM should be released without delay.
• Temporary arrangement against the post of pharmacist should be made pending posting of a regular substitute.
• Medicines should be kept in steel racks, properly categorized and labelled.
• A total sanitation campaign should be launched in support of installation, use, repair and maintenance of domestic toilets.
• Similar campaign needs to be launched against:-
  - early child marriage;
  - teenage pregnancy;
  - want of proper spacing between 2 births;
  - unsafe motherhood;
  - large family;
  - mothers deserting children, ‘the flower of home and family’;
  - recourse to quackery;
  - recourse to fads, taboos, make beliefs and superstitions.
• Conditions need to be created at the originating point through intensification of public works which will minimize the incidence of migration.
• Intensive drive should be launched for allotment of homestead land and agricultural land in favour of the landless;
• Intensive drive should be launched for enforcement of minimum wage;
• Establishing an effective linkage between payment of minimum wage and public distribution system.
• Ensuring maximum coverage of those who are without a roof above their head by providing financial assistance for construction of a dwelling unit under IAY.
• Promoting a kitchen garden scheme under which some fruits and green vegetables can be grown in the vacant space, howsoever small, of the homestead land allotted by Government.
• Encouraging consumption of green vegetables, spinach and locally grown fruits.
• Ensuring that under the grain bank scheme every tribal household has access to
adequate cereals, coarse cereals and pulses which have high nutritive value.

- Inculcating the culture in every tribal household that (a) food should not be overcooked or under cooked (b) food should be served minimum 3 times a day to adults and more frequently to children and in particular to malnourished children.
- Ensuring that access to potable water free of bacteriological and chemical impurities through (a) hand pumps or (b) bore wells or (c) piped water supply is a reality.

Concluding remarks about Ahmednagar at the end of the visit:

This is a district with a linear shape where the tribal areas are at a distance of more than 200 Kms from the district headquarters. One part of the district which is lying on the western ghats has good rainfall (infact going upto 3000 mm it is rather excessive) whereas the other part in Sirdi, and Ralegaon Sidhi is in the rain shadow area with barely 10" rainfall. There are social activists like Anna Hazare who through integrated watershed planning, management and development have converted a dry and drought prone belt like Ralegaon Sidhi into a Oasis. His innovative experiment deserves to be replicated in all the rainsadow areas of the district.

The special problems of tribal households and tribal farmers in the tribal areas are well known. For generations they have been cultivating forest land and after enactment of Forest Conservation Act, 1980 continuance of their occupation of the forest land is being treated as an encroachment. The State Government adopted a Resolution bearing No. LEN/1078/3483/G-1 dated 27.12.1978 in pursuance of which all such encroachments prior to 1.1.78 are to be regularized after conducting a survey and after ascertaining the correct status of such persons. Accordingly an area of 1296.695 hectares of land encroached by 1168 persons have been regularized (this includes 267.715 ha of land encroached by 412 persons in Akole Taluk of Ahmednagar district). The actual extent of encroachment, however, is much more and all such cases are to be processed within the framework of the GO referred to above. The Dy. Conservator of Forests, Ahmednagar – Shri M.S. Reddy reported that further proposal for regularization of forest land encroached by eligible encroachers have been submitted to the Chief Conservator of Forests (T), Nashik vide letter No. A/11-Sruvey/1810 dated 15.12.2004. The proposal, however, has been returned with direction to review all such cases on the basis of orders of Nodal Officer vide his letter No. desk-17/Nodal/400 dated 23.6.2004.

In dealing with the special problems of tribal households living in forest areas we need functionaries who have a full understanding of the ecological Perspective of Conservation of Forest Act, 1980 along with an empathetic understanding of the peculiarities and complexities of the tribal society and the age old customs and traditions associated
with it. In Sri C.D. Bharmal, Project Officer, ITDP I found one such person. Shri Bharmal is an officer of Indian Forest Service on deputation to Tribal Development Department and is fully conversant with the ecology of the forest and the special social needs of tribals. From him I got a clear glimpse of some of the Tribal Development Department Schemes which are being implemented in the tribal sub plan area as part of ITDP which have a close bearing on nutrition such as:-

I **Kanyadan Yojana:**

As a measure of incentive to tribal couples who are willing to marry at the statutorily stipulated age of 18 years (for girls) and 21 years (for boys) will be given a mangalsutra costing Rs. 6000/- and utensils costing Rs. 4000/-. The scheme which is in vogue since 2004 is meant to discourage early marriage.

II **Swabhiman Yojana:**

The scheme which is in vogue since 2004 provides for allotment of 2 acres of irrigated or 4 acres of unirrigated land to those tribal families who are landless and also below poverty line with a view to imparting economic self reliance. Fifty percent of the loan amount with which land will be purchased is meant to be repaid by the beneficiary within a period of 10 years without any interest. Payment of instalment will begin after 2 years of purchase of land. Till date 285.40 acres of land have been purchased and 281 families have been covered. Total cost of the land is about Rs. 7 lakhs.
Geographical, topographical and demographic profile as also the profile related to ICDS and Public Health pertaining to tribal population in general and tribal children in particular:-

The district has a geographical area of 7148 sq. km, a population of 22,07,929 and a medium density of 309 population per sq.km. It has 4 sub-divisions, 15 talukas, 818 GPs and 1892 habitations. The break up of the population is as under:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1,81,253</td>
</tr>
<tr>
<td>Rural</td>
<td>1,98,993</td>
</tr>
<tr>
<td>Women</td>
<td>1,90,301</td>
</tr>
<tr>
<td>Men</td>
<td>1,91,628</td>
</tr>
<tr>
<td>SC</td>
<td>53,667</td>
</tr>
<tr>
<td>ST</td>
<td>2,69,127</td>
</tr>
</tbody>
</table>

Karjat is the only predominantly tribal taluk in the district. It has a geographical area of 651.2 sq.km. and a population of 1,84,420. The break up of the population in Karjat taluk between rural, urban, SC, ST, women and men is as under:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>2,30,670</td>
</tr>
<tr>
<td>Rural</td>
<td>1,33,750</td>
</tr>
<tr>
<td>Male</td>
<td>94,724</td>
</tr>
<tr>
<td>Female</td>
<td>89,696</td>
</tr>
<tr>
<td>SC</td>
<td>3042</td>
</tr>
<tr>
<td>ST</td>
<td>40,942</td>
</tr>
<tr>
<td>Tribal male</td>
<td>20,759</td>
</tr>
<tr>
<td>Tribal female</td>
<td>20,155</td>
</tr>
</tbody>
</table>
• The density of population in tribal areas is 283.2.
• The break up of children in 0-6 age group for the district as a whole and for Karjat taluk is as under:

For the district as a whole:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>28,609</td>
</tr>
<tr>
<td>1-2</td>
<td>32,544</td>
</tr>
<tr>
<td>2-3</td>
<td>34,625</td>
</tr>
<tr>
<td>3-6</td>
<td>98,255</td>
</tr>
</tbody>
</table>

For Karjat Taluk:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>2852</td>
</tr>
<tr>
<td>Tribal</td>
<td>1030</td>
</tr>
<tr>
<td>1-2</td>
<td>2840</td>
</tr>
<tr>
<td>Tribal</td>
<td>1026</td>
</tr>
<tr>
<td>2-3</td>
<td>3081</td>
</tr>
<tr>
<td>Tribal</td>
<td>1462</td>
</tr>
<tr>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>4-5</td>
<td>8184</td>
</tr>
<tr>
<td>Tribal</td>
<td>2317</td>
</tr>
<tr>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16,957</td>
</tr>
<tr>
<td>Total</td>
<td>5835</td>
</tr>
</tbody>
</table>

• The average size of the family in the district as a whole ranges from 5 to 6 members while the same in tribal households ranges from 8 to 10.
• The age of marriage was reported to be according to the provisions of the Prohibition of Child Marriage Act, 2006 i.e. 18 for girls and 21 for boys.
• The migration is mostly inter-district and to the districts of Thane, Pune, Satara and other neighbouring ones.
• On access to potable water no accurate, authentic and up to date statistical information on the basis of any recent survey could be furnished.
• A total number of 7837 households are reported to be not having any access to domestic toilet.
• The dietary pattern in a tribal household comprises of rice, dal and dry fish curry.
• Six habitations and 9 hamlets have not yet been electrified.

Public Health Profile:

• The district has 52 PHCs, 3 PHUs, 288 sub-centres, one sub-divisional and one rural hospital. Of these, the sub-divisional hospital is located at Karjat, rural hospital at Kashele, the 3 tribal PHCs are at Kalamb, Ambivali and Khandas. 19 sub-centres are located in the tribal area.
• There are a large number of vacancies in different positions/categories; the vacancies ranging from 3% to 66%.

• 4 sub-centres under Ambivali PHC, 2 sub-centres under Khandas and one sub-centre building under Kalamb are under construction. In respect of the rest, work has been completed and subcentres are functioning.

• Only 2 Rugna Kalyan Samitis and 11 Village Health, Nutrition and Sanitation Committees have been registered and the rest are in the process. These are important democratic participatory institutions under NRHM and the process of their constitution, registration and functioning should be accelerated.

• The table below indicates the number of Gr. III and Gr. IV malnourished children admitted and treated in PHCs and hospitals during the last 3 years:-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Where admitted and treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2005-06</td>
<td>PHC 06 Hospital 36</td>
</tr>
<tr>
<td>2.</td>
<td>2006-07</td>
<td>15 23</td>
</tr>
<tr>
<td>3.</td>
<td>2007-08</td>
<td>05 91</td>
</tr>
</tbody>
</table>

• It was reported that progression from Gr. II to Gr. I malnutrition has taken place in 8426 cases for the district as a whole though separate figures for tribal areas could not be furnished. There is no progression in any other category.

• It was further reported that between April, 2007 to August, 2007, 22 children have died, the death having taken place on account of the following:-

  - LBW           (4);
  - Premature delivery (3);
  - Twins         (3);
  - Asphyxia      (2);
  - Pneumonia     (2);
  - Hyperpirexia  (1);
  - Meningitis    (2);
  - Encephalitis  (1);
  - Accident      (1);
  - Others        (3)

  **Total**       **22**
• The incidence TB (156 out of 100,000) and malaria (1098 out of 1,00,00 is quite high.

ICDS Profile:
• There are 15 ICDS projects, 14 CDPOs (1 post vacant), 80 supervisors (10 posts vacant), 1931 AWCs and 1912 AWWs (19 posts vacant), 1889 AWHs (42 vacant). All of them have received both induction and refresher training.
• In the tribal areas, there is one ICDS, 1 CDPO, 8 supervisors, 217 AWWs and 217 AWHs.
• Of 1931 AWCs, 1284 have got departmental buildings and the remaining 647 are functioning in other (GP, School, Gym, Community centres) buildings.
• The opening (10 AM) and closing time (3 PM) of AWCs does not appear to be in order on account of the following reasons:-
  ❖ Most of the AWCs have asbestos sheet which generates heat and would make the stay of children for 5 hours unbearable.
  ❖ Most of the children come from the poor families where breakfast is not served. Many children would be looking forward to eat the first meal of the day in the AWC through the SNP feeding. Making them wait till 10 AM for the first meal of the day would not be in order.
  ❖ Children would like to go home after lunch for sleep and rest. Making them wait in the AWC 2 hours after lunch in the sweltering summer heat would be cruel to children. The timing may be revised to 8 AM to 1 PM from 10 AM to 3 PM.

29.9.2007
Field Visits
Rural Hospital Kashel (1986):
Grey areas:
• The post of Medical Superintendent has been lying vacant. For a 30 bedded hospital supervision and coordination of various activities would be extremely difficult without the head.
• There are other vacancies in MO Class II (1) and Staff Nurse (4). In all there are 6 vacancies which inhibit the smooth functioning of the hospital.
• There is no paediatrician post formally sanctioned. A paediatrician comes once a week from the sub-divisional hospital, Karjat. Without advance publicity there will
be no mothers with children and no children without mothers; day long presence of the paediatrician would, therefore, be infructuous.

- The following table shows the number of Gr. III and Gr. IV malnourished children who have been admitted and treated in the hospital during the last 3 years:-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2004-05</td>
<td>26</td>
<td>07</td>
</tr>
<tr>
<td>2.</td>
<td>2005-06</td>
<td>30</td>
<td>06</td>
</tr>
<tr>
<td>3.</td>
<td>2006-07</td>
<td>08</td>
<td>07</td>
</tr>
<tr>
<td>4.</td>
<td>2007-08 (August, 07)</td>
<td>03</td>
<td>--</td>
</tr>
</tbody>
</table>

- I wanted to peruse the case records pertaining to 3 cases of malnourished children admitted and treated in the hospital in 2007-08 but of the 3, only 2 case records could be traced with difficulty and after considerable efforts while the third case record could not be traced. The 2 case records which could be traced showed few loose sheets maintained in a half hazard manner which disclosed the following entries:-

  Name - **Bala Ramdas Shivgan**
  Date of birth of the child - 19.8.2003
  Date of admission - 26.4.2007  11 AM
  Weight at the time of admission - 6.5 kg  Gr. III

  On the same day i.e. date of admission, the mother took away the child from the hospital.

  Date of birth - 30.4.2005
  Date of admission - 27.5.2007
  Weight on the date of admission - 6 kg.  Gr. III

  On the same day of admission, the case was referred to the sub-divisional hospital, Karjat. The mother was unwilling to go to Karjat and eventually took away the child on 5.6.2007.

- There is no analysis as to what considerations weigh in the mind of the mothers to take away the children in a huff on the day of admission itself in one case and the reasons for refusal to take the child to Karjat sub-divisional hospital in the second case.
Suggestions:

• The post of MS who is the Chief Executive of the hospital and that of MO Class II should be filled up with a very high order of priority.

• The Dy. Director, Health from the office of DHS who attended to my visit should bring it to the notice of DHS so that prompt action could be taken.

• The Dy. Director who himself is competent to fill up the 4 posts of staff nurses should do so at the earliest.

• All the staff (staff nurses, pharmacist, lab technician, x-ray technician, ophthalmic Assistant, Lab Assistant etc.) who have been recruited should also undergo refresher training (if they have undergone induction training already).

• The day the paediatrician is coming from the sub-division hospital should by way of advance intimation be made known to AWW, ANM and LHV so that they in turn should be able to inform mothers in the locality in which they function. The presence of the paediatrician will be of no avail without the children being brought by the mothers for screening.

• All case records pertaining to Gr. III and Gr. IV children should be properly maintained. Every case record should have a folder and contain the following details:-
  - date of birth;
  - date of admission;
  - weight at the time of admission;
  - pathological tests undertaken and findings thereof;
  - nature of principal ailment;
  - other associated complications;
  - line of treatment;
  - response of the patient;
  - progression, if any;
  - recovery;
  - date of discharge.

• A sustained drive should be launched against the high incidence of LAMA i.e. leaving against medical advice. For this purpose, the AWW, ANM, LHV, MPW and pada workers should receive special orientation and training. They should be in a position after such orientation to talk to the tribal mothers in their own dialect to bring out the adverse consequences of LAMA on the health of the child. They should impress
on the mothers that their children cannot receive the same treatment and attention at home as they would have received in the hospital/PHC. The help of Sarpanch of the GP and tribal leaders whose words carry weight and are listened to with respect should also be taken to discourage tribal mothers to remove the children from PHC/hospital before the full course of treatment has been administered.

- The Rural Hospital does not have any separate paediatric ward for Gr. III and Gr. IV children. In the absence of the MS, the Civil Surgeon, Raigad was requested to carve out a room where all ailing children as also the Gr. III and Gr. IV malnourished children could be treated and kept for a reasonable duration.

- Large number of cases of anaemic mothers and children have been found. To ward off such a contingency the tribal mothers should be advised to consume and give their children to consume leafy and green vegetables.

- The hospital authorities should take the initiative to organize camps once a month at the level of PHCs within its jurisdiction for intensive screening of health of children and mothers. Adequate publicity should be given about the date, time and venue of the camp, services of specialists functioning in public and private hospitals in the area should be mobilized and effort should be made to complete screening of as many normal, ill and critically ill (including Gr. III and Gr. IV malnourished children) children as possible so that at the end of the camp mothers would have been persuaded and a ground created for sending all ill and critically ill children to rural, sub-divisional and district headquarters hospital, as the case may be.

- As a matter of policy, NICU should be set up in both Rural Hospital as well as Sub Divisional Hospital.

29.9.2007

Visit to Kalam AWC (1981)

- This is an old AWC functioning in a departmental building. As against 81 children in 0-6 age group who have been enrolled, barely 25 children were present. This is notwithstanding the sincere efforts made by the AWW to do 4 to 5 home visits everyday and persuade mothers to send their children to the AWC and remain full time in the AWC till it closes and notwithstanding the nutritious and tasty food served under SNP in adequate quantity and quality twice a day.

- I got the following 9 children weighed in my presence in the automatic (electronic) weighing machine:-
<table>
<thead>
<tr>
<th>Name of the child</th>
<th>Weight recovered</th>
<th>Date of birth</th>
<th>Normal or lower than normal weight</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Urmila</td>
<td>9 kg</td>
<td>13.12.2004</td>
<td>3 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>2. Archana</td>
<td>10 kg</td>
<td>10.8.2004</td>
<td>4 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>3. Kalyani</td>
<td>10.5 kg</td>
<td>5.10.2004</td>
<td>3.5 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>4. Kadambari</td>
<td>10.5 kg</td>
<td>2.10.2003</td>
<td>5.5 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>5. Sanjana</td>
<td>11 kg</td>
<td>29.9.2002</td>
<td>6 kg less than normal</td>
<td>Borderline case between Gr. II and Gr. III</td>
</tr>
<tr>
<td>6. Deekshya</td>
<td>10 kg</td>
<td>12.3.2004</td>
<td>5 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>7. Gayatri</td>
<td>6 kg</td>
<td>13.10.2005</td>
<td>5.5 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>8. Aditya</td>
<td>10 kg</td>
<td>14.3.2004</td>
<td>5 kg less than normal</td>
<td>Gr. II</td>
</tr>
<tr>
<td>9. Deenesh</td>
<td>8 kg</td>
<td>25.6.2004</td>
<td>7 kg less than normal</td>
<td>Borderline case between Gr. II and Gr. III</td>
</tr>
</tbody>
</table>

- Regardless of the fact that there was a difference between salter scale and automatic weighing machine it came out clearly that most of the children are under weight and a number of corrective measures will have to be taken in terms of:-
  - quantum of diet;
  - frequency of diet;
  - presence of micro-nutrients in the diet;
  - balanced combination of carbohydrate, protein, fat, vitamins and minerals in the diet.

  to bring the children of a particular age to a particular weight which is considered normal for that age.

**Other grey areas:**
- All the charts and posters on various related themes of maternity protection,
child health and nutrition, early child marriage etc. have been supplied by the Commissioner, ICDS; not a single chart has been supplied by IEC, Bureau, Pune.

- The charts and posters have not been arranged in a sequential order.
- The SHG member responsible for SNP feeding programme could not confirm if the per capita scale of SNP feeding i.e. Rs. 1.98 is adequate or not.

Suggestions:

- A special drive should be launched by ICDS functionaries for achieving the goal of cent percent attendance and participation in all the activities of AWC by all mothers and children.
- The IEC Bureau, Pune may be requested to provide well visualized and well illustrated charts and posters on the complete cycle of life, commencing from pregnancy, delivery, evolution and growth of children through different stages (neo-natal, infancy, childhood etc.). These should be arranged and displayed in a sequential order so as to facilitate the AWW to explain the contents in a proper sequence to all mothers (pregnant and lactating) who happen to visit the AWC.
- All out persuasive efforts should be made to appeal to the mothers not to take away children from the AWC till all activities of the day have been brought to a logical close.
- There seems to be some confusion about the norms and parameters of growth of children according to a particular age. There are 2 important components of these norms and parameters. These are:-
  - nutritional norms;
  - growth norms
- The nutritional norms were revised by the Department of Women and Child Development by issue of a Circular No. 1-2/2006-CD-0 dated 31.1.2006.
- In the WCD’s earlier letter No. 12-15/2001-CD-1 dated 21.2.2002 nutritional norms for supplementary nutrition under ICDS were prescribed only for energy (calorie) and protein.
- Subsequently importance of other micro-nutrients (vitamins and minerals) for development, immunity and growth of children was felt.
- It has now been decided by the circular letter dated 31.1.2006 to provide 50% of the RDA for different micro-nutrients for 6 months to 6 year old children through 80 gm of ready-to-eat energy food as under:-


<table>
<thead>
<tr>
<th>Micronutrients</th>
<th>Average RDA</th>
<th>50% of RDA for children of 6 months to 6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (mg)</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>Iron (mg)</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>Iodine (ug)</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Zinc (mg)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Vitamin A (ug)</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Riboflavin (mg)</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Ascorbic acid (mg)</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Folic acid (ug)</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>Vitamin $B_{12}$ (ug)</td>
<td>0.2 – 1.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

- The State Governments/UT Administrators were requested through this circular to provide 50% of RDA for micro-nutrients (vitamins and minerals) through 80 gm of supplementary food per child per day under ICDS.
- Similarly the growth norms have been revised by issue of yet another circular D.O. letter dated 27.8.2007 addressed to Chief Secretaries of all States/UTs.
- According to the above circular letter, Government of India have decided to adopt new WHO Child growth standards in the country in ICDS. The States would need to work out details for using the new growth charts under ICDS.
- Since Government of India have decided to adopt new WHO child growth standards (in respect of both height and weight according to age) there should be no further doubt or dispute, far less confusion on the subject. All States including Maharashtra must create conditions to adopt and implement the new norms.

