



From the CMD's Desk

As this issue of In-House Journal of HSCC, earlier published as AAINA is released, it gives me immense pleasure to place it on record the excellent growth of the company. It has achieved highest ever turnover of Rs. 63.85 crores and highest ever gross profit of Rs. 39.19 crores in this year, registering a remarkable hike from previous years. Despite being a challenging year we have successfully maintained a steady growth path. The fast growth of HSCC has also been recognised by various top business & other reputed magazines and leading newspapers of India. The company has also maintained its excellent rating against ambitious targets of DPE.

The company has strengthened and organised its position to handle the upcoming mega projects by appointing experienced and skilled professionals at all level with a view to continue maintaining the high growth trajectory. The company has also started implementing IT enable services in every hospital with other hospital services like heigh-end modular OT, ICU, Kitchen, Laundry, and CSSD & Manifold. The company has also started doing maintenance of buildings constructed by HSCC.

Global Business

The Company has also been venturing into various business opportunities abroad in the SAARC group of countries.

We feel proud to say that the company can and will be considered as one of the largest health care consultant in the world who has so far completed eighty three health sector projects which includes feasibility studies for hospitals & medical colleges and presently executing more than hundred health care infrastructure projects in India and abroad.

Mini Ratna Status

HSCC has earned the distinction of maintaining its Mini Ratna-II status from September, 2002 onwards and now qualified for Mini Ratna-I status.

Corporate Governance

The philosophy of the Company is to ensure transparency in its dealings and compliance of country's laws and regulations in order to promote ethical conduct of business. i.e. observing transparency, integrity, professionalism, accountability and proper disclosure.

Acknowledgment

I would like to extend sincere gratitude for the valuable guidance, support and cooperation extended to the Company by the Ministry of Health & Family Welfare, Ministry of External Affairs, Various State Governments, autonomous institutions and other stakeholders. I thank all our esteemed shareholders for their continued support, whose trust and confidence are pillars of strength in our entire endeavour.

Discipline and production are the two eyes for any organization whether it is house or small shops or corporate like us and should go parallel to reach the destination of success. With this philosophy I would like to place on record the appreciation to the hard work, commitment and dedicated efforts put in by employees at all levels.

In return to your cooperation and support extended to me, I am continuously making sincere & visible hard work to complete the work with fine quality and also take the company to new and commanding heights.

Let us work hard with discipline and march ahead for better prosperity and for a better tomorrow.

Wishing you all a happy and prosperous New Year - 2016.

Thanking you,

Gyanesh Pandey Chairman & Managing Director

Warm Welcome to Hon'ble Minister of Health & Family Welfare



Hon'ble Union Minister for Health & Family Welfare, Shri J. P. Nadda being welcomed by Shri Gyanesh Pandey, CMD, HSCC at Dr. Y. S. Parmar Govt. Medical College, Nahan, Himachal Pradesh, in the presence of Shri Vineet Chowdhary, Additional Chief Secretary, Govt. of Himachal Pradesh and other dignitaries.

Shri J.P. Nadda, Union Health Minister 'Re-categorizes' HSCC as a Mini Ratna-I PSE

HSCC – a PSE under the Ministry of Health & Family Welfare has been rendering a comprehensive range of professional consultancy services in health sector for over 3 decades. It has to its credit over 100 healthcare projects – Designed, engineered & Project-managed – across the country & overseas.

A profit making organization since inception, it attained Mini Ratna-II status in 2002. HSCC's performance, over the last quinquennial has been exceptional; company registered a 93 percent increase in turnover from Rs 33 Cr in 2009-10 to around Rs 64 Cr during 2014-15. Its PAT (profit after tax) recorded a 186 percent jump to Rs 24.5 Cr from Rs 8.6 Cr. Company's net worth too grew 92 percent to Rs 139.33 cr. Its profit margin at around 60 percent is much higher than most PSUs. Company's Earnings per Employee at Rs 42 Lakh is also higher than the market.

Having established its brand image and emerged as a leading healthcare consultancy firm globally, HSCC today has 90 odd projects – diverse in nature and varying capacities – spread across the country, in hand and a healthy order-book position; company is geared to add more than 20,000 beds in next 3 years. HSCC is amongst the fastest growing PSUs in last 3 years.