29.9.2007

Visit to Kalam PHC:
- Established in 1977 the PHC has 5 sub-centres, 17 villages and 20 padas in its jurisdiction. All the incumbents (2 MOs, 6 ANMs, 1 LHV, 2 HAs (male), 5 MPWs and 38 pada workers are in position.

Redeeming features:
- 8 Gr. III and 2 Gr. IV malnourished children were admitted and treated in 2006-07. The case records have been properly maintained.
- Of them 8 have been effectively treated and have substantially gained weight.
• In 2007-08 only one Gr. III malnourished child has been admitted and treated.
• The LHV attached to this PHC was a picture of motherly compassion, affection and grace. She has been preparing the food at her residence for the malnourished children admitted to the PHC.
• She is taking meticulous care to ensure that the malnourished children who are admitted to the PHC receive as much care and attention as they would have received at home.
• There is a constant follow up of cases of children who have been treated in the PHC but who have not fully recovered.
• Continuous counselling is being given to mothers about dietary management at home and medicine.
• All deliveries conducted by the PHC and 5 sub centres under the PHC have been normal and safe and there has not been a single case of maternal mortality. Between April, 2007 to September, 2007 the delivery figures are:-
  - April, 2007 - 20;
  - May, 2007 – 20;
  - June, 2007 – 13;
  - July, 2007 – 17;
  - August, 2007 – 14;
  - September, 2007 – 10
• The weight of new born babies ranges from 2.8 kg to 3.5 kg.
• The calendar of visits has been drawn up properly with a view to covering all AWCs, sub-centres, villages and padas within the jurisdiction of the PHC atleast once every month.
• The visits are well organized and methodical and centre round the following:- issues:
  - causes and contributory factors;
  - interventionist strategy (s);
  - consequences/outcome;
  - follow up/review.
• The LHV and ANM are well conversant with the seven steps to safe motherhood.
Suggestions:

- Charts on the possibility of progression from Gr. IV to Gr. III, Gr. III to Gr. II, Gr. II to Gr. I and Gr. I to normal and pictures of children where progression from Gr. IV to Gr. III, Gr. III to Gr. II, Gr. II to Gr. I and Gr. I to normal has actually taken place should be displayed. This would inspire confidence in the minds of the mothers that malnutrition can be corrected.

- A schedule of inspection of sub-centres (5) alternately by the 2 MOs of the PHC should be draw up. This would ensure that the ANM incharge of the sub-centre does not feel isolated but gets fully involved with the activities of the PHC while inspection and supervision promote accountability of the sub-centre and ANM incharge.

- There is acute shortage of drinking water in the residential complex of the PHC. This should receive special attention of the DHO and the ZP.

- Similarly the problem of leakage and seepage of water in Olman Sub-centre should engage the personal attention of the DHO and ZP.

- There has been some avoidable delay in disbursement of benefits under Janani Surakshya Yojana. The DHO should ensure timely allocation and disbursement of benefits under both Matrutwa Anudan and Janani Surakshya Yojana.

- The LHV and ANM are going for field visits separately. It will be much more desirable and useful if they constitute one joint team and conduct all their field visits together. This will promote better understanding, partnership and follow up compliance.

- For undertaking field visits, the LHV and ANM get a fixed traveling allowance. For the LHV it is Rs. 500/- while for the ANM it is Rs. 300/-. These rates were fixed quite some time back. Conditions have rapidly changed since then. Consumer’s Price Index and Cost of Living Index have registered a steep movement upwards. It would be appropriate and in conformity with the compulsions of prevailing conditions if these rates are reviewed and revised upwards at the earliest.

29.9.2007

Visit to Sub-centre at Pohsir (1977)

Redeeming features:

- The ANM who is continuing since May, 2005 conducts on an average 6 deliveries every month. All deliveries have been safe and no maternal mortality has been reported so far.

- The weight of all new born babies has been normal.
• In all 34 charts and posters covering various aspects of maternity protection, children’s health and nutrition, immunization, breast feeding have been displayed. The charts and posters are educative.

• On account of the proactive role of the ANM and the health counselling given by her 2 women have gone in for tubectomy so far.

Grey areas:

• There is no provision for supply of water and electricity to the sub-centre; the ANM who is occupying a portion of the sub-centre has been greatly handicapped on this count.

• No board on constitution of Rugna Kalyan Samiti and Village Health, Nutrition and Sanitation Committee has been displayed.

• Allocation of funds under different heads is erratic.

29.9.2007

Visit to AWC, Poshir:

Grey areas:

• Against expected attendance of 53, the attendance at the time of visit was only 34.

• The AWC has asbestos sheet as its ceiling which generates a lot of heat and makes the stay of children extremely uncomfortable.

• There is no lighting and ventilation in the AWC.

• The number of Gr. I and Gr. II malnourished children is as under:-

  Gr. I - 34
  Gr. II - 18

• This accounts for almost 99% of the total number of enrolled children.

Suggestion:

• We need to develop a model plan for an ideal AWC. The striking features of such a plan would be:-

  - Minimum ½ an acre of land per AWC flanked by a boundary wall;
  - Outside the AWC building and within the boundary wall there should be provision for a tubewell for supply of potable water, a few domestic toilets for training children as to how to use such toilets, a small play ground and a model kitchen garden for demonstrating to mothers what fruits and vegetables need to be grown to promote nutrition.
Inside the anganwadi, there should be adequate space for:

- storage of grains;
- records and registers; medicines;
- a clean drum to store potable water;
- a model kitchen;
- serving food to children on the floor.

The AWC premises should have at least 500 sq. ft. built up area.

There must be adequate lighting and cross ventilation.

The charts and posters in a proper sequence covering the entire life cycle soon after pregnancy and till completion of 6 years should be displayed on the wall along with all pre-primary education charts and posters.

**Concluding remarks about Raigad:**

- Like Thane, Raigad is in close proximity of Mumbai metropolis which is known as the commercial capital of India. Like Thane also the contrast between affluence and poverty could not have been starker as would be evident from the following indicators in Karjat sub-division/taluk which is predominantly tribal.

**Families without homestead land:**

There are 250 such families without any homestead land. Ownership and possession of homestead land is the primary condition for receiving financial assistance under IAY. In other words, these families will not be eligible for this assistance and, therefore, will continue to remain shelterless.

**Families without agricultural land:**

There are 68 tribal families cultivating forest land in Karjat taluk. They have no ownership of this land and are being treated as encroachers. The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 passed by both Houses of Parliament on 29.12.2006 has come into force; The Rules have also been framed. The cut off date for recognition and vesting of forest rights under the Act will be 13.12.2005. It is hoped that once now it should be possible to vest the forest rights and occupation in forest land in forest dwelling ST and other traditional forest dwellers who have been residing in such favour of forests for generations but whose rights could not be recorded.

Six villages in the taluk are yet to be electrified while 7837 households do not have access to domestic toilets.
Geographical, topographical and demographic profile as also the profile related to ICDS and public health pertaining to tribal population in general and tribal children in particular.

The district lies between 18.4° to 20.5° east longitude and 78.5° to 80.6° north latitude. It has a total geographical area of 10,655 sq. km. of which 10,521 sq. km is rural and 174 sq. km. is urban. According to the decennial census of 2001 the total population is 20,71,101 persons, the break up of which between urban and rural, women and men, SC and ST is as under:-

- Urban : 6,65,067
- Rural : 14,06,034
- Women : 10,08,108
- Men : 10,62,993
- SC : 14.3%
- ST : 18.1%

The density of population is quite low (155 per sq. km.).

Some of the other demographic indicators are:-

- Sex ratio 948
- Rate of literacy 59.41%
- Rate of female literacy 39.02%

- The rate of female SC and ST literacy is 16.87 and 19.70 respectively.
- The percentage of boys who are married at less than 21 years:-
  - Tribal : 14.2%
  - Rural : 16%
  - Urban : 5.8%
• The percentage of girls who are married at less than 18 years:-
  - Tribal - 25.7%
  - Rural - 30.5%
  - Urban - 13.7%

• While the above constitute negative demographic indicators, there are some positive indicators as well such as:-
  - out of district migration is much less;
  - average size of the family is four;
  - average size of landholding – 2.58 ha;
  - average rainfall – 1309.50 mm;
  - actual yearly rainfall – 1037 mm

• There are 4 sub-divisions (of which Rajura is predominantly tribal), 15 talukas, 846 number of village panchayats, 1792 villages (1473 inhabited and 319 uninhabited), 3,29,629 households of which 52,641 are tribal (of which 34,871 or 66% are below poverty level (BPL).

• The break up of children in 0-6 age group is as under:-
  - 0-1 - 26,538
  - 1-2 - 24,570
  - 2-3 - 24,557
  - 3-4 - 23,356
  - 4-5 - 23,686
  - 5-6 - 23,292
  - Total - 1,45,998

Dietary Pattern:

• According to the survey conducted by the Bureau of Nutrition, Nagpur (March, 2000), some of the salient features of the dietary pattern are as under:-

I Intake of foodstuff in lactating mothers (0 to 6 months):
  - consumption of foodstuff was less than the recommended levels;
  - consumption of vegetable, sugar and oil is found to be much less.

II Intake of foodstuff in lactating mothers (above 6 months):
  - consumption of foodstuff is less than the recommended levels;
consumption of leafy vegetables, root vegetables, milk products and sugar was found much less than recommended levels.

II Intake of foodstuff for pregnant mothers:
- consumption of foodstuff was found much below the recommended levels;
- consumption of leafy vegetables, root vegetables and milk products was found much less in almost all families.

IV Intake of foodstuff in 1 to 3 years children:
- consumption of foodstuff (except cereals) was found less than recommended.

V Intake of foodstuff in 4 to 6 years children:
- consumption of foodstuff (except pulses and root vegetables) was found to be less than recommended level.

VI Access to potable water:
- There are 4 ways by which adequacy and effectiveness of access to potable water are to be adjudged. These are:-
  - whether all the villages/hamlets have been fully covered by a scheme for supply of potable water;
  - whether there is an institutional arrangement for drawing of samples and testing of water through approved laboratories;
  - whether water is free from floride, chemical and bacteriological impurities and whether such water, where the floride content is higher than the permissible limit, has been treated;
  - whether potable water is available @ 40 litres per capita.

- In Chandrapur, 1315 villages are reported to be fully covered while 379 villages are reported to be partially covered by a potable water supply scheme.
- On the basis of samples of water drawn and sent for test in 2006-07 and between April, 2007 to August, 2007 the percentage of infection was found to be 11.19% and 14.33% respectively.
- Similarly on the basis of tests conducted in 2006-07, in 318 villages water was found to contain more than the permissible floride content.
- Of this water has been treated and made fully potable in 95 villages.
- In 46 villages potable water supply during summer season continues to be inadequate.
- In only 43% of the total number of households there is access to sanitation through domestic toilets.
On the side of public health, there is one civil hospital, 2 sub-divisional hospitals, 11 rural hospitals, 58 PHCs, 1 PHU and 339 sub centres. 51 PHCs and 314 sub centres have their own buildings and the rest are without such buildings. In case of 7 PHCs the building construction work is in progress while there is no such construction in case of sub-centres. Of the total number of 1798 sanctioned posts, 186 posts in various categories are vacant (10.34%). Some contractual arrangement is made to fill up the posts under NRHM.

- The pace of formation of Rugna Kalyan Samitis at the PHC level has been very slow. Of the 58 such Samitis only 5 Samitis have been registered and in case of the rest registration is under process. Similarly of 846 villages, health, nutrition and sanitation committees in only 63 have been registered and the rest are under process.

- The number of Gr. III and Gr. IV malnourished children in the district both in terms of percentage as also in terms of absolute number as would be evident from the figures in the following table (last 3 years) :-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2004-05</td>
<td>2732</td>
<td>315</td>
</tr>
<tr>
<td>2.</td>
<td>2005-06</td>
<td>1100</td>
<td>152</td>
</tr>
<tr>
<td>3.</td>
<td>2006-07</td>
<td>809</td>
<td>99</td>
</tr>
<tr>
<td>4.</td>
<td>2007-08</td>
<td>288</td>
<td>55</td>
</tr>
</tbody>
</table>

- On the side of ICDS, there are 2091 AWCs of which 1901 have got their own departmental buildings and in respect of the rest other sources of accommodation have been tapped. Of the 2091 AWCs again, 2056 AWWs and 2038 Sahayikas are in position respectively leaving the remaining posts vacant. The Selection Committee under the Chairmanship of the MLA should meet to recommend suitable incumbents to fill up the vacant posts as early as possible failing which this important grass root level institution will remain non-functional.

- The position of vacancies is compounded further by late disbursement of honoraria due to procedural reasons i.e. due to late receipt of funds from the office of Commissioner, ICDS.

- The AWWs (2025) have received the first phase of induction training at the PRC Centre, Nagpur, Wardha, Mul, Sindewahi and Gadchiroli though they are yet to receive the refresher training.

- Though the AWWs are not high up in the educational ladder through their initiative and efforts 2098 SHGs and 2033 Mahila Mandals have been formed in the district as a whole. The SHGs and Mahila Mandals are preparing the food, arranging
immunization camps and assisting the AWW in discharge of other important activities.

- The AWCs open at 10.30 AM and close at 1430 hours. In summer months, the maximum temperature in Chandrapur goes up to 47.7º Celcius. While the opening time for winter months may be in order, the opening time of 10.30 AM for summer months may be too uncomfortable or even oppressive for small children and hence inappropriate. Since the Commissioner ICDS, Mumbai has left sufficient flexibility to the district administration in regard to opening and closing timing, it may be in order if different and appropriate opening and closing timings are observed for summer and winter months suiting agro climatic conditions.

- The average attendance of pregnant and lactating mothers, adolescent girls and children in 3-6 age group is reported to be as under:

<table>
<thead>
<tr>
<th>Pregnant women</th>
<th>Lactating mothers</th>
<th>Adolescent girls</th>
<th>Children in 3-6 age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>99%</td>
<td>97%</td>
<td>85%</td>
<td>93%</td>
</tr>
</tbody>
</table>

- Continuous efforts are being made to improve the attendance levels through personal contacts, regular meetings and by motivation of parents and guardians. The Supervisors and CDPOs also undertake regular visits to AWCs to review activities and motivate the parents to send children to AWCs.

8.10.2007

Field Visits and impressions:

Visit to Rajura Rural Hospital:

The Rural Hospital was established on 29.9.1984. The previous Medical Superintendent was a gynaecologist. He has been relieved on transfer and no substitute has been posted. All the 4 MOs, however, are in position and one of them has been trained in anaesthesia. One surgeon and one paediatrician have been posted on contract basis. Of the 27 sanctioned posts 24 have been filled up leaving 3 vacant.

A few redeeming features:

- Gr. III and Gr. IV patients are being regularly brought by the AWWs to the paediatrician in the hospital. Between April, 2007 and September, 2007, 37 Gr. III children have been brought by AWWs. All of them were Gr. III malnourished and the maximum number (28) was brought in June, 2007.
• Most of these children were cases of LBW and pneumonitis. As a result of timely treatment, proper attention and care they have gained weight (on an average 6 gm to 8 gm per day).

• ANC registration at Rajur hospital is 165%.

• One of the doctors in the Rural Hospital is from the tribal community, is conversant with Gondi language and is able to interact with tribal mothers. They listen to him and he is able to carry conviction to them.

• The doctors (4) appeared to be alive to their responsibility of serving in a tribal area with special problems, constraints and challenges and have taken up their assignment almost with a missionary zeal.

Grey areas:

• There is no follow up to the treatment in terms of diet or the norms of frequency and adequacy, compliance with medicines according to proper dosage and appropriate intervals.

• Follow up is all the more important as most of the mothers are illiterate, are unable to read the prescriptions, unable to read the timing through a watch which they may not have and, therefore unable to comply fully with the prescriptions of the medical officer.

• On the basis of observation and follow up, the AWWs, ANMs, LHVs and MPWs should be able to send timely and accurate feedback to the hospital. On the basis of such feedback steps may be taken to correct deficiencies, if any, by way of ensuring compliance on the part of the mothers. Such a feedback is also lacking.

• There is no arrangement either for storage or transfusion of blood.

• There is no arrangement to provide woolen blankets for prevention of hypothermia.

Suggestions:

• For prevention of hypothermia woolen baby blankets should be provided to all malnourished children who have been admitted to the hospital.

• Counselling on the date of discharge of malnourished children regarding diet and medicine in the language spoken by the mother would be of great help.

Functioning of NICU:

• The NICU with 6 beds was set up 5 years back. At the time of visit all the 6 beds were vacant. Malnourished children with LBW and associated complications (jaundice hepatitis, feeding problem, breathing problem, ARDS) have, however, been treated in the NICU in the past.
**Redeeming features:**

- Jaundice hepatitis is under control.
- Refusal to take food has been replaced by willingness to food.
- Body temperature has been maintained.

**Grey areas:**

- Most of the mothers are anaemic. They come from large families, poor background, have gone in for more than 2 children, are subjected to hard manual labour at an advanced stage of pregnancy and have a complicated delivery. How to educate, train and motivate these mothers remains a million dollar question.

**Interaction with mothers:**

1. **Smt. Lakshmi:**

   She is 32 years, is married with a family of 4 members, is landless (no agricultural land), works as a daily mazdoor and earns Rs. 40/- a day which is much lower than the notified minimum wage. She does not have a BPL card either. While food is prepared and served only twice for adults, children may get food served for the 3rd time. The foodstuff comprises of rice, dal, vegetables and roti. Due to low earnings compounded by the absence of a BPL card it does not meet the requirements of adequacy, frequency and nutritive value of food.

2. **Smt. Vijaya Smarat Aloney:**

   She is a divorcee of 32 years of age, has one daughter and one son (the children are staying with her), is landless, has no other wherewithal for livelihood except daily laobur and has travelled from a long distance to get her daughter (who is having pain in both legs and hands) treated and the waiting period has been long as the outturn of patients on this particular day has been rather high ranging between 100 to 150.

3. **Smt. Shamla Krishna Gedam:**

   She is yet another landless agricultural labourer, of 35 years of age who has to work to meet the day to day needs of a large family of 5 members (with 3 children). With an earning of Rs. 40/- per day she is finding it difficult to prepare and serve food twice a day. The food comprises of rice, dal, roti and some vegetables.

4. **Smt. Ratnamala Shivram Wagmare:**

   She was admitted for delivery with a very low haemoglobin count of 5.6 mg%. This was her second delivery (she delivered twins) and one of the 2 children delivered weighed 1.9 kg (.6 kg lower than the normal). She is also a landless agricultural labourer.
(who owns no agricultural land) and with an earning of barely Rs. 40/- a day she finds it
difficult to prepare and serve food to children more than twice a day. Breast feeding for
the twins has started 2 hours after the delivery.

5. **Smt. Kusum Narayan Nimode:**

She has delivered a male child and weight of the child at the time of delivery was
2.4 kg (.1 kg lower than normal). She is a landless agricultural labourer (who owns no
agricultural land) who with her meager earnings of Rs. 40/- a day barely manages to cook
and serve food twice a day.

**8.10.2007**

**Visit to sub-centre, Tembhrwahi:**

The sub-centre was established in 1982. Smt. Jaya Ramteke is working as ANM
since 2002.

**Redeeming features:**

- The sub-centre building is commodious with a large verandah, well lighted and
  ventilated.
- At the time of visit one baby was delivered in the sub-centre. The baby had normal
  weight of 2.5 kg.
- Eleven safe deliveries have been conducted by the ANM during 2007-08 (upto
  September, 2007).
- There has not been a single case of maternal or neo-natal or child mortality during
  this period which is very encouraging.
- Spacing between 2 deliveries is being loosely observed.
- The ANM appeared to be well aware, agile, alert, alive to her responsibilities and
  alive to the needs of the people.
- A good number of well visualized and well illustrated charts and posters containing
  useful and relevant messages on a host of topics such as women’s position in the
  family and society, importance of girl’s education and awareness, equal treatment
  to girls and women as to boys and men, importance of small family norm and
  planned parenthood, importance of spacing, undesirable consequences of early
  child marriage and teenage pregnancy, importance of breast feeding, importance
  of nutrition and nutritious food which should also be balanced, wholesome and
  sumptuous, how to fight malnutrition, importance of access to potable water and
  environmental sanitation, importance of hospitalization and need for staying in the
hospital for a sufficiently long duration till the full course of treatment is complete etc.

- The ANM was able to explain clearly the central message contained in each chart and poster and how she translates the same to action in course of her field visits.

- In course of her field visits to the 5 villages in her jurisdiction, she has been making a sincere and earnest effort to spread the socially relevant messages contained in the charts and posters, motivating the tribal mothers to come for institutional delivery in preference to home delivery, to go in for tubectomy after 2 children, not to have unnecessary and excessive desire for male offsprings and about the importance of nutritious food and the principles of adequacy and frequency with which food is to be taken.

- She has maintained a normal functional relationship with the AWWs through visits, meetings and consultations. Through such a relationship the interests of Gr. III and Gr. IV malnourished children in the villages in her jurisdiction are kept uppermost in their mind. Both act as stakeholders with the same amount of urgency and seriousness of concern as far as timely admission of such children in PHCs/RH/civil hospital, their treatment, care and attention, discharge and follow up are concerned. Thus through this sub-centre a complete synergy has been established between ICDS and Public Health Institutions.

- The medicines, delivery kits and arrangements for delivery have been kept in order.

- All claims under Matrutwa Anudan Yojana and Janani Surkshya Yojana are being attended to with utmost urgency and the amount (Rs. 400/- under MAY and Rs. 700/- under JSY) is being disbursed in time.

- There has not been any maternal death so far.

**Grey areas:**

- There was one case of infant mortality which is yet to be investigated. This should be investigated by one of the Medical Officers of the PHC and report submitted to the DHO.

- The fixed traveling allowance for the ANM is barely Rs. 450/- per annum. The ANM does not have a vehicle of her own. She has to travel by public bus which consumes a lot of time. The coverage, mobility and outreach could substantially improve if some transport (may be even two wheeler) could be made available with POL. Alternatively the FTA amount should be enhanced to Rs. 1000/-.
Visit to AWC, Sonda (Established: 1.12.95)

Grey areas:

- The accommodation is small, not well lighted and ventilated.
- As against 62 children in 0-6 age group enrolled, the average daily attendance ranges between 24 to 26.
- The starting and closing hours of the AWC i.e. 10 AM and 3 PM are not very convenient. During summer months (when Chandrapur records a temperature of 47.7º Celcius) children in 3-6 age group will find it very difficult to sit through all the programmes in the oppressive heat, particularly the post lunch session.
- Even though the MO from the PHC is visiting the AWC regularly once a quarter for check up of health of children, the entries recorded by him in the register indicating the nature of ailment and the prescriptive treatment are not legible. It is extremely difficult to make out from the register what exactly is the outcome of this entire process of check up of health.
- Two meals under the SNP feeding are being served at 11 AM and 2 PM. They seem to be broadly conforming to the directions of the Supreme Court in W.P. No. 16 of 2001 (interim order of the Court dated 28.11.2001) in terms of quantity of foodgrains supplied and the nutritive value thereof (in shape of the prescribed kilo calorie). This, however, was not reflected in the weight of the 2 children who were got weighed by me in presence of everybody. The children were: 1. Vaishnavi Petkar who at the age of 4 years was weighing 10.6 kg as against the normal weight of 16 kg for a girl of that age. 2. Khushi Nage who at the age of 2 years and 4 months was weighing 9.8 kg as against 13 kg.
- There is acute shortage of charts and posters indicating what should be the normal height and weight of a child at a particular age, the advantages of breast feeding, the importance of composite feeding while continuing breast feeding, importance of presence of micro nutrients in food, the adequacy and frequency of taking nutritious food, importance of access to potable water and environmental sanitation, importance of adhering to certain precautions at the advanced stage of pregnancy, advantages of institutional delivery vs. home delivery, importance of timely admission and check up, follow up, feedback and application of correctives etc.
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8.10.2007

Visit to PHC, Dewada:

The PHC was established in 1983. There are 45 villages and 10 padas within its jurisdiction. Out of the sanctioned posts 1 post of MO and Pharmacist each lying vacant for sometime. This has adversely affected delivery of prompt service to about 50 patients who turn up everyday at the PHC. The PHC conducts a health care campaign every month. This has contributed a lot to awareness generation as also to proper implementation of the immunization programme as would be evident from the following figures:-

- BCG - 59%
- DPT - 58%
- Polio - 58%
- Hepatitis B - 56%

An interaction with 2 ANM and LHV – Smt. Jamboolkar brought out the following points:-

**Smt. A.K. Mandavi - ANM**

- She is targeted to visit 3 villages.
- One village has to be visited 4 times a month.
- About 50 to 60 households are to be contacted in course of every visit.
- Every household has on an average 5 to 7 members.
- In order that every such visit becomes meaningful, a checklist of points on which the dialogue/discussion should take place with the household or with the women in particular should be clearly listed in a diary to be supplied to every ANM and LHV for this purpose. In addition to giving advice/counsel, the ANM and LHV can also check the compliance on the part of the mother with the instructions already given by the MO of the PHC at the time of ANC check up. This would be useful for better time management. This has not been done.

**Smt. S.M. Bhadke - ANM:**

- Like her colleague she has been targeted to visit 3 villages (Dewada, Siddheswar and Lemmerdara).
- The date and timing of these visits on a prescribed date in every week and from 8 AM to 5 PM has been fixed in advance.
- On an average 50 to 60 families are to be contacted in course of every visit.
- A host of functions is required to be discharged in course of every such visit. To
illustrate some of them:-

- imparting elementary counselling on planned parenthood and small family norm, strict observance of the statutory age at marriage, advantages of institutional delivery vs. home delivery, immunization and breast feeding of the new born child, a thorough medical check up of all the parameters in respect of which the health of the child is to be checked, preventive and corrective measures in respect of Malaria, T.B., Filariasis, Jaundice etc.

- With a view to preventing occurrence and recurrence of malaria 2651 impregnated mosquito nets which were received from the Ministry of Health have been issued free of cost to the villages (including tribal families). No death has occurred due to malaria during her tenure.

Grey areas:

- Parents seldom bring their sick children to the PHC for check up and treatment.

- Even though Smt. Bhadke emphasized that there is no malnourished child in the area under her jurisdiction one anaemic child was found in the PHC who had been admitted on the date of visit (8.10.2007) and was weighing 5 kg at the age of 11 months whereas it should have been atleast 9 kg i.e. 4 kg less than the normal weight of a child of the same age. This was a case of home delivery.

Suggestions:

- ANMs, LHVs and MPWs often tend to be superficial in their statements as would be evident from the above. Not only they should display charts in every sub-centre highlighting the weight and height of a person at a particular age, they should be clear in their minds about such correlation between age, height and weight and should be able to explain it to all mothers so that basic knowledge and information about malnutrition is transmitted to the latter. For this repeated doses of refresher training and exposure to situations where malnourished children live will be necessary. It is no doubt an ideal situation to say that there are no malnourished children but the ground level reality being quite different one needs to keep ones eyes wide open before making such a statement.

- It will be appropriate if a proper diary containing all the basic health informations is given to all ANMs, LHVs and MPWs to enable them to record an account of where they go, whom they meet, what type of interactions take place, what type of counsel is given and the extent by which instructions given at the time of first visit are complied with and checked at the time of the second visit.

- Malaria and cerebral malaria are deadly killers, the parasites are highly resistant today to mosquito repellants and the deadly killers have come back with a vengeance. In
view of this a number of simultaneous preventive measures as under would require to be taken:-
- environmental hygiene and sanitation will have to be ruthlessly enforced;
- all stagnant pools need to be ruthlessly closed down as these are breeding grounds for mosquitoes;
- all BPL and tribal families need to be trained in the art of fixing mosquito nets and use of other mosquito repellants; for this hooks need to be supplied along with nets;
- collection of blood slides for malaria positive/negative should be a universal activity; treatment with chloroquin should begin as soon as it is confirmed that it is a case of malaria positive.

8.10.2007
Civil Hospital, Chandrapur:

I visited the Paediatric ward, the NICU, met a large number of LBW children and discussed with the Head of the paediatric department and her team of doctors and paramedical staff about the possible causes of malnutrition (under weight) and how to prevent such cases in future. The discussion centred round the following children:-

1. **Smt. Vishali Ramesh:**
   Date of admission – 3.10.2007 (which is also the date of delivery of the child)
   Weight at the time of birth – 1.25 kg
   Mother being anaemic is not able to do breast feeding.
   Recovery/restoration of normal weight may be prolonged.

2. **Smt. Asha Vilas Kukadkar:**
   Date of admission – 7.10.2007 (which is also the date of delivery of the child)
   Weight at the time of birth – 1.5 kg
   The child has been kept in NICU in a controlled temperature of 37.8º Celsius.

3. **Smt. Jaya:**
   Date of admission – 7.10.2007 (which is also the date of delivery of the child)
   Weight at the time of birth – 2 kg.
   It is a case of caesarian delivery.

4. **Smt. Vandana Kobragade:**
   Date of admission – 1.10.2007
Weight at the time of birth – 1.4 kg
This is a case of IUGR.

5. **Smt. Vandana Kishore Vishrojwar:**
Date of admission – 1.10.2007 (which is also the date of delivery of the child)
Weight has subsequently come down to 2.4 kg.
This is a case of jaundice and the child is being administered photovoltaic light treatment.

**Smt. Rajeshwari:**
Date of admission – 7.10.2007 (which is also the date of delivery).
Weight at the time of birth – 2.5 kg.

**Suggestions:**
- Even though complicated, new born children (neonates) have been admitted, are under proper treatment and improvement in their condition was noted. The children would require to be under close surveillance and the crisis management should receive a very high priority attention (so that there is no loss of life of children).
- IEC materials depicting complete cycle of life commencing from pregnancy, delivery, neo natal child care and immunization, instructional lessons (dos and do nots) for mothers need to be displayed on the walls of the paediatric and gynaecological ward and their content to be explained to mothers off and on.

**An analysis of deaths of children in tribal areas of Chandrapur:**
A discussion with Civil Surgeon [who is in overall incharge of supervision of all rural hospitals (RH)] and DHO helped to identify the following causes of death of children:-
- Birth Injury;
- Congenital Anomalies/Deformities;
- Birth Asphyxia;
- LBW;
- Premature Delivery;
- Hyper Pyrexia;
- Septicemia;
- Acute Respiratory Infection (ARI);
- Meningitis;
- Jaundice Hepatitis;
- Diarrhoea;
- Dysentry;
- Sudden Infant Death Syndrome (SIDS);
- Anaemia;
- HIV Infection;
- Others.

- Death of children could be disaggregated in different age groups (5) such as:-
  - 0-7 days;
  - 8-28 days;
  - 29 days – 1 year;
  - 0-1 year
  - 1-6 years

- As far as Chandrapur is concerned the progressive total number of deaths for and upto the month of August, 2007 in these age groups is as under:-
  - 0-7 days - 244
  - 8-28 days - 53
  - 29 days – 1 year - 67
  - 0-1 year - 364
  - 6 years - 73

- In other words, maximum number of deaths take place during the early neonatal stage (244) and infant stage (364).

- Amongst the causes, LBW followed by premature delivery and birth asphyxia accounts for the maximum number of deaths. The breakup of the causes of death is as under:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Age group</th>
<th>No. of deaths</th>
<th>Cause</th>
<th>S. No.</th>
<th>Age group</th>
<th>No. of deaths</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0-7 days</td>
<td>55</td>
<td>LBW</td>
<td>1.</td>
<td>0-7 days</td>
<td>60</td>
<td>Premature delivery</td>
</tr>
<tr>
<td>2.</td>
<td>8-28 days</td>
<td>20</td>
<td>LBW</td>
<td>2.</td>
<td>9-28 days</td>
<td>6</td>
<td>- do -</td>
</tr>
<tr>
<td>3.</td>
<td>29 days – 1 year</td>
<td>3</td>
<td>LBW</td>
<td>3.</td>
<td>29 days – 1 year</td>
<td>2</td>
<td>- do -</td>
</tr>
<tr>
<td>4.</td>
<td>1 year – 6 years</td>
<td>1</td>
<td>LBW</td>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 79
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Age group</th>
<th>No. of deaths</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0-7 days</td>
<td>52</td>
<td>Birth asphyxia</td>
</tr>
<tr>
<td>2.</td>
<td>8 days – 28 days</td>
<td>2</td>
<td>- do -</td>
</tr>
<tr>
<td>3.</td>
<td>29 days – 1 year</td>
<td>4</td>
<td>- do -</td>
</tr>
<tr>
<td>4.</td>
<td>1 year – 6 year</td>
<td>0</td>
<td>-do-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>58</td>
<td>- do -</td>
</tr>
</tbody>
</table>

Concluding remarks about starvation-cum-malnutrition related deaths of tribal children in tribal areas of Chandrapur:-

Chandrapur (on New Delhi – Hyderabad rail route) is an old district which has been considerably truncated in size after Gadchiroli was carved out in 80s as an independent district but has become more compact and manageable from the geographical and administrative point of view. Chandrapur and Gadchiroli together account for about 70% of the total forest and vegetal cover of Maharashtra. The district has a rich deposit of coal due to which a thermal power plant with 2400 MW capacity has come into being. The Thapar Group has set up a paper mill at Ballarpur since 1945 (taken over by in apar group in 1975) with an installed capacity of production of 344.1 MT per day and 2500 workers.

All this has added to heavy pollution on the one hand and discharge of sizeable quantity of effluent into river Wardha which more ways than one is the lifeline of the district.

Admidst this polluted physical surrounding we have human resources who are warm, affable and hospitable. There is a quiet efficiency in all that they do – be it at the anganwadi, at the sub-centre, at the PHC or at the rural hospital or civil hospital. At Rajura RH one of the medical officers was himself a tribal (Gond) proficient in communicating to the tribals in their own dialect. At the sub-centre, Tembhrewahi, the ANM who had conducted a delivery a few hours before our arrival was full of life, energy and initiative. She has 5 villages and a few padas in her jurisdiction; she has been able to visit all of them more than once in a month and establish an abiding relationship with the mothers in the villages. The Sub-centre was a mini museum, full of health educational materials – charts, flipcharts, posters, books, boards - something which was indicative of the quest of a grass root level health functionary to know and share her knowledge with others. The deliveries conducted in her hands were safe with children born with normal weights and there has not been a single case of maternal mortality.
At the Dewada PHC the LHV and ANM were unassuming, without airs and pictures of quiet efficiency. The topography is difficult, the area full of forests and hills, the PHC has 43 villages within its jurisdiction but that does not deter the LHV and ANM from visiting the villages and households in the villages according to a well planned out schedule and establishing close contact with the mothers. Since women go away for work in both farm and non-farm operations and return around 4 PM (2 hours before the evening meal) adjusting ones time to that of theirs and succeeding to meet them, to counsel and follow up whatever advice and prescription has been given in the hospitals is not easy. Besides, women prefer to be contacted at their respective homes and do not want to come to any common point outside home which could have saved a lot of time and energy of the LHV and ANM who invariably visit them as a unit and not separately. The AWC is full of sick and malnourished children but the AWW is never tired of making them and their mothers feel completely at home. She sings in a full throteed voice a prayer with which she starts the programmes in the AWC. Children sing in chorus and there is a rhythm and spontaneity in these songs. The AWC is decidedly the only place in a village where the poor and deprived children as also pregnant and lactating mothers get to eat their morning meal – sumptuous and nutritious. Both the AWW and AWH are 24 hour workers, cleaning the AWC, opening it in time, mobilizing mothers, persuading them to send their children to the AWC, conducting a host of activities such as the SNP feeding programme, pre-primary educational programme, assisting the MO of the PHC in check up of health of children, attending to visitors (Supervisors, CDPOs, NHRC officials etc.), weighing the children once a month and recording the weight with proper grading in the growth monitoring register. In addition, the AWW makes it a point to visit 4 to 5 households in the evening to establish contact with the mothers and advise them on maternity protection, nutrition, immunization, communicable diseases and so on. Hers is for all practical purposes a 24 hour schedule in which there is no time to stand and stare, to pause and rest. It is the AWW who carries the malnourished children (Gr. III and Gr. IV in particular) to the PHC and hospital for treatment and follow up. It is she again who has to do the followup. Both the AWW and AWH discharge ungrudgingly these onerous responsibilities for a small honorarium of Rs. 1400/- and Rs. 700/- per month.

- There are a number of redeeming features about tribal families of Chandrapur which have a close bearing on nutrition such as:-
  - The average size of the family unlike other tribal districts in Maharashtra is not large;
  - Early child marriage is gradually becoming a thing of the past;
  - Married couples generally observe spacing (between 3 to 5 years);
  - There is no overwhelming preference for a male child.
There are negative indicators too. These are:

- Over 2900 households are shelterless;
- They do not have a homestead land or dwelling unit or agricultural land on which they could raise a few crops;
- There are a very large number of landless agricultural labourers (over 2 lakh) who find it difficult to eke out their livelihood since they do not get minimum wages;
- Over 80,000 hectares of land are not available for cultivation; over 57,000 holders have less than 1 hectare of land;
- Barely 10% of the total cropped area is double cropped; in the rest, the productivity of crops is very low;
- Barely 20% of the net sown area is irrigated;
- There are 15 chemical industries of which 5 are potentially hazardous (LPG fuelling, Chandrapur, Paper Mill and Coal Mines, Ballarpur, Cement and Coal Mines, Ghugus, Ordinance Factory, Bhadrawati and Cement Factories at Gadchandur);
- While access to potable water is partial in 300 villages, there is florosis in 46 villages;
- Barely 40% of the total number of households has access to domestic toilet;
- Even in villages where there is access to potable water, people drink water from the open sources which are polluted when they go to the field for work in agriculture;
- The bovine wealth is poor with poor yield and fodder for milch animals is a serious problem;
- People (tribals in particular) prefer not to drink milk due to ill perceived or mistaken notions even when they have milch animals and availability of milk is assured. Besides, milk prices are unaffordable for common people;
- Out of 15 grain banks only 1 is operational meant to promote food security for the tribal population;
- With large number of tribals as defaulters (on account of inability to repay loan) the consumption loan scheme has got into serious difficulties and for all purposes, is non-functional.
- With massive illiteracy among tribals (47.3% is the rate of literacy) tribal households in general have not been able to reap the benefits of development schemes largely meant for them.
Geographical, topographical and demographic profile as also the profile related to ICDS and Public Health pertaining to tribal population in general and tribal children in particular:

The district lies between 20º.39 to 21º.38 east longitude and 79º-27 to 80º-42 north latitude. It has a total geographical area of 5641 sq.km, a total population of 12,44,031 with a medium density of population at 228 per sq.km. The break up of the population between urban, rural, women, men, SC and ST is as under:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1,52,034</td>
</tr>
<tr>
<td>Rural</td>
<td>10,91,997</td>
</tr>
<tr>
<td>Women</td>
<td>601,873</td>
</tr>
<tr>
<td>Men</td>
<td>5,98,834</td>
</tr>
<tr>
<td>SC</td>
<td>1,67,699</td>
</tr>
<tr>
<td>ST</td>
<td>1,96,455</td>
</tr>
</tbody>
</table>

The district has 2 sub-divisions, 8 taluks, 556 village panchayats, 964 revenue villages and 2,37,070 households. Of these, there are 4 tribal taluks, 240 village panchayats, 445 tribal villages and 20,090 tribal households.

- Some of the other demographic indicators in tribal areas are:-
  - age of marriage – 18 to 20 years
  - average size of the family of tribal households – 4.8
  - migration takes place in 2 spells i.e. January to June and July to December. In the first, the migration outside the district is 1,09,737 while the same outside the state is 1,73,000. In the second, the migration outside the district is 52,665 while the same outside the state is 63,000 (approximately).
The breakup of the child population in 0-6 age group and its break up in tribal areas is as per the table placed below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Age group</th>
<th>District Children’s Population</th>
<th>Tribal block children’s population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0-1</td>
<td>19,930</td>
<td>7568 (37.97%)</td>
</tr>
<tr>
<td>2.</td>
<td>1-2</td>
<td>18,516</td>
<td>7569 (40.87%)</td>
</tr>
<tr>
<td>3.</td>
<td>2-3</td>
<td>18,517</td>
<td>7470 (48.34%)</td>
</tr>
<tr>
<td>4.</td>
<td>3-4</td>
<td>15,614</td>
<td>6240 (39.96%)</td>
</tr>
<tr>
<td>5.</td>
<td>4-5</td>
<td>15,615</td>
<td>6225 (39.86%)</td>
</tr>
<tr>
<td>6.</td>
<td>5-6</td>
<td>23,871</td>
<td>10340 (43.31%)</td>
</tr>
</tbody>
</table>

**Access to potable water:**

**Redeeming features:**

- Out of a total number of 991 villages, following villages are covered by various water supply schemes:-
  - Mini water supply scheme – 133
  - Piped water supply scheme – 90
  - Regional water supply scheme – 30

  The remaining villages receive water supply through bore wells.

- Access is ensured through multiple sources such as bore well, public and private wells and piped water supply.

- The Village Panchayats carry out the process of chlorination of all water sources by TCL every week.

- There is no incidence of guineaworm.

**Grey areas:**

- The following table would indicate the extent of flouride content in water in excess of the desired levels:-

<table>
<thead>
<tr>
<th>Total sample collected</th>
<th>Sample with positive fluoride content</th>
<th>Samples with above 3 PPM</th>
<th>Samples with 2-3 PPM</th>
<th>Samples with 1.3 to 2 PPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>11,959</td>
<td>62</td>
<td>3</td>
<td>13</td>
<td>46</td>
</tr>
</tbody>
</table>

- The following table would indicate the extent of chemical and bacteriological impurities in water:-
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>No. of water samples</th>
<th>Contaminated samples</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2005-06</td>
<td>8888</td>
<td>1982</td>
<td>22</td>
</tr>
<tr>
<td>2.</td>
<td>2006-07</td>
<td>9562</td>
<td>2233</td>
<td>23</td>
</tr>
<tr>
<td>3.</td>
<td>2007-08</td>
<td>4840</td>
<td>1046</td>
<td>22</td>
</tr>
</tbody>
</table>

Access to environmental sanitation:

- Only 37% of the households have access to domestic toilet.

Dietary pattern in tribal households:

- It comprises of cereals (rice), pulses, vegetables etc. with food being served on an average twice a day.