HSCC's consistent excellent performance in turnover and its top-line and bottom-line growth - over the last quinquennial in particular – was duly recognized when Shri J.P.Nadda, Union Minister of Health & Family Welfare, Govt. of India, granted Mini Ratna Category-I status to Sh. Gyanesh Pandey, CMD, HSCC at a simple ceremony, held at Nirman Bhawan, New Delhi, 29th January, 2016 in presence of Sh. Bhanu Pratap Sharma, Secretary (Health and Family Welfare). Dr.(Prof.) Jagdish Prasad, DGHS; Sh. C.K. Mishra, Additional Secretary, Sh.Arun Panda, Additional Secretary, Smt. Vijaya Srivastava, Additional Secretary, Dr. Rakesh Kumar, Joint Secretary, Sh. K.C. Samria, Joint Secretary were also present on the occasion along with officials of HSCC.

Encouraged by the award and the significant contribution by HSCC to the country's healthcare infrastructure development, the Company plans to diversify into new related business areas.



Union Health Minister Visit to Zonal Hospital, Nahan

Construction of proposed 100 Intake Medical College attached to Zonal Hospital at Nahan, H.P.

Construction of proposed 100 intake Medical College attached to regional Hospital, at Nahan is a project of Govt. of Himachal Pradesh with estimated project cost of Rs. 225 crores. The construction work is divided into two phases. Phase-I is LOP stage and Phase-II is recognition stage. Following are the salient features:-

PHASE-I:-

- Construction of Lecture Theatre of 150 seating capacity.
- Construction of ward for 50 beds.
- Renovation of Hospital Block and OPD Block
- Procurement of essential Medical Equipment and Furniture.
- Providing special services like Gas Manifold, CSSD, Laundry and Kitchen.

PHASE-II:-

- Construction of 300 bedded Hospital Block.
- Teaching Block (14500 sqm covered area) for 100 MBBS seats.
- Girls & Boys Hostels
- Construction of, 2 Nos. Type-V Residential Blocks.



Regional Institute of Medical Sciences (RIMS), Imphal, Manipur

Foundation Stone for the new casualty Block, Maternity Block along with Community & Forensic Medicine Block of Regional Institute of Medical Science (RIMS) was laid by the Hon'ble Union Minister for Health and Family Welfare Sh. J.P. Nadda on 5th February 2016 at Imphal. The Blocks would be completed within 2 years.

Sh. Gyanesh Pandey, CMD, HSCC briefed the Hon'ble Minister about the upcoming Blocks with all the project details. Sh. K.C. Samria, Joint Secretary, Health & Family Welfare along with Dr. T. Meinya, MP; Thangso Baite, MP; Khjoykishan, MLA; Sh. Bishwajit, MLA and Sh. Ashnikumar, BJP Manipur Pradesh General Secretary were also present on the occasion.



- Construction of Casualty Block, Forensic & Community Medicine Block, Maternity Ward Block, Blood Bank, Lecture Halls, ESS.
- Increase of U G seats from 100 to 154 intake.
- Internal & External Electrical, Air conditioning, PHE, fire fighting & developments works etc.
- Construction of Hostels & Residential Quarters.



Assam Medical Colleges, Dibrugarh, Assam Under PMSSY Phase - III

The foundation stone for the Super Specialty Block in Assam Medical College, Dibrugarh was laid by Sh. J. P. Nadda, Minister for Health and Family Welfare, Govt. of India. Sh. Gyanesh Pandey, CMD, HSCC explained about the project in details at the ceremony that was graced by the presence of Sh. Sarabnand Sonwal, at present the Hon'ble Chief Minister of Assam & the then Union Minister of Sports and Youth Affairs and other dignitaries.

With a view to correct the imbalances in availability of affordable & reliable tertiary-level healthcare in the country in general, and, to augment facilities for medical education in under-served backward areas, in particular, upgradation of 39 Government- Medical Colleges, Institutions are being under-taken under the PMSSY Phase-III programme. Out of these, 19 are being taken up by HSCC (India) Ltd. as the project Management & Supervision Consultant. This project is one of these.



The facilities proposed are as per the Gap Analysis Reports, distributed over the two blocks, and include:

- Block A-OPD, Paediatrics Surgery Ward, CTVS Ward, Neurology Ward, ICUs, 3 Operation Theatres + Cath lab
- Block B: Dialysis, Diagnostics, Urology Ward, Labs, Neurosurgery, Cardiology Wards, ICUs, 2 OTs

The construction is to be spread over an area of 15,987 Sqm; bed strength of 266 would be added (including 62-I C U Beds & 12-Dialysis Beds).

The proposed facilities shall be implemented within a period of 26 months.

According to the Working Group on Tertiary care Institutions for the 12th Five Year Plan, strengthening & up-gradation of more Medical Colleges would be taken up under the PMSSY during the Plan Period



Guwahati Medical Colleges, Assam Under PMSSY Phase - III

The foundation Stone for Super Specialty Block in Guwahati Medical College, Guwahati, Assam was laid by Sh. J. P. Nadda, the Hon'ble Minister for Health and Family on 21st February 2016. The project is under Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) which envisages setting up of new AIIMS and up-gradation of existing Government Medical Colleges. Sh. Gyanesh Pandey, CMD, HSCC briefed the Hon'ble Minister about the upcoming blocks. The ceremony was also graced by Dr. Nazrul Islam, Minister of Health & Family Welfare, Govt. of Assam; Smt. Bijoya Chakraborty, Member of Parliament, Guwahati; Sh. Sunil Sharma, Joint Secretary, Govt. of India. The facility would be completed in two years time.

The facilities proposed are as per the Gap Analysis Reports, distributed over the two blocks, and include:

- · Block A-OPD, Paediatrics Surgery Ward, CTVS Ward, Neurology Ward, ICUs, 3 Operation Theatres + Cath lab
- Block B Dialysis, Diagnostics, Urology Ward, Labs, Neurosurgery, Cardiology Wards, ICUs, 2 OTs

The construction is to be spread over an area of 15,987 Sqm; bed strength of 266 would be added (including 62 - I C U Beds & 12 - Dialysis Beds). The proposed facilities shall be implemented within a period of 26 months.



SSB Block at Shyam Shah Medical College - Rewa (M.P.)

Construction of Super Specialty Block under PMSSY (Ph-III) at Shyam Shah Medical College, REWA (M.P.) & their maintenance up to Defect Liability Period. The project is the being implemented under PMSSY—Ph III scheme of Govt. of India for up gradation of Shyam Shah Govt. Medical College at Rewa, (M.P.). Project Comprises of G+5 Story building having total area of 17682.00 Sqm. & comprising of facilities i.e. 160 bedded wards with 54 ICU beds and 8 Operation theatres. The project will be having departments like Cardiology, CTVS, Neonatology, Neurology, Neuro Surgery, Urology



SSB Block at M.L.N. Govt. Medical College - Allahabad (U.P.)



Construction of Super Specialty Block under PMSSY (Ph-III) at M.L.N. Govt. Medical College, Allahabad & their maintenance up to Defect Liability Period. The project is the being implemented under PMSSY –Ph III scheme of Govt. of India for up gradation of Govt. Medical College at Allahabad. Project Comprises of G+5 Story building having total area of 15635.00 Sqm. & comprising of facilities i.e. 160 bedded wards with 54 ICU beds and 8 Operation theatres. The project will be having departments i.e. Neurology, Neurosurgery, Urology, Nephrology, Plastic Surgery, Surgical Oncology, CTVS, Endocronology.

SSB Block at NSCB Medical College - Jabalpur (M.P.)

Construction of Super Specialty Block under PMSSY (Ph-III) at NSCB Medical College, Jabalpur (M.P.) & their maintenance up to Defect Liability Period. The project is the being implemented under PMSSY –Ph III scheme of Govt. of India for up gradation of NSCB Medical College at Jabalpur, (M.P.). Project Comprises of G+5 Story building having total area of 17682.00 Sqm. & comprising of facilities i.e. 158 bedded wards with 30 ICU beds and 18 bedded Dialysis Unit. The project will be having departments i.e. Cardiology, CTVS, Neonatology, Neurology, Neuro Surgery, Urology.



Inauguration of 100-Bedded Mother & Child Hospital at SAT Thiruvananthapuram, Kerala

A 100-Bedded Mother & Child Hospital in the premises of Sri Avittam Thirunal Hospital (SAT), Kerala under the project consultation of HSCC (India) Ltd. was inaugurated by Sh. Oommen Chandy, Hon'ble Chief Minister of Kerala on 15th February, 2016. Sh. V. S. Shiva Kumar, Hon'ble Minister for Health, Govt. of Kerala; Shri M. A. Wahid (MLA); Shri G. R. Gokul (IAS), State Mission Director NHM; Sh. S. K. Jain, Director (Engg.), Sh. S. C. Garg, CGM (Project) along with other dignitaries were also graced the occasion.



Inauguration of 50-Bedded Mother & Child Hospital in Irinjalakuda, Kerala

A 50—Bedded Mother & Child Hospital at Irinjalakuda, Kerala under the project consultation of HSCC (India) Ltd. was inaugurated by Sh. V. S. Shiva Kumar, Hon'ble Minister for Health, Govt. of Kerala on 23rd January 2016. This hospital will provide special care to women and children. Sh. C. N. Jayadevan, Hon'ble Member of Parliament, Sh. Nimya Shiju, Municipal Chairman, Sh. S. K. Jain, Director (Engg.) along with other dignitaries were present on the occasion. As a part of institutional strengthening measure, the State Mission Director (NHM) initiated construction of MCH Blocks in hospitals at various locations in the state. One of such initiative is 50-bedded Mother & Child Hospital at Taluk Hospital Irinjalakuda.