Profile of Public Health:

- The district has 1 sub-divisional hospital, 9 rural hospitals (of which 6 are located in tribal areas), 39 PHCs (of which 19 are located in tribal areas), 237 sub centres (of which 124 are located in tribal areas).
- 17 non-tribal and 14 tribal PHCs have departmental buildings. The position of PHCs without departmental buildings (3) in non tribal and tribal areas (5) is as under:

Non tribal:

- **Kawlewada:** The PHC was shifted in February, 2006 from mother PHC Goregaon. Land acquisition process has started as no government land is available for construction of PHC building.
- **Morwahi:** Construction has been delayed due to non-availability of land. Now that land is available construction work will be taken up soon.
- **Telli Mohagaon:** The PHC building is under construction and will be completed in 3 months.

PHCs without departmental buildings in tribal areas:

- **Channabakti:** The building is under construction and will be completed within 2 months.
- **Korambhitola:** The building is under construction and will be completed within 1 month.
- **Dhabepaoni:** The PHC has been shifted recently from mother PHC Navegaon bandh. No government land is available at present for construction of the building. The process of land acquisition has started.
- **Mulla:** The building is under construction and will be completed within one month.
• **Dawwa:** The PHC has been recently shifted from mother PHC Sadak Arguni. Land is available for construction of the building and the formalities of obtaining administrative approval are being complied with.

**Sub-centres without departmental buildings in non-tribal area:**

- There are 19 sub-centres without departmental building in non-tribal area. Construction of 5 sub-centres is proposed under NRHM and 5 sub-centres under DPDC in 2007-08. Construction of the remaining 9 sub-centres will be carried forward to 2008-09.

**Sub-centres without departmental building in tribal area:**

Four sub-centres are without departmental building in tribal area. It is proposed to take up construction of 2 sub-centres in 2007-08 under NRHM and construction of the remaining 2 sub-centres under DPDC in 2008-09.

**Position of vacancies in hospitals/PHCs:**

- The total number of vacancies in all categories (medical and para medical) for the district as a whole is 65 as against 812 sanctioned posts (about 8% vacancies).
- The total number of vacancies in all categories (medical and para medical) for the tribal areas is 24 against 406 sanctioned posts (about 6% vacancies).

**Constitution of Rugna Kalyan Samiti:**

- In all 50 such Samitis are required to be formed at the hospital and PHC level. Of them only 6 have been registered and the rest are under the scrutiny of the Charity Commissioner or his authorized representative.

**Constitution of Village, Health, Nutrition and Sanitation Committee:**

- In all 540 such Committees out of 556 have been formed at the Village Panchayat level. Of them only 301 have received the funds. However, they are yet to be fully functional.

**Number of Gr. III and Gr. IV malnourished children who have been admitted and treated in the hospital/PHC over the last 3 years in tribal taluks:**

The break up is given in the following table:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Years</th>
<th>Gr. III</th>
<th>Gr. IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2004-05</td>
<td>105</td>
<td>9</td>
<td>114</td>
</tr>
<tr>
<td>2.</td>
<td>2005-06</td>
<td>159</td>
<td>33</td>
<td>192</td>
</tr>
<tr>
<td>3.</td>
<td>2006-07</td>
<td>85</td>
<td>19</td>
<td>104</td>
</tr>
<tr>
<td>4.</td>
<td>2007-08</td>
<td>77</td>
<td>10</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>(upto Sept.07)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This shows an increasing and decreasing trend in terms of number of malnourished children (Gr. III and Gr. IV) over the last 3 years.

**Rate of recovery of Gr. III and Gr. IV malnourished children:**

The break up is given in the following table:-

<table>
<thead>
<tr>
<th>Normal Children</th>
<th>Gr. II</th>
<th>Gr. III + Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>April’05</td>
<td>April’05</td>
<td>April’05</td>
</tr>
<tr>
<td>35%</td>
<td>43%</td>
<td>21%</td>
</tr>
</tbody>
</table>

The table shows that in percentage terms the extent of malnutrition or malnourishment is sharply declining which is encouraging.

- Number of children where progression has taken place (Gr. IV to Gr. III, Gr. III to Gr. II, Gr. II to Gr. I, Gr. I to normal):

<table>
<thead>
<tr>
<th>Progression of children (for and up to the month of August, 2007)</th>
<th>Gr. IV 53 to Gr. III 8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gr. III 456 to Gr. II 53</td>
</tr>
<tr>
<td></td>
<td>Gr. II 14846 to Gr. I 333</td>
</tr>
<tr>
<td></td>
<td>Gr. I 49223 to normal 304</td>
</tr>
</tbody>
</table>

- The above table shows that the pace of progression is rather slow and we have to go a long way before we could achieve a complete switch over to normal grade status from the malnourished status for all children in the years to come.

**Analysis of death of children in tribal areas:**

A discussion with the Civil Surgeon (who is in overall charge of supervision of all rural hospitals) and DHO enabled me to identify the following causes of the death of children.

**Table showing the causes of death, number of deaths for the district as a whole, number of deaths in tribal areas and percentage of deaths of children in relation to the total number of children:**
Period: - April, 2007 to August, 2007

<table>
<thead>
<tr>
<th>Causes of death</th>
<th>District Total</th>
<th>In terms of Percentage</th>
<th>Tribal</th>
<th>In terms of Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birth Weight (LBW)</td>
<td>35</td>
<td>18.82</td>
<td>09</td>
<td>16.6</td>
</tr>
<tr>
<td>Acute Respiratory Distress Syndrome (ARDS)</td>
<td>23</td>
<td>11.29</td>
<td>04</td>
<td>3.7</td>
</tr>
<tr>
<td>Congenital Anomaly</td>
<td>19</td>
<td>10.22</td>
<td>04</td>
<td>7.4</td>
</tr>
<tr>
<td>Premature delivery</td>
<td>11</td>
<td>5.91</td>
<td>08</td>
<td>14.8</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>11</td>
<td>4.84</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Twins</td>
<td>9</td>
<td>4.84</td>
<td>02</td>
<td>3.7</td>
</tr>
<tr>
<td>Suffocation deaths</td>
<td>8</td>
<td>4.30</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Acute abdomen</td>
<td>9</td>
<td>3.23</td>
<td>04</td>
<td>3.7</td>
</tr>
<tr>
<td>CCF</td>
<td>5</td>
<td>2.69</td>
<td>01</td>
<td>1.8</td>
</tr>
<tr>
<td>Aspiration Asphyxia</td>
<td>5</td>
<td>2.69</td>
<td>09</td>
<td>16.6</td>
</tr>
<tr>
<td>Neonatal Jaundice</td>
<td>4</td>
<td>2.15</td>
<td>01</td>
<td>1.8</td>
</tr>
<tr>
<td>Septicemia</td>
<td>3</td>
<td>1.61</td>
<td>01</td>
<td>1.8</td>
</tr>
<tr>
<td>Hypoglycaemia</td>
<td>3</td>
<td>1.61</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Febrile Convulsion</td>
<td>3</td>
<td>1.61</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Hypothermia</td>
<td>3</td>
<td>1.61</td>
<td>02</td>
<td>3.7</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>3</td>
<td>1.61</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>0</td>
<td>1.08</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Dysentry</td>
<td>0</td>
<td>0.54</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>0</td>
<td>1.08</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Snake bite</td>
<td>2</td>
<td>1.08</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Dog bite (rabies)</td>
<td>0</td>
<td>1.08</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Haemetesis</td>
<td>1</td>
<td>0.54</td>
<td>01</td>
<td>1.8</td>
</tr>
<tr>
<td>Oesophageal Stenosis</td>
<td>1</td>
<td>0.54</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Meningitis</td>
<td>1</td>
<td>0.54</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Nephrotic Syndrome</td>
<td>1</td>
<td>0.54</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Death due to burns</td>
<td>1</td>
<td>0.54</td>
<td>01</td>
<td>1.8</td>
</tr>
<tr>
<td>Drowning</td>
<td>1</td>
<td>0.54</td>
<td>01</td>
<td>1.8</td>
</tr>
</tbody>
</table>
• Death of children could be disaggregated in different age groups such as:-

<table>
<thead>
<tr>
<th></th>
<th>Total District</th>
<th></th>
<th>Tribal Blocks</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total child deaths</td>
<td>IMR</td>
<td>Total child deaths (tribal)</td>
<td>IMR</td>
</tr>
<tr>
<td>0-1 year</td>
<td>145</td>
<td>41</td>
<td>0-1 year</td>
<td>39</td>
</tr>
<tr>
<td>1-6 years</td>
<td>34.68</td>
<td></td>
<td>1-6 years</td>
<td>37.06</td>
</tr>
</tbody>
</table>

**Gondia ICDS Profile:**

• There are 8 ICDS Projects of which 4 are tribal namely Deori, Arjunimar, Salekasa and Sadak Arjuni. Of the 8 sanctioned posts of CDPOs, 2 are vacant at Gondi and Arjunimar. Of the 59 posts of Supervisors, 56 are in position and 3 are vacant in the tribal ICDS.

• Of the 3 posts, 2 are in the category of nomadic tribe for interchange. These posts will be filled up within 2 months after receiving caste validity certificates from the candidates concerned. For the remaining one post, no candidate is available from the nomadic tribe category and, therefore, could not be filled up.

• Of the 1298 AWCs sanctioned and functioning in Gondia district excluding the tribal project, 937 AWCs have got their own departmental building. In the tribal Project 490 AWCs have their own departmental building.

• Twenty three AWCs need repair and maintenance but funds have not been placed so far.

• Of the 1298 AWWs sanctioned for 1298 AWCs, 1245 AWWs are in position and 53 are vacant. Similarly 1256 AWHs are in position and 32 are vacant.

• In the tribal project, of the 639 posts sanctioned 619 AWWs and 626 AWHs are in position and 20 and 13 posts of AWWs and AWHs respectively are vacant.

• Of 1298 AWWs, 1071 have been trained (induction training) by MLTC, Nagpur. In the tribal project 499 AWWs have been trained. No refresher training has been arranged for any one so far.
Field Visits and impressions:

Rural Hospital, Navegaon Bandh

This is a 30 bedded hospital established on 25.3.1986. The hospital is functioning in a departmental building which is in a good shape. While 2 MOs, 5 staff nurses and 1 x-ray technician are in position, 1 Medical Superintendent, 2 Staff Nurses, 1 Gynaecologist, 1 Paediatrician, 1 Anaesthetist and 1 Lab Assistant are vacant. The vacancies (7) are continuing for about 2 years. These are to be filled up by Dy. Director, Health Services, Nagpur. In the limited set up of a RH located in a rural area, vacancies of key personnel for such a long time is bound to cause severe dislocation to the functioning of the hospital. It is rather surprising that this has gone unnoticed for such a long time.

Redeeming features:

• The outturn of patients ranges between 60 to 70.
• On an average 10-12 women come with their children every day.
• The number of women who get registered for ANC on every ANC clinic day (Thursday) ranges between 10 to 12.
• Seven safe deliveries were conducted in September, 2007 while no deliveries have been conducted in October, 2007. The average weight of new born babies was 2.5 kg (normal).
• No premature deliveries associated with still births have been reported so far.
• Birth certificates are issued in case of all new born babies.

Grey areas:

• Infection in the upper respiratory tract is the main complaint. Even though the atmosphere is fairly clear, the damp atmosphere with high humidity is responsible for this ailment for which only symptomatic treatment can be given.
• There have been occasional cases of LBW reported. One mother Sarita Gopal Donode delivered twin babies on 7.9.207. One baby weighed 1.4 kg and second one 1.5 kg. Such cases could have been treated in Rural Hospital but the main reason which weighed with the RH authorities to refer the cases to Women’s Hospital, Gondia is the absence of a paediatrician in the Rural Hospital.
• Even though it is a RH, no NICU has yet been sanctioned necessitating reference of all LBW cases to Women’s Hospital, Gondia. The cost of a NICU will be approximately Rs. 5 lakh.
• While one case was found positive for T.B. on the basis of Sputum test, 6 malaria positive cases have been found necessitating special measures for prevention.
• As against the normal haemoglobin count of 10 mg% the haemoglobin content in children (0-6) was found below normal necessitating treatment for deficiency of iron in blood.

In course of visit to the paediatric ward I interacted with 2 mothers – Ms. Purnima Wamanrao Kore and Ms. Sandhya Ramteke and the following picture came out of this interaction:

- average size of the family – five;
- most of the tribal families are landless;
- the women work as agricultural labourers and earn Rs. 30/- a day which is much lower than what their male counterparts receive;
- the earning is grossly inadequate to meet the cost of food and non-food items (rice, wheat, soap, edible oil, hair oil, tooth powder) which will have to be procured mostly from the open market;
- food is cooked and served only twice daily (as against three times which is recommended);
- the food package contains leafy vegetables, lady’s finger, pulses, brinjal, chapatti etc.

9.10.2007

Visit to PHC, Saundad

The PHC was established on 17\textsuperscript{th} May, 1985 and is functioning in a departmental building. There are 36 villages in the jurisdiction of the PHC. In all there are 9 sub-centres under the PHC. Of the 9, 8 ANMs have been posted on regular basis and one on contract basis. All the sub centres are functioning in departmental building.

Redeeming features:

• Incidence of malnutrition is coming down. This would be evident from the fact that in 2006-07 there were 19 Gr. III and 3 Gr. IV malnourished children while the same has come down to 13 Gr. II and nil Gr. IV in 2007-08.
• This is one of the 39 PHCs which will have a Nutrition Rehabilitation Centre (NRC) or Child Development Centre (CDC) in the first phase. This is a new concept which is being tried out in a few districts of Maharashtra to deal with the problem of malnutrition. It’s a truly integrated approach to child development which is expected to bring the ICDS and health functionaries together.
As of now, the NRC or CDC concept is being implemented through 16 PHCs and over a period of time all the 39 PHCs will be covered with a view to bringing all the 440 malnourished children in the district to 0. The distinct advantage in this new approach is that conditions are being created which will be conducive to mothers staying with malnourished children. The latter will get concentrated attention both in terms of diet, medicines and health care under the direct personal supervision of a medical officer (who could be a paediatrician subject to availability). The pace of recovery will be fast, children will gain weight and mothers also will receive orientation and familiarization in the art of treating malnourished children. As the children are discharged, the mothers will be able to do the follow up of the treatment better and in a more scientific manner.

Other redeeming features:

- A thorough interaction with LHV and ANM brought out the following positive points:
  - Their tours are systematically organized;
  - They undertake visits together as a team;
  - ANMs at the sub-centres, AWWs at the AWCs and mothers in high risk households constitute the first, second and third points of contact for them;
  - The mother’s counselling is done in a meaningful manner;
  - Pregnant mothers are advised to eat 3 to 4 times a day.
  - They are also advised to go in for cent percent ANC registration.
  - A total sanitation campaign has been launched. Out of 63 villages in the Saundad taluk 31 are Nirmal Gram.
  - The coverage of the immunization campaign is as under which is quite encouraging:
    - BCG - 94%
    - DPT - 96%
    - Measles – 92%
  - Three mothers in the PHC mother’s ward were contacted to ascertain the status of their health and health of their children. The women were (a) Purnima Purushottam Bhandarkar (b) Shive Gajbhiye and (c) Runda Sandesh. Their children weighed 2.7 kg, 3 kg and 3kg respectively and were in good health.
  - Due to easy access to potable water – water borne diseases are less.
  - All deliveries conducted in the PHC so far have been safe.
  - All deliveries are being closely monitored.
Grey areas:

- The fixed traveling allowance (FTA) for the LHV and ANM @ Rs. 530/- and Rs. 315/- is quite low and inadequate. This will not meet their irreducible barest minimum expenditure when they are on tour.
- Despite repeated advice to the mothers food is cooked and served twice a day on account of low earnings.
- For similar reasons consumption of non-vegetarian food is restricted. The food package comprises of 3-4 chappatis with vegetables (no pulses). Fish, meat and eggs are rarely consumed.
- Milk, wherever there are milch animals in the household is also not consumed but sold @ Rs. 12/- per litre for economic reasons.
- Incidence of TB is on account of low protein diet with less nutritive value, unclean, unhygienic and insanitary living conditions in houses which are congested/overcrowded (due to large size of the households in a small and cramped space).
- Rugna Kalyan Samitis for 39 PHCs are yet to be registered. The proposal for registration is pending at the level of Joint Charity Commissioner.
- As against 252 ASHA workers meant for the district, only 20 have been selected and trained so fare.

Analysis of a case of SIDS:

- While maternal mortality is zero, one case of death of an infant in a household was reported in August, 2007. This was a case of Sudden Infant Death Syndrome (SIDS) and no intervention was possible (as the child could not be brought to the PHC). The MO visited the household to do oral autopsy. He has since submitted his report to the DHO and the latter has accepted the same.

Visit to AWC Bopabodi:

- The AWC was established on 1.10.86 and is functioning in a departmental building. While 56 children have been enrolled in the AWC, 42 were present at the time of visit. A few mothers were present. The AWH normally goes to the households to bring the children; sometimes the mothers also bring them, leave them at the AWC and go away to the field for work. Two meals under SNP are served to children, first at 10.30 AM and later at 1.30 PM. The AWC functions for 6 days a week and the recipe is divided as under:-
  - Usal - 2 days
  - Khichdi - 2 days
  - Gram - 2 days
• Since no SHG is willing to prepare the food with a small allocation of Rs. 1.98 per child, the AWH is preparing and serving the food.

• The following children were weighed in my presence. The findings are as under:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>D.O.B.</th>
<th>Current Weight</th>
<th>Weight last month</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mithun S. Bhendarkar</td>
<td>13.6 kg</td>
<td>13.2 kg</td>
<td>Weight gain.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Chabilal S. Tembekekar</td>
<td>13 kg</td>
<td>12.8 kg</td>
<td>Weight gain.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Vilas Kapgate</td>
<td>12.5 kg</td>
<td>12.5 kg</td>
<td>No change.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Roshani V. Gondule</td>
<td>13.5 kg</td>
<td>13.2 kg</td>
<td>Weight gain.</td>
<td></td>
</tr>
</tbody>
</table>

A few redeeming features of the AWC:

• Unlike most other AWCs, there is adequacy of space (400 sq. ft.), adequate lighting and ventilation. Since foodstuff, utensils, potable water, records and registers have been kept in the adjoining room the main room meant for children and mothers and for all the activities of the AWC does not suffer from congestion as elsewhere.

• The AWW sings a prayer prior to the commencement of the activities in the AWC. The children sing in chorus.

• The pictures, alphabets and numbers have been displayed in an appropriate manner and are being taught to the children.

• Weight is being taken on the 10th day of every month. Of the 42 children attending, 10 are in Gr. II and the rest are in Gr. I.

Grey areas:

• One MO from the PHC is visiting the AWC and is examining the health of the children once every 3 months. The register shows the name, date of birth, weight, grade etc. of children who have been examined. The MO has, however, not clearly mentioned about the diagnosis, medicines prescribed and improvements noticed. In the absence of these details it is difficult to have any clear and precise idea about the follow up.

9.10.2007

Visit to Sub-centre, Bopabodi:

• The sub-centre was established on 1.4.86 and is functioning in a departmental building. It’s a small sub-centre with 3 villages and a total population of 3429. The sub-centre opens at 8 AM. About 10 to 12 women visit the sub-centre for
ANC registration. Between April and September, 2007 seven deliveries have been conducted and four cases of complicated delivery were referred to BGW hospital at Gondia and the women’s hospital at Bhandara. The hospitals at Gondia and Bhadara to which these 4 cases were referred had no difficulty in entertaining the cases which had the following complications:-

- one was a case of pregnancy at an age above forty;
- one was a case of heart disease;
- one had a previous history of abortion;
- one was a case of toxemia.

The common causes of abortion are:-

- early marriage (below 18 years);
- teenage pregnancy;
- hard manual labour in third trimester.

There have also been 3 cases of anaemic women who are being given iron and folic acid.

The average weight of new born babies ranges between 2 to 2.5 kg.

Some redeeming features:-

The entrance to the sub-centre itself is marked by display of a number of IEC posters. One of them was ‘Satpapadi’ which means seven steps to take care of the pregnant women registered for ANC. The 7 steps are:-

- Registration;
- Immunization;
- Iron tablets;
- Diet and rest;
- ANC check up three times;
- Institutional delivery;
- Advice regarding family planning.

Around the delivery room too, there are certain good posters such as:-

- infertility is not a sin;
- there is nothing immoral or illegal in conducting safe abortion if such abortion is in the interest of health of the mother;
- boys and girls are born out of the same mother’s womb and are equal in all respects;
do not take recourse to female foeticide.

Visits undertaken by ANM:

- The ANM visits each village once a week and around 50 to 60 households.
- She goes from one household to another to meet the malnourished children, pregnant and lactating mothers.
- She carries the weighing machine and gets the weight of malnourished and normal children checked.
- She also attends to follow up and brings the feedback for the MO of the PHC.