Inauguration of AIIMS Hostels by Shri J. P. Nadda, Hon'ble Union Minister for Health and Family Welfare in Bhubaneswar, Orissa

Hostels (Block-A and C) of the AIIMS Housing complex in Bhubaneswar, Orissa, under the project consultation of HSCC (India) Ltd. were inaugurated by Sh. J. P. Nadda, Hon'ble Union Minister for Health and Family Welfare, Govt. of India on 26th March 2016. Sh. Dharmendra Pradhan, Hon'ble Minister of State for Petroleum & Natural Gas, Dr. (Prof.) Prasanna Kumar Patasani, Member of Parliament, Sh. B. P. Sharma, Secretary, Health, Govt. of India along with other dignitaries were present on the occasion. Sh. Gyanesh Pandey, CMD, HSCC briefed the Hon'ble Minister about the entire project.

AIIMS Housing Project, Bhubaneswar was started in August 2008. It has total 18 Multi-storied Blocks out of which 5 Blocks are residential quarters with 135 nos. of Flats, 3 Blocks are Undergraduate Hostels with 350 rooms, 2 Blocks are Nursing Hostels with 310 rooms with common toilets, 4 Blocks are Post graduate hostels with 536 nos. of single room with attached toilet and 55 nos. of double room with Kitchen and attached toilet, 2 nos. of Dining hall for undergraduate students and Nursing students, 1 no. Guest house with 22 rooms and one Director Bungalow. Out of 18 Blocks, 14 Blocks had been handed over to AIIMS and put to use. Progress of remaining 4 Blocks are in full swing and will be handed over to AIIMS in September 2016. Project was delayed due to land acquisition and local problems.



Inauguration of Second Campus Indian Institute of Chemical Biology (IICB), in Kolkata

Second Campus of CSIR –IICB Translational Research Unit of Excellence was inaugurated by the Hon'ble Union Minister for Science & Technology and Earth Sciences, Govt. of India, Sh. Harsh Vardhan in Kolkata on 8th February 2016. The ceremony took place in the Salt Lake Campus of CSIR on the occasion, Sh. Gyanesh Pandey, CMD, HSCC, briefed the Hon'ble Minister about the project. The ceremony also had the gracious presence of Dr. Y. S. Chowdary, Hon'ble Minister of State, Ministry of Science & Technology and Earth Sciences, Govt. of India along with Dr. Girish Sahni, DG & Secretary of DSRI.

Research Block is G+3 storied building with facilities i.e. 13 Laboratories, Library, Conference

Room, Seminar Hall (having a total build up area of 4956 Sqm).

facilities i.e. Guest Rooms with VIP Suite Room, Seminar hall (50 Seated), Lecture Hall (100

Seated) and Conference hall (having a total build up area of 2556 Sqm).



Inauguration of AIIMS Hostel-II, New Delhi

Hostel -II of All India Institutes of Medical Science (AIIMS), New Delhi was inaugurated by Dr. (Prof.) M. C. Mishra, Director, and AIIMS on 8th Feb 2016. The ceremony was attended by Sh. V. Srinivasan, DDA, AIIMS along with other dignitaries.

Salient Features of the Hostel Block (H3):

Under the aegis of Oversight Committee, recommended measures for Implementation of Reservation Policy for Backward Classes, the implementation of its projections called for augmentation of seats in Central Government Institutions/Autonomous Institutes, since AIIMS offers undergraduate and post graduate teaching courses with annual intake of MBBS, UG course of 50 and MD/MS PG Course at 139 (total 415 seats in three years), the augmentation, entailed the requirement of an annual increase of 182 seats. In a five year period, this would lead to an additional 722 students/resident doctors being catered to.

In order to compensate the shortfall in the occupancy thus created, new Hostel blocks were proposed to be constructed in the Masjid Moth Area of the AIIMS. A part of this augmentation Hostel Block 3 was constructed and handed over to AIIMS for its beneficial use on 08.02.2016 and formally inaugurated by Director AIIMS. Basically the whole hostel block H3 is comprised of double rooms and single room accommodation. It is a 2 Basement plus Ground plus Five structures (2B+G+5) and provides 54 double rooms and 06 single rooms. The prominent features of the proposed block are narrated below:

Occupancy : Double & Single bed room with attached toilet & balcony facility.