9.10.2007

Visit to Rural Hospital, Deori (1983):

- The RH is entitled to 9 posts of MOs of which only 3 are in position and 6 are vacant. The post of pharmacist is also vacant. The vacancies are persisting for quite some time.
- The Medical Superintendent who happens to be a paediatrician somehow manages the heavy workload by distributing it amongst the 3 MOs which is beyond their limited biological energy.
- There is no blood bank with transfusion facility. Even though a sum of Rs. 5 lakh has been sanctioned under IPHS Scheme the construction of the blood bank building is still awaited.
- There is a mortuary without cold storage. One has to go immediately for post mortem.
- There is neither any auto analyzer nor a high pressure sterilization.
- There is no proper NICU even though number of malnourished children in Gr. III and Gr. IV is quite high as would be evident from the following:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Year</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2005-2006</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>2006-2007</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

- A Trauma Centre was sanctioned for the RH which is on the Calcutta Bombay National Highway keeping in view the possibility of accidents and trauma caused on account of such accidents. One post of Orthopaedics Surgeon has been sanctioned and posted but the post has since been diverted to Buldhana for inexplicable reasons.
Redeeming features:

- The Medical Superintendent – gifted, energetic, self-effacing and well intentioned has made available his own accommodation for use of the Nutrition Rehabilitation Centre which has been set up in MS’s residential quarters adjacent to the Rural Hospital. The MS is staying in an accommodation which is much below his entitlement.

- The services of MS who is a paediatrician are being utilized by the PHCs located at the following places:-
  - Ghonadi (35 km);
  - Kakodi (38 km);
  - Putana (12 km);
  - Mulla (12 km).

- Between April, 2007 to September, 2007 more than 110 deliveries have been successfully conducted at the Rural Hospital.

Suggestions:

- Of the 110 deliveries 14 children have been reported to be weighing less than 2 kg which is a matter of deep concern. All these cases require to be closely followed up at the respective homes of these children by the ANM and LHV of the PHC area. On the basis of the feedback further correctives can be applied to restore the children to their normal weight (corresponding to their age).

Nutritional Rehabilitation Centre

or

Child Development Centre, Deori

This is a new concept which integrates ICDS with Public Health very closely. I had emphasized the need for and importance of such integration when I had visited Yavatmal on 3.6.2007. The Divisional Commissioner, Amravati (Dr. S.K. Goel) accompanying me had appreciated it and sought to implement it. The NRC or CDC is the outcome.

- In all 13 children were admitted of which 12 were Gr. III and 1 was Gr. IV.
- All mothers were present along with the children.
- The environment in the NRC or CDC was extremely homely-warm and hospitable.
- Toys for children – simple and harmless were available.
- Charts indicating all details about children – date of delivery, weight at the time of birth, gain of weight as a result of stay of the child in the NRC, the diet – composition, frequency, quantities etc. were displayed on walls.
• In the first week diet was given 8 times i.e. 6 AM, 8 AM, 10 AM, 12 Noon, 2 PM, 4 PM and 6 PM.

• The kitchen, store and dining room were found to be immaculately neat and clean.

• The mothers who stayed with their children in the NRC/CDC also received training as to how to cook nutritious food for children with the help of foodgrains (cereals, coarse cereals, tubers) and vegetables which were locally available.

• The weight of the children was taken daily and it was observed that children who were underweight (cases of LBW) were having weight gain. Amongst the 13 children the weight gain was of the order of 970 gm, 525 gm, 425 gm, 405 gm, 520 gm, 65 gm, 696 gm, 860 gm, 156 gm, 74 gm, 876 gm, 16 gm and 265 gm.

• The pace and progress of recovery of Gr. III and Gr. IV children were very good and this was possible on account of round the clock vigilance, personal care and supervision of the MS and the lady medical officer.

• This integrated model deserves to be replicated in all the PHCs of the State in a phased manner. To start with, all the tribal PHCs may have such NRCs/CDCs to be followed by others.

9.10.2007

Visit to BGW Hospital, Gondia:

• In the paediatrics ward and NICU 7 babies in all were examined of whom 2 were of low weight. Of them, one was not accepting food, second one was having septicemia, third was a case of breach delivery and the fourth was suffering from Mucus Aspiration Syndrome. All of them were receiving proper treatment.

Concluding remarks about visit to Gondia:

As has been observed earlier the solution to the problem of malnutrition of children does not lie in anganwadis or sub-centres or PHCs or hospitals but primarily at home through the following:-

- access to employment;
- access to remunerative wages;
- linkage of wages with public distribution system;
- allotment of homestead land to the landless;
- allotment of agricultural land to the landless;
- allotment of a dwelling unit under Indira Awas Yojana;
- access to potable water;
- access to sanitation;
- access to rural electrification;
- production, distribution and consumption of cereals, pulses, taber, milk, fish, eggs, meat, fruits and green vegetables.

These require a detailed analysis as under:

I Access to employment:

Barely 40 days of employment is available in rainfed agriculture and that too for female labourers. About 200 days of work is available for adult women and men both. For the remaining days, there is no assured employment within the district. Agricultural and non-agricultural labourers, therefore, migrate to Nagpur, Chandrapur, Balaghat and Chattisgarh. It was reported that while migration outside the State is 10.81%, migration outside the district is 7.44%.

II Access to remunerative wages:

Minimum wages have been notified in respect of 65 scheduled employments by the State Government. Of these, some of the scheduled employments such as beedi rolling, labelling and packaging, rice mill, shops, hotels, oil mills etc. are in Gondia. Even though the notified minimum wage for a daily rated employee in agriculture is Rs. 70/- field interactions with tribal women of the district revealed that on an average they earn Rs. 30/- per day and find it extremely difficult in allocating this amount amongst food and non-food items. This is contrary to the claim made by officers of the Labour Department that normally all workers are getting minimum wages. Their claim that women and men are being paid equal wages for same or similar nature of work is equally fallacious. The figures quoted by them in support of their claim are paper figures and do not have any correlation with ground level reality.

III Linkage with Public Distribution System:

According to the official version 97,603 BPL cards, 64015 Antyoday cards and 2400 Annapurna Cards have been issued and the cardholders are getting rice (25 kg per card), wheat (10 kg per card), Koil (2 litre per unit for non-gas holders) and sugar (500 gm per person) as per entitlement. In course of field visits and interactions the following deficiencies in the PDS were notified:-

- the entitlements fixed are not adequate considering the size of the household;
- the earnings being low it is difficult to buy the required quantity of food stuff (rice, wheat, coarse cereals) from the open market at rates much higher than the controlled PDS prices;
- a large number of families who are genuinely below poverty line have been kept out of the BPL list and, therefore, are not in possession of BPL cards;
- considering the fact that tribal households (20,090) in tribal villages/hamlets (445) are scattered and fragmented, 276 fair price shops located in tribal areas are not adequate.

**IV Allotment of homestead land:**

A very large number of tribal families (24,619) do not have any homestead land. The district administration has no plans to allot even a small plot of homestead land (about 10 cents) to these families.

**V Provision of dwelling unit under IAY:**

So far 3521 households have been provided with financial assistance for construction of low cost dwelling units the break up of which is as under:-

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2006</td>
<td>846</td>
</tr>
<tr>
<td>2006-2007</td>
<td>1120</td>
</tr>
<tr>
<td>2007-2008</td>
<td>1555 (proposed)</td>
</tr>
</tbody>
</table>

A large number of families (13,552) are in the waitlist for receipt of financial assistance under IAY.

**VI Allotment of agricultural land:**

A total number of 14,456 tribal cultivators belonging to 620 villages of the district have been cultivating forest land for several years. They have nothing else to fall back upon. They have, however, been treated as encroachers (as they do not have any valid title and right of possession on the said land). The district administration on the basis of survey conducted recommended cases of 2642 cultivators who have been cultivating the said forest land prior to 1980, the year when the Conservation of Forest Act came into being for eventual settlement in their favour but no light could be thrown on the outcome of the said proposal.

**VII Promoting Kitchen garden:**

BPL families and tribal families who are genuinely poor but have been left out of the BPL list and, therefore, do not have a BPL card, find it extremely difficult to buy foodgrains from the open market (on account of higher prices and limited earnings which are lower). If homestead land could be allotted and the concept of kitchen garden could be integrated, they could grow at least fruits and green leafy vegetables which could contribute to the nutrition of family members (including children). There was no evidence of any effort having been made by the district administration in this direction.
VIII  Rural Electrification:

Of the 20,090 number of tribal households, only 10,848 households have been electrified. The pace and progress of this seem to be quite slow.

IX  Production of cereals, coarse cereals, pulses, tuber, milk, eggs, fish, meat, fruits and green vegetables:

There was neither any indication nor any evidence of any special efforts having been made by the Agriculture and Horticulture Departments to promote and boost production of cereals, coarse cereals, pulses, tuber etc.

From the side of Animal Husbandry and Veterinary Department, it was indicated that 504 milch animals, 218 goatery units and 3500 birds (poultry) have been distributed to improve production of milk, meat and egg.

In a district with 20,090 number of tribal households the extent to which production of milk, meat and egg would improve by distribution of 504 milch animals, 218 goatery units and 35000 birds is anybody’s else. There was no indication about the measures taken to ensure proper upkeep and maintenance of these units to sustain their production and productivity.

On the ground there was clear evidence that people do not consume milk on account of certain mistaken notions or make beliefs. There was, however, no evidence of any extension effort having been made by the Animal Husbandry and Veterinary Department to remove these notions or make beliefs. It is obvious that adequate attention has not been paid to most of the issues either at the Policy Planning level or implementing levels. For this, a few words of reflection about the role of Zilla Parishad will be quite appropriate. ZP is the Principal Policy making, directional and coordinational mechanism at the district level. If the Chairman, Vice Chairman and members of the General Council, Standing Committee and subject matter Committees as also the Chief Executive Officer and Officers of line Departments down below are aware, agile, alert, take genuine and passionate interest in development including promotion of nutrition of children and their mothers, a lot of good results could be achieved. The CEO, Gondia in particular is a young and energetic officer from the All India Services (IAS) and has been taking keen interest in development administration of the district for the few months that he has been posted here. It may be necessary and desirable to provide short term orientation programmes for all non – official and official members of the Zilla Parishad to promote a clear understanding of the concept, content and process of nutrition, malnutrition and under nutrition. This can be organized at YASHDA which is headed by yet another young, energetic and bright officer as its Director.
The district of Nagpur has a geographical area of 11033.56 sq.km of which the forest area is spread over 2947 Km. It has a population of 42,19,263 the break up of which is as under:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>23,92,026</td>
</tr>
<tr>
<td>Rural</td>
<td>18,27,237</td>
</tr>
<tr>
<td>SC</td>
<td>31,42,21</td>
</tr>
<tr>
<td>ST</td>
<td>27,92,08</td>
</tr>
</tbody>
</table>

It has 5 sub-divisions, 14 talukas, 14 Panchayat Samitis, 2030 revenue villages, 823 Village Panchayats and 3,71,943 households. Nagpur is a fairly advanced and progressive district with a literacy rate as high as 84.3%.

Ramtek is the only tribal taluk in Nagpur district with a total geographical area of 1141.56 sq. km. which is predominantly rural. It has a total population of 1,51,626 and a low density of population of 132.82 per sq.km. The break up of the population for Ramtek taluk between urban and rural, women and men, SC and ST is as under:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>36,606</td>
</tr>
<tr>
<td>Rural</td>
<td>1,15,020</td>
</tr>
<tr>
<td>SC</td>
<td>18,531</td>
</tr>
<tr>
<td>ST</td>
<td>49,853</td>
</tr>
</tbody>
</table>

The break up of children in 0-6 age group in Ramtek taluk is as under:-

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>2129</td>
</tr>
<tr>
<td>1-2</td>
<td>1852</td>
</tr>
<tr>
<td>2-3</td>
<td>1960</td>
</tr>
<tr>
<td>3-6</td>
<td>5048</td>
</tr>
<tr>
<td>Total of 0-6</td>
<td>10,989</td>
</tr>
</tbody>
</table>
The average size of the family in tribal households ranges between 5 to 6.

The dietary pattern in a tribal household comprises of cereals and pulses generally and green vegetables, egg, meat, fish and fruits rarely.

Access to potable water is mostly through hand pumps and wells and in a few cases through piped water supply (either temporary or permanent). Water from regular drinking water sources was tested 100% in the laboratories at Nagpur and Ramtek during 2005 to find out if the sources were affected chemically and bacteriologically. While the incidence of guinea worm was found to be zero 16 villages were reported to be affected by florosis.

Out of 45 Village Panchayats in Ramtek taluk, the status of households having toilets is as under:

- 20 Village Panchayats - 100% coverage
- 10 Village Panchayats - 90% coverage
- 15 Village Panchayats - 30% coverage

Profile of Public Health:

In terms of Public health, there is one sub-divisional hospital at Ramtek, one Rural Hospital at Deolapar, 5 PHCs (Karwahi, Mansar, Hiwra bazaar, Bhandarbodi and Nagardhan) and a total number of 30 sub-centres. Of the 5 PHCs, Karwahi and Bhandarbodi do not have any departmental building (they are under construction) and the remaining three have. All 30 sub-centres have departmental building.

In all there are 12 vacant posts in the 5 PHCs in different categories (MO II, MO III, HA (male), HA (female), MPW (male), MPW (female), pharmacist). These vacancies are pending for a long time. I was given to understand that even though the selection process for selection to the posts has been over in August, 2007 posting orders could not be issued due to model Code of Conduct for Village Panchayat elections coming into force. PHCs and sub-centres are vital grass root level service institutions in the countryside and it is not clear to me as to how issue of posting orders for functionaries of these institutions which is a normal administrative function could affect the sacrosanctity of the GP electoral process. Any delay in issue of the posting orders and delay in joining the respective posts by the incumbents selected to the post would instead cause a lot of avoidable dislocation in the management of the institutions much to the detriment of health and well being of people.

Proposal for registration of Rugna Kalyan Samitis for all the 5 PHCs in Ramtek is pending with Charity Commissioner for registration. The process is expected to be completed by 15th October. It was, however, reported that village health, nutrition
and Sanitation Committees have been formed in all the 45 Village Panchayats in Ramtek Panchayat Samiti. Their Functioning needs to be activated at the earliest.

Nagpur ICDS Profile:

- While there are 13 ICDS Projects in the district, there is one Project at Ramtek with 177 AWCs. Of the 177, (164 AWC and 13 Mini AWCs) 148 AWCs have their own departmental building and at 29 places other sources have been tapped to provide the accommodation.
- Of the 164 AWWs 162 are in position and of the 164 AWHs 161 are in position.
- The average age of the AWWs is 31 and 8th standard passed is the average educational qualification.
- There are 2 different timings for opening and closing of AWCs such as:-

<table>
<thead>
<tr>
<th>Opening</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td>March to June</td>
<td>8 AM</td>
</tr>
<tr>
<td>July to February</td>
<td>10 AM</td>
</tr>
</tbody>
</table>

- The AWWs through their initiative have mobilized 93 SHGs/Mahila Mandals and formation of more such groups is in process.

10.10.2007

Field Visits:

Visit to Sub-district hospital, Ramtek:

Grey areas:-

It originally started as a 30 bedded hospital in 1990 and was raised to the status of a 50 bedded hospital in 2004. There was no paediatrician in the hospital for the last 3 to 4 years. Its only about 3 months back that 2 Paediatricians have been posted. There is, however, no exclusive arrangement for treatment of Gr. III and Gr. IV children in as much as there is neither a paediatric ward nor a NICU as an integral part of the hospital. All children are being treated in the general ward along with adult patients which is not a very healthy arrangement. ANC registration is not 100%. Even today 52% of the deliveries take place at home and almost 100% of the tribal mothers are anaemic with a low haemoglobin count of 8 to 9 mg%.

- One of the main reasons for low ANC registration or high pc of home delivery is lack of adequate publicity. Not a single camp has been organized since inception of the hospital and no field visits have been undertaken. There is no extension activity whatsoever from the side of the hospital in this direction.
Even though it’s a fairly new hospital and the hospital building with spacious wards, rooms, corridors is in a good shape, not a single health educational material (charts, posters, graphs depicting the number of deliveries conducted, home delivery vs. institutional delivery, weight of the children at the time of birth, figures relating to NMR, IMR, CMR and MMR, age of marriage, incidence of teenage pregnancy, incidence of IUGR, still birth, abortion, premature delivery) was to be found anywhere.

There is no organized effort to bring Gr. III and Gr. IV malnourished children to the hospital either with the help of AWWs of AWCs or with the help of ANMs and LHV of PHCs. No survey has ever been conducted with the help of hospital staff which could have helped to bring such children to surface. Since it is not expected that ignorant and illiterate mothers will ever bring Gr. III and Gr. IV malnourished children to the hospital, we have to take the help of ANMs, LHV and MPW for this purpose.

Even though the MS is a gynaecologist no effort has been made to make the pregnant tribal mothers aware as to what they should do and what they should not at an advanced stage of pregnancy, what causes abortion, still birth or premature delivery. On the whole, no extension and publicity effort whatsoever has been made by the hospital authorities. Through field visits to the tribal households it should have been possible to know (a) how many times food is being cooked and served (b) what pregnant mothers are eating and (c) whether they are sufficiently aware of schemes like Matrutwa Anudan Yojana and Janani Surakshya Yojana. Neo-natal disease surveillance study conducted under the overall supervision and professional guidance of Dr. A.K. Niswade, Professor, Paediatrics, Government Medical College, Nagpur appears to be the only redeeming feature amidst this bewildering scenario. The Project was taken up w.e.f. 1.11.2006 with support from United States Agency for International Development (USAID), International Clinical Epidemiology Network (INCLEN) and Indian Clinical Epidemiology Network (INDIACLEN). The Project has opened site offices at all the 5 PHCs namely Nagardhan, Mansar, Bhandarbodi, Hiwra bazaar and Karwahi and the staff working at site office comprise of 1 MO, 1 MIS Officer, 1 Data Manager, 5 Supervisors, 20 Research Associates, 1 Lab Technician and 1 Attendant while at the Central Coordinating Centre (CCO) at Medical College, Nagpur one Systems Analyst has been compiling and analyzing the outcome of the surveillance. Some of the findings of the neo-natal disease surveillance study in tribal areas as on 30.9.2007 are as under:-

| Normal ANC – 836 (out of 980) | 85.3% |
| High risk ANC – 144 | 14.6% |
No. of miscarriage-abortion – 5 - 0.5%
No. of maternal death – 1 - 0.1%
No. of normal deliveries – 543 - 94.2%
No. of surgical deliveries – 33 - 5.7%
Total home deliveries – 400 - 69.4%
Total institutional deliveries (Govt.) - 139 -24.1%
Total institutional deliveries (private) - 35 -25.1%
No. of live new born – 540 - 93.75%
No. of still birth – 22 - 3.8%
No. of neo-natal deaths – 19 - 3.2%
No. of complicated deliveries referred – 29 - 5.03%
Birth weight less than 2.5 kg –181 - 31.3%
Birth weight more than 2.5 kg – 398 - 68.8%
LBW associated with other diseases -59 - 10.20%
LBW – 132 - 21.10%
Suspected Sepsis – 74 - 12.8%
Yellowness over body – 46 - 7.9%
Loose motion – 67 - 11.59%
Birth Asphyxia – 29 - 5.01%
Umbilical Chord discharge -22 - 3.8%
Congenital Anomaly/defect -17 - 2.94%
Rash/boils over skin – 46 - 7.9%
Vomitting/excessive gastroesophageal reflex -58 - 10.03%
Hypothermia – 76 - 13.1%

The death syndrome is as under:-

Infant death (1-4 months ) - 4
Maternal death - Nil
Neo-natal death (0-28 days) - 1
Neo-natal death (0-28 days) - 19
The survey has had a very good outreach (167 villages with 66000 population) in a short time span of 10 months with some very useful findings which could be used for designing a policy and strategy to deal with similar cases/situations in future.

10.10.2007

Visit to PHC, Mansar:

The PHC was established on 18.12.83 and is functioning in a departmental building. Except the second MO who has no separate room for himself the floor space available for other purposes is adequate such as:-

1. Room for PHC incharge - 100 sq.ft.
2. Delivery room - 120 sq.ft.
3. Surgical room - 130 sq.ft.
4. Injection and dressing room - 40 sq.ft.
5. Medicine store room - 100 sq.ft.
6. Room for disciplinary medicine - 100 sq.ft.
7. Room for Gr. III and Gr. IV children where they can stay with their mothers and undergo treatment - 500 sq.ft.
8. Room for HA (male) and HA(female) – 100 sq.ft.

Redeeming features:

- ANMs in course of their visit to the households counsel, motivate and persuade the mothers to
  - go in for ANC registration;
  - go in for regular check up under MAY;
  - comply with the medicines prescribed during pregnancy;
  - not to run fast, not to climb heights, not to lift heavy weights, take precaution while crossing the threshold of the door;
  - eat nutritious meal 4 times a day;
  - eventually go in for institutional delivery in preference to home delivery.

Grey areas:

- Cases of 8 Gr. III malnourished children were reported to be referred to Ramtek sub-divisional hospital but no further information is available on the following:-
- When they were referred;
- What is the present status (whether the children have been discharged or are still continuing with the treatment).
- What is the follow up at home if they have been discharged from the hospital;
- What is the feedback on the basis of contact with the patients at home.

• This is mysterious as I had visited the sub-hospital at Ramtek only around 10 AM in the morning and there was no trace of these children. The ordinary presumption in such a situation would be that either mothers have taken away the children before the full course of treatment could be completed or there is no documentation.

• The sum total of the impression that one gets after visiting both the sub-hospital as well as the PHC, Mansar is that (a) there is no follow up and (b) there is no feedback. There is a paediatrician in the PHC but he pleaded complete ignorance about the present status of these children.

• Rugna Kalyan Samiti has been formed but is awaiting registration with the Charity Commissioner. It is hoped the process will be completed by 15th October, 2007.

• Both the ANC registration and vaccination have a low percentage of achievement (36% and 30% respectively).

• Medicines in the store room have not been labelled with name and expiry date.

• The data entry operator who mans computerized data through the PC is not clear as to how and in what order the relevant data should be collected, compiled and stored. He was not in a position to retrieve the data either.

• The vital statistics presented in a table below goes to show that there has not been much change as far as total deaths or infant deaths are concerned:

**Vital Statistics**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total births</th>
<th>Total deaths</th>
<th>Infant deaths</th>
<th>Still births</th>
<th>MMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>488</td>
<td>148</td>
<td>21</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>2002-03</td>
<td>478</td>
<td>152</td>
<td>14</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>2003-04</td>
<td>437</td>
<td>147</td>
<td>18</td>
<td>18</td>
<td>-</td>
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<td>07</td>
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</tr>
<tr>
<td>2005-06</td>
<td>454</td>
<td>113</td>
<td>17</td>
<td>07</td>
<td>-</td>
</tr>
<tr>
<td>2006-07</td>
<td>445</td>
<td>107</td>
<td>19</td>
<td>02</td>
<td>-</td>
</tr>
</tbody>
</table>
The CDR and IMR, however, continue to be high as would be evident from the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>CDR</th>
<th>IMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>2002-03</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>2003-04</td>
<td>5.25</td>
<td>41.18</td>
</tr>
<tr>
<td>2004-05</td>
<td>4.82</td>
<td>37.94</td>
</tr>
<tr>
<td>2005-06</td>
<td>4.37</td>
<td>15.41</td>
</tr>
<tr>
<td>2006-07</td>
<td>4</td>
<td>42.69</td>
</tr>
</tbody>
</table>

10.10.2007

Visit to sub-centre, Borda (PHC Mansar):

The sub-centre was established in April, 2006 and has 4 villages with 389 households under its jurisdiction. The centre is functioning in a departmental building. The incumbent ANM is functioning since inception. The physical space available in the sub-centre appears to be adequate (3000 sq.ft.) of which the residential portion (225 sq.ft.) is an integral part. The following are some of the redeeming features of the sub centre:-

- The ANM is able to cover all the 4 villages and 389 households in the jurisdiction of the sub-centre in course of her visits in a month.
- The Arogya Advisory Committee for the sub-centre has been formed and is functioning. There are 7 members of whom 3 are women.
- The Village Health, Nutrition and Sanitation Committee has also been formed and is functioning.
- A number of slogans/messages on pregnancy, delivery, nutrition of mothers and children, HIV prevention, family planning devices etc. have been pasted on the wall.
- Forty two pregnant women have registered themselves under ANC.
- The ANM has conducted 15 deliveries between April 2007 and September, 2007.
- Benefits under MAY and JSY are being disbursed to pregnant mothers.

Grey areas:

- The size of the delivery room is rather small.
- There was one abortion and one still birth in September, 2007 although it did not pose any threat to the life of the mother.
• Four children in the sub-centre area died in the previous years. One of them was a case of congenital anomaly.

• There is no piped water supply to the sub-centre or to the villages. Water from bore well is available but there is a possibility that if it is not treated it may contain chemical and bacteriological impurities.

Suggestions:

• To make the visit to households by the ANM more meaningful a structured interrogation to be made in an informal manner would be useful. The interrogation which should have a special focus on health and nutrition of mothers and children could be divided into 4 parts namely:-
  1. Family related (size of the family, age of marriage, employment status, earnings, how much of earning is allocated towards food and how much towards non-food items etc.).
  2. Food and nutrition related (how many times food is prepared and served, what are the micro-nutrients contained in the food, how much k.cal energy it will generate).
  3. Health related (whether pregnant mothers registered under ANC are undergoing checkups, whether vaccinated, whether there is any breach, position of foetus etc., vaccination of the child after delivery, breast feeding upto 2 years, composite feeding after 6 months).

10.10.2007

Visit to AWC, Mansar:

The AWC was established in 1980 and is functioning in a departmental building. The physical space available measures 236 sq.ft. in 2 rooms i.e. AWC hall and store room. There are 3 windows but no lighting arrangement. While the number of children in 0-6 age group enrolled in the AWC is 50, the average attendance ranges between 20 to 22. It was clarified that due to Mahalaya the attendance was less.

Redeeming features:

• Ramabai Swayan Sahayata Mahila Bachat Gat prepares and serves the food to children in 3-6 age group twice at 12 Noon and 2 PM. The recipe is changed once in every 2 days.

• The general reaction of the mothers to both the quantity and quality of food was reported to be good.

• The Supervisor in-charge of supervision of the AWC visits it every month and records her remarks in the visitor’s book.
• Weight of the children is being taken on the 10th day of every month. The MO from the PHC visits the AWC once every quarter for check up of health of children in 3-6 age group.

• AWW makes it a point to visit 5 households everyday.

• The immunization schedule is being meticulously observed every Thursday at the PHC.

Grey areas:

• The timings for opening and closing of the AWC are not very scientific. This is on account of the intense summer heat in Nagpur district (temperature goes up to 45º to 46º Celcius) and tender children in 3-6 age group would find it very difficult to return home in the sweltering heat around 2 PM.

• The timing of the meals served under the SNP also appears to be inconvenient. Children from poor families may have eaten very little breakfast or may have come with an empty stomach. It will be in order, therefore, if the first meal of the day could be served around 10.30 AM i.e. within half an hour of opening of the AWC. The second meal could be served 2 hours later i.e. at 12.30 Noon and not at 2 PM as is being done now.

• Weight of 3 children was taken by me and all the 3 children were found to be under weight as would be evident from the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Weight</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Laxman Sampat Nane</td>
<td>3 years</td>
<td>10 kg</td>
<td>4.6 kg less than normal.</td>
</tr>
<tr>
<td>2. Piyus Ujjwal Dhole</td>
<td>3 years 8 months</td>
<td>10 kg</td>
<td>6 kg less than normal.</td>
</tr>
<tr>
<td>3. Monali Sushil Upadhya</td>
<td>4 years 9 months</td>
<td>11 kg</td>
<td>6 kg less than normal.</td>
</tr>
</tbody>
</table>

10.10.2007

Visit to AWC (Sarakha) Borda:

The AWC was established in 1995 and is functioning in a departmental building. The physical space available comprises of 2 rooms with 400 sq.ft. built up area which is adequate. There are 7 windows but no lighting arrangement. As in the case of the earlier AWC at Mansar an SHG (Savitribai Mahila Bachat Gat) is cooking and serving food to children in 3-6 age group under SNP. The general reaction of the mothers (13 mothers
were present at the time of visit) to the quantity and quality of food was reported to be good.

**Redeeming features:**

- The average attendance in the AWC (28 to 29) was better than the one at Mansar.
- The accommodation available is also better than the earlier AWC.
- Immunization schedule is being observed meticulously on the 7th day of every month (at the sub-centre).
- The AWW makes it a point to visit 5 households in the evening everyday.
- The MO from the PHC visits the AWC once in every 3 months for check up of health of children.

**Grey areas:**

Interaction with the mothers revealed the following weaknesses in family size, age of marriage, pregnancy, spacing, weight of children etc.

- Family size is large (5 to 6);
- Spacing between 2 deliveries is negligible (barely 1 year);
- Pregnant women continue to work till the last day before delivery.
- The earnings are very low. While men get Rs. 50/- per day, the women for same or similar nature of work and sometimes more strenuous work get only Rs. 30/- per day.
- It becomes difficult with such meager earnings to meet the cost of both food and non-food items.
- The allocation of the meager earning between food and non-food items is not balanced. Such decisions are taken by men and not by women.
- The number of Gr. I children is 30 and Gr. II 12. Took the weight of the following children and found the same to be quite low in relation to age:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>Date of birth</th>
<th>Weight</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shejal Devidas Thondre</td>
<td>19.5.2004</td>
<td>3.5 kg</td>
<td>The child should be graded as Gr. III and not Gr. II.</td>
</tr>
<tr>
<td>2.</td>
<td>Vishal Thakre</td>
<td>3 years of age</td>
<td>8.6 kg</td>
<td>6 kg lower than normal weight</td>
</tr>
</tbody>
</table>
Suggestions:

- The negative indicators arising out of large family size, want of spacing, early child marriage, teenage pregnancy will have to be repeatedly addressed through vigorous and effective counselling. Pregnant women get to interact with AWWs, ANMs, LHVs; they also come to PHC for check up and for receiving benefits under MAY and JSY. The AWWs, ANMs, LHVs and PHC-in-charge need to avail of this opportunity to talk to the pregnant women in as simple, persuasive and non-threatening a manner as possible and eventually carry conviction to them in respect of the following:-
  - it is in their own interest and the interest of their children that they should go in for tubectomy after 2 children;
  - it is in their own interest that they should observe minimum spacing of 3 years between 2 children;
  - it is in their own interest that they should put an end to early child marriage and teenage pregnancy which are injurious to their health.

- Simultaneous efforts should be made by the district administration to improve access of BPL tribal families to better avenues of employment, better wages and better linkage between earnings and public distribution system.

10.10.2007

Visit to Hiwra bazaar PHC:

The PHC established in 1984 and is located 25 kms. away from Ramtek. It has 7 sub-centres and 40 villages within its jurisdiction. Located in the midst of a dense forest the last village is 30 km away from the headquarters of the PHC.

Redeeming features:

- Even though located in the midst of a dense forest, incidence of malaria is nil. Incidence of T.B. is also nil.

- All preventive measures have been taken to ward off malaria (including distribution of impregnated mosquito nets in 8 villages so far).

- Ambulance van with driver and provision of required POL amount contributes towards mobility of doctors and transportation of patients.

- Interaction with ANM and LHV confirmed that they are undertaking regular visits to the 40 villages according to a well laid down calendar of visits and with the intention of visiting 40 villages at least once a month.

- There are no vacant posts unlike other remote, interior and inaccessible pockets.
Grey areas:

- Cases of malnourished Gr. III and Gr. IV children are referred to sub-hospital but are not followed up.

- To illustrate, the cases of the following malnourished children were referred to sub-hospital, Ramtek:-

  1. Ganesh Krishna Uke – 5.2 kg at one year of age;
  2. Priti Vijay Sareyam – 6 kg at 5 years and 8 months of age;
  3. Manisha Rambhau Uke – 7.8 kg at 2 years and 10 months of age;
  4. Akanshya Akadu Wadiye – 9.7 kg at 5 years of age;
  5. Purnima Govind Chachare – 7.5 kg at 2½ years of age;
  6. Khushal Mahendra Wagde – 8 kg at 3 years of age.

- These are cases of chronic malnutrition which have been referred to the sub hospital, Ramtek (25 kms away). When I visited the sub-hospital on 10th morning I was told that there are no cases of Gr. III and Gr. IV malnourished children referred to the hospital.

- This goes to show that no documentation of Gr. III and Gr. IV children referred by the PHC to the sub-hospital has been maintained either at the PHC or at the sub-hospital and there has been neither any follow up nor any feedback.

- It is a pity that the PHC reports that these 6 cases have been referred to the sub-hospital but is unable to report about the latest status of their health.

- There are a number of other grey areas which came out in course of interaction with the ANM and LHV. These are:-
  - mothers are not ready to bring their children either to the PHC or to the sub-hospital or Rural hospital on their own;
  - very few micro nutrients are present in the daily dietary pattern of families which comprises mostly of rice;
  - there is very little of environmental sanitation in the countryside;
  - there are mistaken notions in the countryside of tribal areas that consumption of milk will lead to scabies and itching;
  - while milk and eggs produced in a household are sold in the market, children do not get to consume them;
  - while tribal women go out for work, men (tribals) sit idle at home drinking country liquor;
- the earnings of women which are low are frittered away by men by unproductive expenditure;
- there are taboos against use of domestic toilet;
- there is generally acute shortage of employment in the countryside.

**Suggestions:**

Very powerful and aggressive advocacy is needed in shape of nukkad nataks/street theatres, role plays and simulation exercises etc. to drive home certain central messages to tribal mothers. The messages are:-

- children are our succeeding generation;
- we cannot afford to play ducks and drakes with their lives;
- Gr. III and Gr. IV children need to be admitted to and treated in hospitals; such treatment cannot be arranged at home and home cannot be a substitute for hospital;
- Nutrition is the science of food in relation to health. It is 100% science and there is no place for blind faith or superstition in this;
- Children need milk and eggs since 80% of the brain is formed in the first 2 years of their life. We cannot afford to deny them of these macro-nutrients;
- Children's life once debilitated or deformed or destroyed cannot be regained; it will be a sad and irretrievable loss of our next generation;
- Since access to productive and remunerative employment is limited and so is access to earnings, and yet nutrition is key to survival and development we have to balance our limited earnings to buy and consume whatever is produced locally and whatever contains macro and micro-nutrients to the best possible extent.

Such central messages should be designed in workshops with the help of creative thinkers, writers and artistes, should be pretested and their relevance validated on the ground before they can be used in shape of nukkad nataks/street theatres, role plays, skits as the media. Such an experiment can be as simple, innovative, time bound, area specific and cost effective as possible.
Nanded
(22.10.2007 and 23.10.2007)

General

Geographical, topographical and demographic profile as also the profile related to ICDS and public health in relation to tribal population in general and tribal children in particular:

Like Ahmednagar, Nanded is linear in structure with the district headquarters at one end and Kinvat (which is the headquarters of a tribal sub-division) at another and at a distance of 140 km. The district has a total geographical area of 10,528 sq. km of which more than 20% is the tribal area comprising of 2 taluks namely Kinvat and Mahur (2105.06 sq.km.). The district and tribal area population is of the order of 28,76,259 and 2,97,76 respectively with a medium and low density of population of 273.20 and 141.2 per sq.km respectively. The breakup of the population is as under:-

<table>
<thead>
<tr>
<th></th>
<th>District</th>
<th>Tribal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28,76,259</td>
<td>2,97,276</td>
</tr>
<tr>
<td>Urban</td>
<td>6,89,604</td>
<td>24,878</td>
</tr>
<tr>
<td>Rural</td>
<td>21,87,195</td>
<td>2,72,534</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>District</th>
<th>Tribal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11,23,468</td>
<td>3,57,890</td>
</tr>
<tr>
<td>Female</td>
<td>10,63,727</td>
<td>3,31,174</td>
</tr>
<tr>
<td>SC</td>
<td>4,06,046</td>
<td>92,150</td>
</tr>
<tr>
<td>ST</td>
<td>2,22,846</td>
<td>30,750</td>
</tr>
</tbody>
</table>
The district has 3 sub-divisions, 16 talukas, 1313 GPs, 1612 inhabited villages, 368 hamlets and 5,27,875 number of households. The corresponding figures for the tribal areas of Kinwat and Mahur are:

- **Taluks** - 2
- **GPs** - 197
- **Inhabited villages** - 283
- **Hamlets** - 
- **Households** - 54,848

The number of children in 0-6 age group in the tribal pockets of Kinwat and Mahoor are:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Kinwat</th>
<th>Mahoor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 year</td>
<td>3954</td>
<td>1890</td>
<td>5844</td>
</tr>
<tr>
<td>1-2 years</td>
<td>3966</td>
<td>1721</td>
<td>5687</td>
</tr>
<tr>
<td>2-3 years</td>
<td>4162</td>
<td>2015</td>
<td>6177</td>
</tr>
<tr>
<td>3-4 years</td>
<td>5011</td>
<td>2018</td>
<td>7022</td>
</tr>
<tr>
<td>4-5 years</td>
<td>4852</td>
<td>1889</td>
<td>6741</td>
</tr>
<tr>
<td>5-6 years</td>
<td>2955</td>
<td>1564</td>
<td>4519</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24,940</strong></td>
<td><strong>11,090</strong></td>
<td><strong>35,990</strong></td>
</tr>
</tbody>
</table>

**Demographic features:**

- About 6 to 8% of the population migrate outside the State mostly to A.P. in search of better avenues of employment and income.
- Average size of households in the district is 5.44 while in the tribal areas it is 4.9.
- Average age at marriage in tribal areas is 18.1 years.
- Informaitions pertaining to the rate of literacy and break up in urban and rural areas, male and female, SC and ST could not be furnished by the district administration.

**Dietary pattern:**
Food is cooked and consumed twice daily i.e. 10 AM and 7 PM. The dietary pattern comprises of jower chapatti, rice, tur dal, chana dal, green leafy vegetables generally as also egg, meat, fish and crabs occasionally. Milk is not much consumed in tribal areas.

**Access to potable water:**
- In Kinwat tribal taluk the chemical analysis conducted in respect of water samples of 19 villages reveals floride content beyond the permissible limit whereas in Mahoor
tribal taluk the excess fluoride content is in respect of 15 villages. Water sources in these villages have been banned and alternative arrangements for water supply have been made.

- The bacteriological examination in respect of water samples drawn for test in approved laboratories during 2007-2008 reveals a very high percentage of non-potable water as under:-

<table>
<thead>
<tr>
<th>Month</th>
<th>Kinwat</th>
<th>Mahoor</th>
<th>Kinwat</th>
<th>Mahoor</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample taken and examined</td>
<td>Sample taken and examined</td>
<td>Results</td>
<td>Results</td>
<td>Water non potable</td>
</tr>
<tr>
<td>April'07</td>
<td>565</td>
<td>259</td>
<td>123 (21.7%)</td>
<td>54 (20.84%)</td>
<td>-do-</td>
</tr>
<tr>
<td>May'07</td>
<td>536</td>
<td>290</td>
<td>187 (34.8%)</td>
<td>68 (23.52%)</td>
<td>-do-</td>
</tr>
<tr>
<td>June'07</td>
<td>650</td>
<td>379</td>
<td>213 (32.71%)</td>
<td>107 (28.23%)</td>
<td>-do-</td>
</tr>
<tr>
<td>July'07</td>
<td>1112</td>
<td>460</td>
<td>401 (36.06%)</td>
<td>173 (37.6%)</td>
<td>-do-</td>
</tr>
<tr>
<td>Aug'07</td>
<td>697</td>
<td>417</td>
<td>204 (29.2%)</td>
<td>114 (27.33%)</td>
<td>-do-</td>
</tr>
<tr>
<td>Sept. '07</td>
<td>615</td>
<td>330</td>
<td>228 (37.07%)</td>
<td>67 (20.30%)</td>
<td>-do-</td>
</tr>
</tbody>
</table>

- The percentage of households having toilets (manually operated or with cistern) ranges between 2 to 3 PC. The Collector and CEO were of the view that this together with open defecation in the countryside and lack of environmental sanitation are responsible for drinking water turning to be non-potable in many areas including tribal areas.

- There is no incidence of guinea worm reported anywhere in the district so far. There are sporadic cases of goiter earlier but not recently.

Public Health Profile:

- The breakup of Public health institutions for the district and the tribal taluks of Kinwat and Mahoor is as under:-

<table>
<thead>
<tr>
<th>Public Health Institution</th>
<th>District</th>
<th>Kinwat</th>
<th>Mahoor</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC</td>
<td>63</td>
<td>9</td>
<td>5</td>
<td>Out of 14 PHCs and 92 sub centres, 13 PHCs and 56 SCs are having departmental building. By 2008-09 all sub centre buildings will be ready.</td>
</tr>
<tr>
<td>PHU</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MHU</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sub centre</td>
<td>374</td>
<td>65</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>SDH</td>
<td>4</td>
<td>1</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>RH</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
The following table would indicate the staffing position with reference to number of posts sanctioned and number of posts vacant in Kinwat and Mahoor taluks:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Designation and Staff</th>
<th>Sanctioned Post</th>
<th>Filled up Post</th>
<th>Vacancies</th>
<th>Remarks Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>MO Gr. A</td>
<td>28</td>
<td>27</td>
<td>1</td>
<td>Order issued but MO not joined.</td>
</tr>
<tr>
<td>2.</td>
<td>MO Gr. B</td>
<td>25</td>
<td>25</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>HA</td>
<td>30</td>
<td>30</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>LHV</td>
<td>26</td>
<td>22</td>
<td>4</td>
<td>2 retired, 2 transferred.</td>
</tr>
<tr>
<td>5.</td>
<td>MPW</td>
<td>95</td>
<td>95</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>ANM</td>
<td>109</td>
<td>105</td>
<td>4</td>
<td>2 promoted, 2 transferred.</td>
</tr>
<tr>
<td>7.</td>
<td>Pharmacists</td>
<td>22</td>
<td>22</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Lab Technician</td>
<td>13</td>
<td>13</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Driver</td>
<td>24</td>
<td>24</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>372</strong></td>
<td><strong>363</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

The percentage of vacancies works out to 2.4. The DHO was advised to go in for appointments on contract basis if the response to the advertisements was not found to be encouraging.

- In terms of number, health educational and publicity materials appear to be impressive but the holistic dimension to health education and information is wanting. These materials should reflect a complete life cycle encompassing all phases right from pregnancy, delivery (institutional and home), breast feeding, composite feeding, immunization, growth monitoring, nutrition, malnutrition and under nutrition, forms of malnutrition (LBW, Vitamin A deficiency, Anaemia, IDD etc.), fight against malnutrition and under-nutrition, dietary pattern, line of treatment of malnourished children in PHCs and hospitals, mother’s education and counselling etc. The materials distributed do not fall into any of these categories and do not bring out the close correlation between nutrition, food, health and growth in a succinctly logical and coherent manner.
Accountability:

- It has been stated that accountability of public health functionaries is being ensured through the following:
  - weekly visits of ANMs to villages;
  - fortnightly visits of MPWs to villages;
  - monthly and fortnightly meetings at the PHC;
  - Taluka and district level reviews at every 14th and 20th of the month;
  - Block level Navsanjivani/meeting of MO/HA reviewed by AD/DHO.