Recreational facility : A common room on 2nd & 3rd floor consisting of recreational infrastructure.

Lifts : It is housed with 02 lifts.

Floor finishes : Marble floor finishes, Bathroom with ceramic tiles in dado and walls.

Wall finishes : Synthetic plastic emulsion paint.

Doors & windows
 Of powder coated aluminum frames and fittings. Windows of glazed and doors & laminated.

Parking : 128 nos in basement(double stack)

Dining facility : Centralized Dining hall.



Site Visits

Construction site of Mother & Child Block and Surgical Block in AIIMS, New Delhi





AIIMS, New Delhi

Construction of Super Speciality hospital and other facilities-for Dr. B. C. Roy Institute of Medical Sciences & Research at IIT, Khargpur, is a 487 bedded hospital with all the modern facilities.





Indian Institute of Technology, Kharagpur

Construction of National Institute of Animal Biotechnology (NIAB) is a State-of-the-art lab with facilities like BSL lab, Animal House, Live Stock Farm, Auditorium, Housing and Cold Room etc.





NIAB, Hyderabad

Site Visits

200 Bedded SSB block at Kolkatta Medical College, Kolkata





SSB, Kolkatta

Satellite Centre for PGI, Snangrur, a 500-bedded Multi Speciality Hospital





PGI, Sangrur

The redevelopment of the Safdarjung Hospital set up by augmenting the existing infrastructure and medica facilities.

The project consists of 500-bedded Emergency Block alongwith 87 bedded Super Speciality Block





SSB, Safdarjung Hospital

Awards & Recognitions

HSCC (India)Ltd. participated in "Digital India Knowledge Exchange Summit, Kovalam, Kerala" held on 19th & 20th February, 2016. Sh. Gyanesh Pandey, CMD, HSCC made a special presentation on e-Healthcare and enlightened the dignitaries with the importance of Digitization healthcare sector.



Shri Gyanesh Pandey, CMD, HSCC receiving an award for HSCC's outstanding work in rendering professional healthcare consultancy service

6th Healthcare Leaders Forum 2016: Technology for patient delight

HSCC (India)Ltd. participated in 6th Healthcare Leaders Forum 2016: Technology for patient delight, held on 02nd March, 2016. Sh. Gyanesh Pandey, CMD, HSCC attended the forum as a special guest & speaker, he spoke about HSCC's role in current digitalization scenario in Health care Sector. Sh. Manoj Jhalani, Joint Secretary, MOH&FW, facilitated Sh. Pandey for HSCC's excellent digitalization work on various healthcare projects under taken by it.



Vibrant North-East: 2016

With the new situation and emerging opportunities the focus of the Government on the development of North East Region, CARD and ASSOCHAM with the support of DONER had jointly organized the VIBRANT NORTH EAST-2016 in Guwahati from 18th to 20th February, 2016, involving various development bodies, national level organisations, Ministries and the industry. Being into Health Care Sector and very proactive in North East Region with various prestigious projects, HSCC showcased its capabilities & creativity by participating in the Vibrant North East -2016 which had held in Veterinary Play Ground, Khanpara, Guwahati, Assam (various hospital projects being undertaken, designed and developed by HSCC in the North Eastern States).



Digital India Knowledge Exchange Summit: 2016

HSCC (India)Ltd. participated in "Digital India Knowledge Exchange Summit, Kovalam, Kerala" held on 19th to 20th February, 2016. Sh. Gyanesh Pandey, CMD, HSCC made a special presentation on e-Healthcare and enlightened the dignitaries about the importance of Digitization in healthcare sector.





HSCC (India) Ltd has also received an award for its outstanding work in Professional Healthcare Consultancy Service in India and abroad. During the inauguration of the summit, Hon'ble Chief Minister of Kerala, Shri Oommen Chandy along with Hon'ble Minister for Industries & IT, Kerala, Shri P, K. Kunhalikutty visited HSCC stall. Shri Gyanesh Pandey, CMD, HSCC briefed them about different IT projects undertaken & healthcare infrastructure being developed in the Kerala state by HSCC.



6th Healthcare Leaders Forum: 2016





HSCC has been proactive in displaying its capabilities, creativities & innovations through participation in various exhibitions. As part of this endeavour, HSCC participated in 6th Health Care Leaders Forum-2016 under displayed various Health care projects where it has deployed Information Technology for the improving the patient care.

ICT can be an extremely powerful enabler in efforts to bring about positive and sustainable development to the country; our country already has the advantage of a strong IT fibre backbone and indigenous satellite communication technology, with trained manpower. With enhanced efforts, telemedicine could help bring specialized health care to the remotest corners of the country.