- It was clarified by me that accountability is a multi faceted concept and in the context of public health institutions it would encompass the following:
  - is the PHC-in-charge staying at the headquarters of the PHC or at a considerable distance away?
  - is he able to turn up at the PHC to open the PHC in time?
  - what is the punctuality in attendance of other staff?
  - what is the extent of absenteeism of other staff?
  - What is the number of patients turning up at OPD; what is time taken for examination of each patient (depending on the nature of ailment), whether the patients (both at the OPD and at the ANC registration) are treated kindly and made to feel completely at home etc.?

- It was further clarified by me that instead of having too many meetings and making the functionaries of public health institutions to remain away from their place of work for attending these meetings it would be better to bring down the number of meetings to just one in a month so that these functionaries (ANM, LHV, MPW) are available more for the people than for anything else.

Formation, registration and functioning of RKS and VHNS Committees:

- The following table indicates the latest factual position in tribal taluks in this regard:

<table>
<thead>
<tr>
<th>Block</th>
<th>No. of PHC</th>
<th>RKS established/ registered and functioning</th>
<th>No. of GPs</th>
<th>No. of VHSC</th>
<th>Accounts opened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinwat</td>
<td>9</td>
<td>9</td>
<td>134</td>
<td>112</td>
<td>20</td>
</tr>
<tr>
<td>Mahoor</td>
<td>5</td>
<td>5</td>
<td>63</td>
<td>50</td>
<td>18</td>
</tr>
</tbody>
</table>

- Matrutwa Anudan Yojana and Janani Surakshya Yojana:

The JSY being managed by the NRHM, the funds are being placed directly at the disposal of the MO, PHC by the DHO who in turn transfers it to the sub-centre account.
Not so is the procedure for routing of funds under Matrutwa Anudan Yojana which being a State scheme there are more channels than what is strictly necessary which causes avoidable delay in disbursement. (To illustrate BDO as a channel of disbursement is totally unnecessary). This could make a number of pregnant mothers who come to the PHC for check up waiting for a time longer than necessary to receive the amount under MAY due to them.

- The CEO and DHO were requested to review the number of channels for routing and disbursement of funds and rationalize the procedure for allocation, disbursement and utilization of funds under both MAY and JSY. Besides, they were asked to improve the percentage of coverage under both the schemes.

### Malnourished children:

No. of Gr. III and Gr. IV malnourished children admitted and treated in PHCs/hospitals in 2007-08 has been 11 while it was nil in 2004-05, 2005-06 and 2006-07. The reason for this sudden upsurge could not be clarified. This, if not properly explained is likely to cast a reflection on the accuracy and credibility of reporting. This is particularly disturbing as subsequent column on death shows very high figures of death (malnutrition related deaths included).

### Progression:

- The following table shows the number of children where progression has taken place (Gr. IV to Gr. III, Gr. III to Gr. II, Gr. II to Gr. I and Gr. I to normal):

<table>
<thead>
<tr>
<th>Mahoor</th>
<th>Normal</th>
<th>Gr. I</th>
<th>Gr. II</th>
<th>Gr. III</th>
<th>Gr. IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progression</td>
<td>726</td>
<td>371</td>
<td>132</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>New Addition</td>
<td>411</td>
<td>323</td>
<td>247</td>
<td>14</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kinwat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progression</td>
</tr>
<tr>
<td>New addition</td>
</tr>
</tbody>
</table>

### Death of children:

- The yearwise breakup of children who have died on account of various reasons is as under:
<table>
<thead>
<tr>
<th>Year</th>
<th>No. of children died</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>170</td>
</tr>
<tr>
<td>2005-2006</td>
<td>192</td>
</tr>
<tr>
<td>2006-2007</td>
<td>42</td>
</tr>
<tr>
<td>2007-2008 (upto August, 2007)</td>
<td>66</td>
</tr>
</tbody>
</table>

- Causes of death have been investigated by the MO, PHC and reports submitted to DHO. These are on account of :-
  - LBW;
  - Pneumonia;
  - High grade fever;
  - Diarrhoeal disorders;
  - Cardiac complications;
  - Hypothermia;
  - Febrile convulsion.

- The table below shows the cause/contributory factor wise and age wise breakup of deaths of children in Kinwat and Mahoor Blocks between April, 2007 to August, 2007:

<table>
<thead>
<tr>
<th>Block</th>
<th>Cause of death</th>
<th>0-1 yrs.</th>
<th>1-6 yrs.</th>
<th>0-6 yrs.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinwat</td>
<td>Premature delivery</td>
<td>21</td>
<td>-</td>
<td>21</td>
<td>This represents the progressive total between April, 07 to Aug., 07.</td>
</tr>
<tr>
<td>Mahoor</td>
<td>Pneumonia</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Birth Weight</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypoglycemia</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aspiration Asphexia</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other causes</td>
<td>13</td>
<td>8</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>54</td>
<td>12</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

- Incidence of T.B., Malaria, Filariasis, Jaundice/Hepatitis, Diarrhoea/ Dysentery and other Water Borne Diseases.

Malaria including cerebral malaria, dengue and chickengunia are vector borne diseases. Weekly mosquito density survey is being carried out by the health workers with a view to preventing these diseases. Dry day and abate application activity is done in the event of increase in mosquito density. Between June to September, 2007 DDT spraying has been done in 86 villages. Additionally, 30581 nets have been distributed in 76 villages.
• From the side of GPs, chlorination of water sources is being carried out (for which adequate quantity of TCL is available) with a view to preventing water borne diseases.

• There was an outbreak of diarrhoea as epidemic in Lalunaik Tanda of Kinwat and Lokarwadi Tanda of Mahoor. In all 52 people were affected but the epidemic was controlled. There was no death.

• Between April’07 to Sept.’07, 152 TB cases have been detected of which 56 patients could be fully and effectively treated and cured (33% achievement). The rest are under treatment.

• Incidence of malaria and filariasis is very high in both Kinwat and Mahoor blocks. Of 1,87,293 blood samples taken earlier 32 were found positive. 376 new cases have been detected between April’07 to Sept.’07 and they are being treated. In filariasis 748 cases have been detected and all of them have been treated.

• To sum up, the overall public health scenario may be assessed from the indicators contained in the following table:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>District</th>
<th>Tribal Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Birth rate</td>
<td>19.5</td>
<td>20.4</td>
</tr>
<tr>
<td>2.</td>
<td>Death rate</td>
<td>7.2</td>
<td>7.1</td>
</tr>
<tr>
<td>3.</td>
<td>Still Birth rate</td>
<td>16.3</td>
<td>9.2</td>
</tr>
<tr>
<td>4.</td>
<td>IMR</td>
<td>46.2</td>
<td>50.9</td>
</tr>
<tr>
<td>5.</td>
<td>Child Mortality</td>
<td>10.3</td>
<td>14.6</td>
</tr>
<tr>
<td>6.</td>
<td>Total Fertility Rate (TFR)</td>
<td>02.5</td>
<td>03.0</td>
</tr>
<tr>
<td>7.</td>
<td>Sex Ratio at Birth</td>
<td>85.6</td>
<td>84.6</td>
</tr>
<tr>
<td>8.</td>
<td>Sex Ratio at death</td>
<td>60.5</td>
<td>70.5</td>
</tr>
<tr>
<td>9.</td>
<td>Maternal Mortality Rate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ICDS Profile:**

• There are 15 ICDS projects for the district as a whole with 15 CDPOs and 93 Supervisors (of which 84 are in position). Of these 2 ICDS Projects are located in the 2 tribal blocks, one each at Kinwat and Mahoor with 2 CDPOs and 16 Supervisors (of which 9 are in position).
• There are in all 388 AWCs of which 379 AWCs have AWWs and AWHs in position and 198 AWCs have got departmental buildings, the rest being accommodated in GP and School buildings. Of the 379 AWWs 371 have been trained in the District Training Centre at Nanded. They are between 20 to 45 years of age with average educational qualification ranging between 9th to 10th standard. No information is available about their refresher training.

• On account of the initiative of the AWWs a number of SHGs and Mahila Mandals have been formed. The picture obtaining in the 2 tribal blocks is as under:

<table>
<thead>
<tr>
<th>Block</th>
<th>No. of SHGs formed</th>
<th>No. of Mahila Mandals formed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinwat</td>
<td>929</td>
<td>266</td>
<td>74 SHGs are active for SNP in 94 AWCs.</td>
</tr>
<tr>
<td>Mahoor</td>
<td>430</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Activities of AWCs:

SNP feeding and nutrition:

Redeeming features:

• SHG and consumer societies prepare SNP food.

• The food comprises of 70 gms per child per feed with mung dal, chana, rice, oil, khichadi, soyabean and therapeutic powders.

• It is served twice a day at 9.30 AM and 11.30 AM for normal children and 4 times for Gr. III and Gr. IV malnourished children (corresponding to the AWC timings of 8 AM and 2 PM).

• The food served conforms to 300 kilo calorie for normal children and 600 kilo calorie for malnourished children with protein intake of 8 to 10 gms and 16-20 gms for the 2 categories of children respectively.

• For pregnant and lactating mothers the nutritive value of food is 500 kilo calorie with 20 to 22 gm protein.

Grey areas:

• While the number of AWCs is 388 only 94 are with SHGs and the rest are with contractors which is a violation of the interim orders of Supreme Court.

• Since the total number of SHGs in the district as a whole and in the tribal blocks of Kinwat and Mahoor is sizeable there is no reason why SNP feeding programme should not be fully entrusted to them and why this responsibility should be entrusted to contractors in violation of the directives of the Supreme Court.
• The Collector and CEO were of the view that the management of the SNP feeding programme has been bungled due to connivance of the Dy. CEO (ICDS) whose performance on this score has been very frustrating. The matter has been reported to the Divisional Commissioner, Aurangabad and a formal enquiry process has been set in motion. It was further brought to my notice that the discipline, accountability and control of all ICDS officials rest with RD Department and not with Women and Child Development Department. This is anomalous in as much as ICDS officials are recruited by Women and Child Development Department and not by Rural Development Department.

Other redeeming features in ICDS:

• All pregnant and lactating mothers are being visited by the AWW (who on an average visits 5 households every day in evening hours) and being counselled for:-
  - Dietary habits;
  - ANC checkup;
  - F.S. consumption;
  - Injection TT;
  - Institutional deliveries;
  - Newborn care;
  - Breast feeding.

• The contact made by the AWW with these mothers on the village health day is far more intensive.

• The AWW assists the MO from the PHC who comes for check up of health of children.

• On account of this check up and medication prescribed by the MO, 70 to 80% children recover from ailments like warm infestation, scabies, diarrhoeal disorders, ear discharge, anaemia etc.

• The weight of children attending the AWC is generally registering improvement though inadequate dietary intake during pregnancy, early marriage, illiteracy and lack of health education and inadequate check up of health by the mothers during pregnancy continue to be causes contributing to LBW and low weight in general. AWWs are taking pains to improve these conditions. There are many instances of progression and improvement of weight.

• Supervision of the activities in the AWC is intensive. At least 20 visits by the CDPO and 20 visits by the Supervisor per month are taking place. The mechanism for accountability of AWWs and AWHs is adequate.
**22.10.2007**

**Visit to NICU, Government Medical College and Hospital, Nanded**

The purpose of this visit soon after arriving at Nanded was to assess the functioning of the paediatric ward and NICU conditions under which children of one month and below were admitted, pace of recovery, duration of stay and follow up after discharge. The hospital building including the paediatric ward and NICU was itself in a bad shape with profuse seepage all around. NICU with 5 cradles was itself congested and was hardly the place where children of one month and below in a critical condition should be kept.

There was 3 children in the NICU at the time of visit and the details about them are as under:-

1. **Baby of Anita Matoji Panchal**
   - Date of birth: 18.10.2007
   - Date of admission: 18.10.2007
   - Birth weight: 1.1 kg
   - Weight at the time of visit: 1 kg.

**Diagnosis:**
- Proteins LBW.
- Treatment started with iv antibiotics along with warm care and routine preterm care.
- Feeding commenced from 3rd day of admission (RT feeding).
- Likely duration of stay – 10 to 15 days.
- Prognosis – guarded.

2. **Baby of Sonabai Madha Wade**
   - Date of birth: 18.10.2007
   - Date of admission: 18.10.2007
   - Birth weight: 2 kg
   - Weight at the time of visit: 2.1 kg.

**Diagnosis:**
- Full term female child with septicemia with physiological jaundice.
- Treatment started with iv antibiotic and iv fluid.
- RT feeding started soon after admission.
• Breast feeding has started now.
• On the 3rd day of life the baby developed jaundice (physiological jaundice).
• Phototherapy started on the third day itself.
• Response of the child to treatment – very good.
• Likely duration of stay – 5 days.

3. **Baby of Kiran Suresh Maske:**
   Date of birth - 12.10.2007
   Date of admission - 12.10.2007
   Birth weight - 1 kg
   Weight at the time of visit - 1.1 kg.

**Diagnosis:**
• Protein LBW with hyaline membrane disease.
• Treated with iv antibiotics and iv fluids.
• RT feeding started on the 5th day of life.
• Baby is tolerating feeding well.
• Likely duration of stay 15-20 days.
• Prognosis – guarded.

**IV Baby of Indubai Gunwant Tawde:**
   Date of birth - 22.10.2007
   Date of admission - 22.10.2007
   Birth weight - 2.5 kg
   Weight at the time of visit – 2.5 kg

**Diagnosis:**
• Full term female child with early onset of septicemia.
• Treatment started with
  • Warm care
  • iv antibiotics
  • iv fluids
• Likely duration of stay – 8 days
• Prognosis – guarded.
5. Baby of Radha Nagora Gawhare:

<table>
<thead>
<tr>
<th>Description</th>
<th>Date/Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of birth</td>
<td>1.10.2007</td>
</tr>
<tr>
<td>Date of admission</td>
<td>22.10.2007</td>
</tr>
<tr>
<td>Age at the time of admission</td>
<td>22 days</td>
</tr>
<tr>
<td>Birth weight</td>
<td>2.3 kg</td>
</tr>
<tr>
<td>Weight at the time of visit</td>
<td>2.5 kg</td>
</tr>
</tbody>
</table>

Diagnosis:

- Full terms male child with septicemia.
- Treatment started with iv antibiotics and iv fluids.
- Warm care.
- Likely duration of stay – 8 days.
- Prognosis satisfactory.

22.10.2007

Field visits:

Jaldhara PHC:

- The PHC was established in 1984. Between 1984 and 22.8.87 (when it started functioning in a proper departmental building) it was functioning from an Ashramsala. The PHC has a total built up area of 727 sq. metres. The PHC building is in a bad shape. After the roof was cast grading plaster was done without bitumen. It has given way due to heavy rains causing profuse seepage in all the rooms (except the Operation Theatre). The PHC has 8 sub-centres and 31 villages. There are 2 vacancies – one of an ANM and second of a HA (female). The post of HA (female) is required to be filled up by way of promotion from ANM on the basis of seniority and ACRs. The process should be accelerated as without an ANM, the LHV will find it difficult to do justice to all the households in 31 villages in a month.

Redeeming features:

Poorest state of physical infrastructure and vacancies notwithstanding the PHC in this remote tribal belt has a few redeeming features. These are:-

- The average outturn of patients ranges between 35 to 40. The total outturn of patients (between 1.4.2007 to 22.10.2007) was 2976. The patients come from a radius of 5 to 10 km;
The ANC clinic is open every Saturday and 288 mothers have registered for ANC (60%). On an average 10 to 12 pregnant mothers come to the ANC clinic for check up;

On an average the MO spends about 20 minutes for one pregnant mother for a thorough check up. This time is also utilized for providing health and diet related counselling to the mothers.

Under Matrutwa Anudan Yojana a cash dole of Rs. 400/- in 4 instalments @ Rs. 100/- each and the following medicines are dispensed:-

- folic acid tablet;
- iron tablet;
- syrup evatal;
- syrup provita;
- syrup cabi;
- syrup himalt;
- syrup FS.

Upto end of September, 2007, a sum of Rs. 76,000/- has been disbursed and the PHC is left with Rs. 75,000/- which will be sufficient to carry upto March, 2008. The disbursements are timely without any pregnant mother waiting to receive the amount;

Between April, 2007 to September, 2007, 229 deliveries have been conducted in the PHC area (with 35 deliveries in September, 2007 alone). Of these 105 are institutional and 124 are home deliveries. The break up of institutional deliveries is as under:-

- PHC - 11
- Sub-centres (8) - 94
- Total - 105

All deliveries are reported to be safe. There has not been any case of maternal mortality so far;

Fourteen cases fell under the category of high risk delivery and have been referred to Kinwat RH. As the mothers went to the hospital on their own no transport charges have been paid in these cases.

There are 28 skilled birth attendants who have conducted 28 home deliveries (between April, 2007 to September, 2007). Their performance is reported to be satisfactory;
- The average weight of all new born babies has been reported to be normal;
- One RH camp was organized in August, 2007. On account of advance publicity 12 mothers and 67 other patients attended the camp. Malnourished children were screened and 2 were found in Gr. III and 1 in Gr. IV;
- Due to the collective efforts of ANM, LHV and AWW all such malnourished children who are identified and graded (III and IV) are being referred to hospital for admission and treatment;
- A calendar of visits for ANM, LHV and MPW has been prepared. According to this calendar ANM is required to go out for 9 days in a fortnight while the MPW is to go out for 10 days;
- The calendar is being adhered to except some deviations under some unavoidable circumstances (flood, epidemics etc.).
- The visits commence at 8 AM and close around 5 PM;
- On an average 1000 to 1200 houses are being visited in a month by the LHV, ANM and MPW. During these visits 90 to 95% families with pregnant and lactating mothers and children are being contacted.
- In course of visit AWCs are invariably in the itinerary where the visitors spend about an hour in the minimum, and check the health of the pregnant mothers, if any present in the AWC, health of the children, quantity and quality of SNP feeding etc.
- In course of visit to the households the advice to the pregnant mothers comprise of:
  - ANC registration;
  - Regular ANC checkup;
  - High risk pregnancy;
  - Dietary advice;
  - Adequate doses of IFA and TT;
  - Institutional delivery;
  - Family Planning methods;
  - Risk of HIV/AIDS;
  - Lactation and exclusive breast feeding;
  - There has not been any case of LAMA (leaving against medical advice) reported so far;
  - There has not been a single report about abortion;
- There are instances of progression from Gr. IV to Gr. III (Deepa Rameshwar Shelke is one such example) which is encouraging.

Grey areas:
- Despite ANC registration all women do not report at the PHC for regular check up;
- This is on account of their preoccupation with work as farm labourers;
- They come out of their households to the village on the Village Health and Nutrition Day (which is a fixed date and differs from village to village) for check up of their health and immunization of children;
- Majority of the pregnant women who are contacted by the LHV, ANM and MPW are anaemic. Since they are anaemic their children are bound to be anaemic;
- Anaemia of women could be attributed to the following:-
  - Early marriage i.e. marriage at an age which is much earlier to the statutory age.
  - Large size of the family but less earning members;
  - Consumption of more non-food items in preference to food items;
  - Lack of choice of appropriate and balanced food package with the desired micro-nutrients due to ignorance and illiteracy as also due to discrimination by the male members of a male dominated family/society;
  - Bundles of fads, obscurantist ideas and unscientific practices (too much of fasting, being the last to eat when there is very little left to eat and so on);  
  - More number of children and more mouths to feed with less income and hence imbalances in intra familial distribution of food;
  - Children being born at a very late stage (40+).
- There are cases of 2 children whose weight is showing progressive decline despite best efforts. The cases of these 2 children are:-
  - **Durga P. Khosle**, resident of Ghoti;
  - **Pallavi Sable**, resident of Thara.
- These 2 cases are cases of growth faltering (GF) and growth declining (GD). They were referred to higher centres for detailed investigation. They have been diagnosed as cases of VSD and advised cardiac cathetrisation.
- There are 2 other cases of LBW such as:-
- Pankaj Sonajee Kokade weighing 7 kg at 34 months;
- Sushma Shankar Gaekward weighing 6.5 kg at 21 months.

The MO has referred both these cases to Nanded Civil hospital and the slips have been handed over to the parents but the latter instead of removing them to the hospital have kept them at home.