To extend quality-health to each individual, in the country, Universal Health Coverage (UHC) has been rolled out in the current plan which implies moving towards broader and better public health and ensuring that the entire population has access to affordable health services. ICTs, having already proliferated our daily lives, makes these sources a strategic ally for public health – whether to help solve or prevent health problems, or to improve access to health systems and services. Internet connectivity and mobile phone usage alone generates vast data on an individual's social and health-related behaviours; data garnered from new technologies can be used to issue early warnings and healthcare alerts, enabling the public health sector to detect outbreaks early and monitor cases more accurately and facilitate immediate response to emergency and disaster situations.



Healthcare Sabha – The National Thought Leadership Forum on Public Healthcare

Shri Gyanesh Pandey, CMD, HSCC, was invited as a special speaker to address the Healthcare Industry during Healthcare Sabha, organised by Indian Express group in Hyderabad, on 5th March, 2016.

The event was a National Platform bringing together Policymakers, Thought Leaders, National and International Health Organizations, Social Entrepreneurs, and Technology & Ancillary Healthcare Service Providers; the Forum deliberated on cohesive, unified and innovative ways by which the Vision of The National Health Mission could be achieved.

During his address Shri Pandey expressed his views on importance of Frugal Innovation in medical technology. Frugal Innovation in medical technology encompasses a wide range of healthcare products which are used to diagnose, monitor or treat diseases or medical conditions affecting humans.

Such technologies are largely intended to improve the quality of healthcare delivered through earlier diagnosis, less invasive treatment options and reductions in hospital stays and rehabilitation times. Key growth drivers of Medical Technology in India are; Faster up-gradation of existing technology and global new product innovation; Evolution of India as a medical tourism hub leading to demand for world-class equipment, growing awareness amongst providers & consumers on advancements in medical technology, Increasing competition with the advent of large private sector to have latest technology for the patient care .



Your goodness is impediment in your way, so let your eyes be red with anger, and try to fight the injustice with a firm hand.

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- Sardar Patel

Foundation Day

34th Foundation Day of HSCC

HSCC celebrated its 34th Foundation Day on 30th March, 2016 with present annual awards to deserving employees for their long term contribution to the organization along with Hindi Awards.

Sh. Gyanesh Pandey, Chairman & Managing Director, HSCC presented the awards in the presence of Sh. S. K. Jain, Director (Engg.).

In his address, Sh. Pandey congratulated all the recipients, on the occasion and said that the organization has set new benchmarks both in its construction and operation-related activities in the healthcare sector.





Faith is of no avail in absence of strength. Faith and strength, both are essential to accomplish any great work.

- Sardar Patel

Holi Celebration



Words that reverberate through the country, on each and every street as the festival of colour approaches. There is vibrancy in the air, colours bring with them a level of enthusiasm and joy that picks up the mood across people.

HSCC is no different; as Holi approached the whole team at HSCC was anticipating fun and celebration. It was a gala time. As everyone was happy to be smeared in colours and celebrate this spirited festival with the extended work-family. The enthusiasm doubled with the gracious presence of CMD Sh. Gyanesh Pandey.



Long Service Awards

25 YEARS



Sh. S. C. Garg, Chief General Manager (PG-II)
A Post Graduate in Civil Engineering having about
30 years of experience in civil construction projects.
He joined HSCC as an Asst. Manager and presently
working as CGM (Projects)



Sh. Rajesh Gupta, Dy. Manager (Civil)

A Civil Engineer by profession, joined HSCC as

Asst. Manager in the year 1995



Sh. Mohan Lal, Executive Assistant

Joined HSCC in the year 1995 and presently working
in Finance Department

20 YEARS



Sh. Arun Kapoor, Sr. Manager (BME)
An Engineer in Instrumentation, started his career in
HSCC as Asst. Manager in 1995



Sh. P. K. Pattajoshi, Despatch Assistant Joined HSCC in the year 1995



Sh. Ajay Suri, Sr. Manger (F&A) Joined HSCC in 1995 as Asst. Manager and presently working in PCSO, Tezpur

Long Service Awards

15 YEARS



Sh. A. K. Nema, Dy. General Manger (Systems)

Masters in Computer Application, joined HSCC as a

Dy. Manager in IT Department in year 2001



Smt. Harsh Marwah, Manager (Finance) joined the organisation as an Executive in the year 2001



Sh. Rahul Kapoor, Manager (Mechanical) A Mechanical Engineer by profession he joined HSCC in January 2001



Sh. Raj Kumar, Driver Joined in the year 2002



Sh. Rajesh Kumar, Driver Joined in the year 2002

Long Service Awards

10 YEARS



Sh. S. K. Khare, Dy. General Manager
A Civil Engineer by profession joined as Manager
(Planning) in year 2006 & now posted
at Kolkata Site



Sh. Luv Chayal, Dy. Manager(Civil) A Civil Engineer by profession joined HSCC as an executive in year 2005



Sh. Vimal Kumar, Dy. Manager (F&A) Joined in the year 2005 as an Executive in the Finance Department



Sh. Manoj Singh, Dy. Manager (F&A) Joined the Finance Department of HSCC in year 2005



Sh. Babulal, Assistant (Grade II) Working with HSCC since 2005

Project Management of Mega Projects

In a world more than 60% mega projects exceed the cost/budget limitations due to which projects are either delayed abnormally or scopes are curtailed defeating the purpose for use of beneficiaries. Managing the mega projects is a great challenge so as to finish it timely within the projected budgetary cost. The effective management of the mega project requires early planning and organizing, interaction with client/stakeholder and project integration.

For managing the projects successfully, time and cost are the two key components of a project need to be worked out judiciously and realistic considering the impact of factors affecting cost and time. These to be monitored and controlled throughout project duration.

The cost of the project or any of the construction activity is much more than as compared to the cost of manpower required for planning, organizing and managing the project i.e. the cost of consultant. So, client should not make any compromise on cost of consultant who is assigned the task of project implementation. The mega project can be benefited from having a high level specialized staffing as management cost is relatively small as compared to construction cost. The project team should be identified at the very start of the project so as to take the advantage of the every flexibility of the project which otherwise is not available or disaappears once the project take off. It is best to assign a core team throughout the project to promote the accountability and responsibility.

The requirement of project and scope of work should be frozen in interaction with client/user and accordingly design and drawings should be prepared and all preconstruction studies including topographical survey, Geotechnical and Hydrological survey, existence of electrical lines, underground services, protection of any nearby structure and or any other structure coming in the way of project should be identified before preparation of estimate.



S. C. GARG Chief General Manager, HSCC

A Post Graduate in civil engineering having about 30 years of experience in civil construction projects of large values sharing his actual experience where such issues were largely faced during execution specially in projects at Nurses residential complex, Srinivaspuri, Hyderabad, Kolkata, AIIMS projects and Kalpana Chawla Medical College project. He has completed various projects in HSCC.

The project team should develop the realistic estimate considering all the above factors and local prevailing rates of material and manpower. Estimate should have provision of price variation (Escalation), contingencies, taxation, cost of sanction of plans and supply of electricity, water and sewer connection etc. from local authorities and any other factor which may impact the cost. A realistic estimate so prepared should be accepted by client and in case of any cost limitation, the scope and design should be modified and accepted and sanctioned by client accordingly. Once the estimate is prepared accurately, the project team is committed to managing the cost within permissible variation limits and client also committed to release the fund timely.

After preparation of design, estimate and its sanction from client, the selection of contractor who is going to execute the project is very—very important. The terms of eligibility for appointment of contractor should be such that an experienced and



resourceful contractor who has the capacity of delivering the project of required magnitude and having track record of successful delivery within the time frame envisaged is appointed. As the contractors are appointed through tendering process, the condition of the tender should be framed in such a way so as to attract the best contractor available in the market.

It is of utmost importance to avoid any delay in the project while tendering and appointment of contractor is in process, all arrangements to make the site clear and free from all hindrances which may affect the construction of project should be made. This will help in a great way for timely completion of project as well also avoid any claim from contractor.

The contractor mainly needs three things these are timely availability/release of construction drawings, site of construction free from hindrances and timely release of payment. It is the responsibility and obligation of the consultant and client to ensure timely availability of these.

Once the contractor is appointed and site is made available to the contractor, the contractor has to give the detailed schedule of the project in line with the overall construction period of the project and individual mile stones/goals set. The schedule should clearly project the deployment of resources in terms of material and manpower, schedule for placement of order, delivery and erection of long delivery items. The schedule once accepted by consultant/client should be monitored very closely. A mechanism for



monitoring of the project should be in place. The contractor should use latest technology in implementation of the project so as to minimize the time frame. The delays and cost impact are not an exception during construction phase. Construction risk such as adverse climatic condition, poor contractor/specialized agencies or sub-contractor performance, safety and environment risk, resource availability and coordination among various activities and agencies need to be frequently and carefully monitored and controlled from risk management perspective. Any slippage in the project at any stage should be brought into knowledge of all concerned/stack holder and re-scheduling of the project should be done so as to accommodate the delay occurred within the overall project schedule.