**Concluding remarks about the PHC:**

The medical officer in charge of the PHC is expected to provide leadership and direction to a small team of about 20 persons. In order that he is able to do so he should familiarize himself with the geography, topography, demography of the area, special traits and characteristics of the people (tribals) of the area, their social, economic and cultural compulsions, how to make them perceive and internalize the importance of children as the most valuable resource, importance of nutrition in the lives of children to make them healthy, strong and stable – physically, emotionally and psychologically as also from the point of acquisition of cognitive skills, how to replace make beliefs by a rational and scientific approach to life and how to carry conviction to them that all is not lost, we can turn the corner and replace malnutrition and under nutrition by nutrition for health and well being. The PHC-in-charge thoroughly disappointed me on this front. He is not sure of himself and sure of facts and figures. He changed the figures relating to delivery thrice but was not sure of the third set of figures. He is hardly able to articulate the concerns of the area and not sure of the strategy which needs to be adopted to provide the desired correctives in time. To illustrate, 2 Gr. III children have been referred by the PHC to RH Kinvat on 28.6.2007. Both are cases of LBW. Additionally one is a case of VHD and another a case of Thalassemia. The first child is at home under supervision of Dr. Kable, a private medical practitioner while the second child is undergoing blood transfusion while staying at home. Both the cases require close surveillance and follow up. We need to consult a team of senior and experienced paediatricians and cardiologists to come and examine the cases and give expert advice about the future course of treatment. This would require the PHC incharge to be agile, alert and responsive to the needs and challenges of a given situation. The current incumbent did not show any of these qualities. The visits undertaken by the LHV, ANM, MPW etc. also need to be subjected to constant monitoring and supervision in terms of quality of advice imparted and extent of its compliance.

Not a single chart or poster or any other health educational material has been displayed at the entrance to the PHC and on the walls of the PHC. These are meant to be displayed so that patients who come to the OPD and who are literate can see them, read them, understand the central message contained in them, internalize and apply those messages to their daily lives. I was given to understand that all educational materials
have been stored inside. The purpose which is served by storing them inside could not be clarified. A proper plan should be chalked out to classify the materials under different heads i.e. under health and nutrition and have them disseminated to various AWCs under the ICDS as well as PHCs under the Health Department so that they can be put to proper use.

The PHC on the whole presents a very dull and depressing look. The upkeep and maintenance of the delivery room, surgical room, injection-cum-dressing room, medicine store room leave much to be desired. They need complete sprucing up and drugs, dressings, gauge, bandage, plaster and all other store items which have been huddled together need to be properly arranged.

Suggestions:

• The Rugna Kalyan Samiti and Village Health, Nutrition and Sanitation Committees need to be formed, registered and made fully functional without further delay. Funds required for this purpose also need to be released at the earliest.

• It was reported that while incidence of malaria is declining, incidence of TB is increasing. Addiction to alcohol, gutka, tobacco and beedi appear to be the main reasons for this. PHC needs to launch a campaign for generation of positive awareness among all concerned so that consumption of these undesirable items could be discouraged.

• The LHV, ANM and MPW who are primary field functionaries in public health were given some induction training a few years ago. They may have outlived much of what they had learnt in the induction training workshop. They need to be given refresher training so that they can keep themselves abreast of the latest changes and innovations in the field of health management.

• All activities of the PHC (ANC registration, check up of pregnant mothers, disbursements under Matrutwa Anudan Yojana and Janani Surakshya Yojana, admission and treatment of Gr. III and Gr. IV children, recovery, progression, deliveries, all cases of mothers and children referred to hospitals, field visits undertaken by LHV, ANM and MPWs, drugs indented and drugs received etc.) should be computerized and a computerized data base should be created and updated from time to time.

22.10.2007

Visit to Rural Hospital, Kinwat:

• The hospital was established in 2004. The RH Kinwat is a premier medical institution in a predominantly tribal area. Except the post of MS who is the head of the institution,
all other incumbents (7 MOs including the specialists such as paediatrician, surgeon, medicine specialist, gynaecologist and anaesthetist, 12 staff nurses, X-ray Technician, Lab Technician, Lab Asstt. And Asstt. Matron) are in position. The Senior most staff nurse has been given the additional charge of matron of the hospital. The post of MS should be filled up without any further delay as it is the MS as head of the institution who is expected to provide the leadership and direction to the hospital staff.

- The number of Gr. III and Gr. IV malnourished children admitted and treated in the hospital since 2004-05 is as under:-

<table>
<thead>
<tr>
<th>Year</th>
<th>Gr. III malnourished children</th>
<th>Gr. IV malnourished children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2005</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2005-2006</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2006-2007</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2007-2008</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>April’ 07 to Sept.’07</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

- All these children were brought by the AWW to the PHC and from the PHC they were referred to the hospital. No analysis seems to have been done which could explain the reasons for a sudden spurt of Gr. III malnourished children between April, 2007 to September, 2007. The children have been reported to be suffering from the following ailments:-
  - LBW;
  - Upper respiratory track infection;
  - Bronco-pneumonia with LBW and Diarrhoea;
  - Diarrhoea with LBW;
  - Bronchitis with LBW;
  - Pyrexia;
  - Anaemia with pyrexia and LBW.

- It could not be clarified as to what was the dietary pattern for these children, who prepared and supplied the food, whether the food conformed to the kilo calorie prescribed for Gr. III and Gr. IV malnourished children i.e. 600 kilo calorie with 16-
• 20 gms of protein.

• It was eventually found that the entire work of preparation and delivery of food has been outsourced to a contractor, that the latter prepared the food in the hospital kitchen and delivered it to the malnourished children, that there was no mechanism to supervise the entire process and ensure that the food prepared and served to children had all the micro-nutrients necessary for a balanced food package for a healthy child.

• Between April’07 to Sept.’07, 7 deaths of children in 0-28 days have taken place and these deaths could be attributed to:-
  - LBW;
  - Birth asphyxia;
  - Premature delivery;
  - Septicemia with aspiration pneumonitis.

• In course of visit to RH, I encountered a wave of mass discontentment from the representatives of the people and public against the functioning of the hospital. The delegation which met me ventilated the following grievances:-
  - the hospital’s opening timings are 8 AM. It never opens before 9.30 AM to 10 AM;
  - Most of the MOs in the absence of the Head (MS) never turned up at the hospital in time;
  - Most of them did not stay at Kinwat;
  - Delayed opening of the hospital prolonged the waiting period at the OPD for the poor patients who came from far off places;
  - Prolonged waiting period meant loss of wages for the day;
  - The job of cleaning and sweeping of the hospital has been outsourced; the contractor never bothered about discharge of his responsibility as a result of which standards of cleanliness left much to be desired;
  - There was no transparency about financial management of the hospital. Due to bungling in store management the store keeper of the hospital has been placed under suspension;
  - There was acute load shedding off and on which adversely affected the various operations in the hospital.

All these are serious lapses, gaps and deficiencies in a referral institution in a tribal area and the attention of the representative of the State Health Department, Civil Surgeon,
DHO, Collector (all of whom were present when the grievances were ventilated) was drawn for taking urgent preventive and corrective action.

22.10.2007

Visit to NICU, Sub divisional hospital, Gokunda, Kinwat:

Of the 3 cradles 2 were occupied and the warming machine attached to the 3rd cradle was lying out of order. The details of the babies who have been admitted to the NICU are as under:

1. Baby of Maya Raju Umre
   
   Age - 3 days MCH  
   Weight - 750 gm  
   Address - Village Pura  
   Date of admission - 11.10.2007

Diagnosis:

- Extreme prematurity with LBW and hypoglycemia.
- Line of treatment:
  - 10% Dextrose;
  - Injection Antibiotic;
  - Injection Histac.
- Body temperature of the body has been maintained at 36.5º C.

2. Baby of Rekha Shali Tekam

   Age - 3 days MCH  
   Address - Pulsm taluk Yavatmal  
   Weight - 1.9 kg  
   Date of admission - 22.10.2007

Diagnosis:

- Birth Asphyxia
- Line of treatment:
  - O₂ inhalation;
  - Suction;
  - Injection: Monocef;
  - Iv 10% Dextrose.
Suggestion:

- the NICU should be expanded to a minimum of 10 beds;
- the warming machine lying out of order should be repaired;
- baby blankets and thermocol box should be provided;
- doctors should be available for 24 hours;
- adequate IEC materials should be provided particularly on –
  ☐ breast feeding;
  ☐ weaning;
  ☐ neo-natal care;
  ☐ baby not to be withdrawn against medical advice.

23.10.2007

Visit to Sub-centre Sarkhani:

The sub centre was established in 1990 and the present incumbent ANM is incharge since 1993. The sub-centre is a departmental building but is in a bad shape with profuse leakage and seepage. This is one of the 24 sub centres in Kinwat which has been taken up for repairs.

Redeeming features:

- The ANM has received induction training at the civil hospital, Parbani. This is one of the few civil hospitals which is running a training school.
- The ANM has conducted 14 deliveries since April, 2007. All deliveries have been safe.
- The weight of the new born babies has been reported to be normal (2.5 kg).
- There are only 2 villages within the jurisdiction of the sub-centre at a distance of 3 km from the sub-centre. The ANM makes it a point to cover them as many times in a month as possible. In course of her visit she contacts about 50 to 60 households, meets the pregnant and lactating mothers and counsels them.
- The ANM makes it a point to meet all the pregnant mothers on the day of immunization (first Monday).
- Village Panchayat, AWC, SHGs/Mahila Mandals, pregnant and lactating mother is the order in which the ANM contacts all the grass root level institutions.
- The ANM is the first point for recording all births and deaths. The statistics about all births and deaths is furnished to the VLW for formal registration.
Grey areas:

- The salter scale weighing machine is not in order and the method adopted by the ANM (holding the weighing machine in hand and recording the weight of children) is not in order.

- Not a single chart or poster or good health educational material has been displayed at the sub-centre.

- The Village Health and Sanitation Committee has not been formed as the Sarpanch who is meant to be the Chairman of the Village Level Committee has not yet been elected.

- The ANM has also not received a sum of Rs. 10,000/- towards running/recurring expenses of the Committee.

- In course of her visit to the 2 villages in her jurisdiction and while contacting the households she does not ask:
  - what is the size of the family?
  - whether the household is landed or landless?
  - if landed, what are the crops raised on the land?
  - if landless, what are the foodgrains purchased from the open market and at what rate?
  - how many times is food cooked and served to adults and children and at what intervals?
  - are there malnourished children at home?
  - What is the basic understanding of the household about the concept of malnutrition?
  - Have such malnourished children been taken to PHC or hospital for treatment?

- Like the PHC incharge MO, the ANM hardly responded to single query with freedom and spontaneity. She has to be prodded and goaded again and again to elicit certain informations or basic facts about health, about the village where she works and lives and about the management of the sub centre. This reinforces the need for retraining of all ANMs incharge of 92 sub centres in Kinwat and Mahoor Tribal blocks.

Suggestion:

- A lot of land is available in the compound of the sub-centre. The soil appears to be good. The ANM under guidance of the Agriculture Extension Officer of the Block could make a beginning by raising a kitchen garden which could be a source of good demonstration about nutrition to pregnant and lactating mothers who visit the sub centre.
Visit to AWC at Daheli Tanda:

The AWC was established in 1981 and the current incumbent AWW is working since 1987. In the absence of a departmental building the AWC is functioning in a school building. A new building for the AWC is under construction. In the present building there is adequate lighting but no ventilation. The number of children in 0-6 age group registered in the AWC is 174. As against the normal attendance of 75 in 3-6 age group, the actual attendance on the day of visit was found to be 55.

SN feeding programme:

• The SHG of the village is managing to provide 74 gms of food to all normal children twice daily within Rs. 1.98 per head prescribed by Government while it should have been possible ordinarily to provide 52 gms of food within that amount. If the directions of the Supreme Court are to be implemented to provide 80 gms of food with about 16-20 gms of protein (twice daily) the per head amount needed would be of the order of Rs. 3.50 per day.

• The AWC functions for 6 days a week. To meet the norms of variety, taste and desired nutrient levels the SHG has introduced a different recipe for all the 6 days as under:-

- Monday - Lapsi
- Tuesday - Matki
- Wednesday - Chana
- Thursday - Lapsi
- Friday - Mung dal
- Saturday - Khichadi

• The timings when food is served to children are at 9.30 AM and 12 Noon.

Check up of health of children:

• The MO from the PHC (located nearby) is conducting a routine check up of the health of all children in 3-6 age group including a surveillance of all cases of growth faltering (GF) and growth declining (GD). The register maintained for recording the findings of the MO after such check up along with medicines prescribed for each case of ailment shows that the children are suffering from the following ailments:-

- upper respiratory track infection
- worms
- scabies and other skin infections.
• It is rather surprising that despite deworming operations carried out twice a year for all children the latter continue to be victims of worms infestation.

• The MO from the PHC clarified that unclean and unhygienic surrounding in which children live are responsible for this affliction.

• Got seven children attending the AWC weighed in my presence. The table below indicates the name, age and weight against each child.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the child</th>
<th>Date of birth of the child</th>
<th>Weight</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Suraj Prakash S. Power</td>
<td>2.11.2003</td>
<td>10 kg</td>
<td>6 kg lower than normal</td>
</tr>
<tr>
<td>2.</td>
<td>Nandini Vinod Power</td>
<td>3.9.2003</td>
<td>11 kg</td>
<td>5 kg lower than normal</td>
</tr>
<tr>
<td>3.</td>
<td>Miina Rohidas Chauhan</td>
<td>15.1.2005</td>
<td>10.4 kg</td>
<td>2.5 kg lower than normal</td>
</tr>
<tr>
<td>4.</td>
<td>Baliyar Rasool Saheeb</td>
<td>11.1.2006</td>
<td>9 kg</td>
<td>2 kg lower than normal</td>
</tr>
<tr>
<td>5.</td>
<td>Fara Abbas Khan</td>
<td>9.6.2006</td>
<td>8 kg</td>
<td>2 kg lower than normal</td>
</tr>
<tr>
<td>6.</td>
<td>Amjad Umar Khan</td>
<td>2.1.2007</td>
<td>7 kg</td>
<td>2 kg lower than normal</td>
</tr>
<tr>
<td>7.</td>
<td>Khusboo Manohar Khan</td>
<td>8.9.2005</td>
<td>8.5 kg</td>
<td>3 kg lower than normal</td>
</tr>
</tbody>
</table>

• The AWW confirmed that weight of children attending the AWC is being regularly checked and recorded in the growth monitoring register on 14th, 15th and 16th of every month.

• The weight so recorded is also being cross checked by the supervisor in course of the latter’s visit to the AWC every month.

• Despite this, however, the gradation of each malnourished child does not appear to have been correctly reflected in the growth monitoring register.

**Interaction with the public:**

• Incidence of child marriage is on the decline but has not completely disappeared. About 15 to 20% of the girls even now are victims of early child marriage (age of marriage being lower than what is provided by the law).

• The size of the tribal household continues to be large. Since all members are not earning and the limited income gets apportioned between food and non-food items with priority being in favour of non food items malnutrition is the inevitable outcome.
Women and men continue to get differential wages for same or similar nature of work. Sometimes women work longer than men but earn only Rs. 40/- a day as against men who earn Rs. 60/- a day.

The families take 3 meals a day such as:-
- 10 AM - Jawar roti, dal and bhaji;
- 2.30 PM - Jawar roti, dal and bhaji;
- 7 PM - rice, dal and bhaji.

The interaction with the public further brought out the following disquieting features of village life and economy:-
- tribal areas continue to suffer from isolation and neglect;
- public transport and communication to the area is not frequent and effective;
- functionaries (health, education, nutrition, sanitation) do not often stay in the village where their presence is needed most;
- people harbour a lot of blind faith and quackery with harmful consequences;
- members of the tribal community are not aware of the various plan schemes meant for their development;
- no serious public initiatives have been taken or efforts made to make them aware of such schemes;
- consequently fruits and benefits of planned progress do not easily trickle down to them;
- many of these unmerited benefits are captured by malfunctional and dysfunctional middlemen;
- the public distribution system (imported wheat in particular) which are supplied through fair price shops are unfit for human consumption.

Samples of foodgrains (imported wheat) were produced before me. They were infested with pest and on a visual inspection were actually found to be unfit for consumption of human beings and cattle alike. I have asked the CEO, ZP – Shri Parimal Singh to place them before the Collector – Shri Radheshyam Mopalwar for appropriate remedial action.
23.10.2007

Visit to Daheli Tanda PHC:

Grey areas:

- The PHC was established in 1974. It has 4 sub-centres and 16 villages. The building and staff quarters (5) which are about 30+ years old are in an extremely bad shape. They are full of cracks (both vertical and horizontal), there is profuse leakage and seepage, steel and plaster pieces coming out from the ceiling, making the building highly unsafe. It is inconceivable that patients are still coming and getting admitted and treated even in a situation where the PHC building itself is unsafe and may collapse any time.

- To make matters worse, there is loadshedding for 6 hours a day making surgical interventions extremely difficult.

- For construction of new PHC and sub-centre building Government land is not available and acquisition of private land is a time consuming process. People are not willing to donate private land for public purpose. Dhundra Sub centre is one such notable example.

- Village health, nutrition and Sanitation Committees have been formed in 7 out of 13 GPs. They are not yet fully functional. The Committees in the remaining 6 could not be formed on account of non completion of the process of election of Sarpanch who is to be the Chairman of the Committee.

- All children in 0-6 age group need to be thoroughly surveyed by the AWWs and number of malnourished children need to be brought to the surface. This process has not yet been completed.

- Since GOI has adopted WHO norms and parameters of growth (height, weight, circumference of forehead and armpits etc.) and these have been communicated to all State Governments since 27.8.2007 they should be adopted and implemented. Growth monitoring register in AWC which does not as of now correctly reflect the growth and gradings thereof need to be recast and new gradings introduced. This will bring to surface much larger number of Gr. III and Gr. IV malnourished children than what has been done so far.

A few suggestions:

- The PHC building and staff quarters should be declared unsafe, got vacated and dismantled.
• Alternative accommodation in the area should be explored till such time the new buildings come up.

• The Site Selection Committee should meet and should select alternative sites (about 3.5 acres for a PHC and 1 acre for a sub centre) where the buildings – PHC and sub-centre can be constructed.

• From the beginning itself greenery should be an integral part of the planning process for construction of PHC and sub-centre building.

• The procedure for disbursement of funds under Matrutwa Anudan Yojana and Janani Surakshya Yojana should be simplified and funds should be disbursed to all waiting pregnant women (25 in case of MAY and 7 in case of JSY in case of Daheli Tanda PHC).

• Orientation and training need to be organized for the Chairman and Members of all Rugna Kalyan Samitis and Village Health, Nutrition and Sanitation Committees.

***
ABOUT THE AUTHOR

Lakshmidhar Mishra, a former
Union Labour and Parliamentary Affairs
Secretary (1995-2000), a former Senior Adviser, ILO
(2000-2003), a former Special Rapporteur, National Human
Rights Commission (2006-2011), a former Special Advisor, National
Commission on Protection of Child Rights (2011-2012) worked as a Chief
Consultant, Technical Support Group, National Literacy Mission Authority, Ministry of Human
Resource Development (Deprt. of School Education and Literacy) from 01.01.13 till 30.06.13. He
holds a doctorate in educational Planning from the Intercultural Open University, Netherlands.

He has held important positions in both State Govt. of Odisha (1964-78) and 1994-95 and Central Govt.
(1979-2000) and took voluntary retirement on 30th Sept. 2000 when he was Union Labour Secretary in order to join
the International Labour Organisation in a very senior position on the Invitation of Juan Somavia, the then DG, ILO.

Dr. Mishra had a brilliant academic career right from HSLC onwards tiune graduated with first rank in first class Honours in
Political Science with distinction in all subjects.

He has been a prolific writer right from his student career. He has, as of now, over 300 articles and 20 books to his credit.

These cover a wide range of subjects – Labour Welfare and social security to rural development, human rights to health &
education, custodial justice (including Juvenile) and reforms, mobilisation & organisation of the poor and deprived for social
justice and equity. Many of his articles have been published in journals of national and international repute.

As a socio-legal investigating Commissioner of the Supreme Court of India, (1983-85) Dr. Mishra submitted three
voluminous and valuable reports on the plight and predicament of workers in brick kilns and stone quarries. A condensed
version of the work he did for the apex court which earned him accolades from the latter has since been published as ‘Burden
of bondage’ in May’ 1997.

For his outstanding contribution to public service and, in particular, in the field of labour, rural development, adult
literacy & education, Dr. Mishra has received a number of awards such as National Unity Award, Pandit Jawaharlal Nehru
Literacy Award, Dr. Malcolm S. Adisesiah Award for Literacy, Post literacy and Continuing education, Sramik Bandhu Award,
Sahed Dhoom Das Award, Eminent Odiya Award etc.

He chaired a Committee of the High Court of Delhi on the plight & predicament of sewer workers of Delhi (7000)
between 2008 and 2011 and has submitted over 40 reports to the Court.

He also acted as a Member in a Committee constituted by the High Court of Delhi, to investigate into affairs of
Commonwealth Games, 2010, Delhi, drafted and submitted a comprehensive report to the Court on the findings of the
investigation team.

He has between 2006 and 2011 submitted over 100 reports to the National Human Rights Commission on a wide range
of issues (including the theme of the present work on malnutrition related deaths of children in tribal district of Maharashtra)
such as elimination of bonded labour, elimination of child labour, migrant labour, trafficking of children, mental health,
custodial justice & reforms, human rights & juvenile justice.

As Special Adviser, NCPCR, he has submitted a large number of reports on the plight & predicament of children lodged in
Observation Homes and Children’s Homes in the NCT of Delhi. The quality of work done by him in drafting a Special Action
Plan for NE States (8) covering primary, elementary & secondary education, elimination of child labour, prevention of
trafficking, substance abuse & HIV/AIDS has also been widely appreciated.

Scholarship tinged with clear perception, deep insight, empathy and sensitivity of a humanist with which the studies and
investigations have been conducted and reports submitted make his publications immensely interesting and relevant to the
poor, deprived and disadvantaged sections of the society.