We should schedule regular meetings with contractors, specialized agencies/nominated subcontractors, suppliers and third parties to share the factual information about the progress, co-ordination, safety and security of the work so that timely action if needed may be taken to avoid any slippage in project.

The project leader should always think of and focus on overall integration of the project in totality and organize to happen timely all other activities of the project meant for overall functioning of the project to deliver the output/purpose for which the project was conceived.

Project management policies should also address the quality control, risk management, regulatory compliance, Environment, Health, safety and security (EHSS), project auditing, technical examination, timely dispute resolution etc. Due care in planning and execution should be taken on these aspects while planning, tendering, awarding the work and execution. We should not compromise on Environment, Health, safety and security as human life is precious.

So, the mega construction projects are not machine made product can not be simply managed from industry experience. Each project is a new project with new environment, site, situation, agencies where new challenges are to be faced which can be mitigated by effective project management and timely decision



Infection Control in Modular Operation Theatre

Infection control in the operating room environment is the most challenging as the nature of surgery provides significant infection risk. The other aspect of surgery is that infections will be internal and difficult to treat. This is compounded by increasing numbers of communicable diseases like tuberculosis, immuno compromised conditions like HIV/AIDS and multi-resistant organisms occurring in health care facilities. The operating room is a unique area, even within a hospital in terms of the risk factors for a patient. Nosocomial infections cover a broad range of types and causes, and as a result, the procedures, controls and systems for prevention are also broad. It is of paramount importance to consider hospital infection control measures while planning various departments like wards, operation theatre (OT), intensive care unit (ICU), central sterile supply department (CSSD), dietary, laundry etc.

In the Operation theatre, the development of HVAC aspects resulted improvement of better infection control. The key areas in relation to HVAC covered in the guidelines include infection control during construction, general design considerations and specific design requirements for area such as Operating Rooms, etc. Dedicated AHU for each OT has particular air changes per hour and fresh air supply for OT are set as per the type of OT or guidelines of ASHRAE/NABH. The objectives of ventilation system in OT are recommended as:- a) To dilute the bacteria generated by the operating team and patients in the theatre by appropriate air volume changes. b) To prevent less clean air from neighbouring rooms entering the OT by using positive air pressure. c) To create an air flow pattern that carries contaminated air away from the operating table. d) To provide a comfortable environment for the operating team and patients with controlled temperature, humidity and ventilation. The air management system is with laminar airflow system equipped with 0.3 micron HEPA filters to achieve ISO 14644/1 classification=ISO 5

Bacteriological class =B (5 CFU/m3), Particle decontamination kinetics CP =5 min, Biological decontamination kinetics CB = 5min inside OT.



DEBASISH BANDYOPADHYAY Dy.General Manager (Mech), HSCC

A Mechanical Engineer by profession is handling the services group division of HSCC. Looking after design and execution of Specialized Engineering Services (SES) of the projects in hospital. Specialized Engineering Services entail activities of design and execution of Modular OT, High end Modular OT with Integration, MGMS, CSSD, Laundry, Kitchen, Bio-Medical Waste Management, Pneumatic Tube Transfer System, Mortuary, BSL Lab-2, 3 & 4, Animal House, Vaccine lab, and Multi level Car Parking system.



The emergence of Modular OT reduces the risk of surgical infection. The common features in Modular OT as Integrated function, Cleanliness, Safety of facilities, equipments and devices, Lesser disruption and noise, Ergonomically Working environment for medical staff, Protecting against growth of bacteria, mould and yeasts, Ensuring Hygienic atmosphere, Promoting high standard of asepsis, Facilitating coordinated services, Ensuring maximum standard of safety, Ensuring Patient and staff comfort in terms of thermal, acoustic and lighting requirements



The Modular Operation Theatre is constructed with high asepsis, bacteria free hygienic environment. Such OT is equipped with the bacteriostatic Wall and Ceiling system, Antistatic PVC flooring, Corner coving, pressure Relief damper, Laminar air flow system, Automatic hermetically sealed sliding door, Anaesthetic and Surgeon Pendants with articulated horizontal and vertical motion and rotation, Dual dome LED light integrated with HD camera and HD Monitor, Medical graded Touch Screen Surgeon control panel with 9 services, Digital Display Monitor, Hermetically Sealed Window, X-Ray Viewer, Antibacterial Switches, Writing board and Scrubber with photo sensor as per the international standard. As per the ongoing requirement of teaching or medical transcription, the Modular OT is also equipped with data management and integration system through Integration of OT with Audio Visual communication for video conferencing, Central Control System, HD Monitors for image data management system, PTZ camera and dual channel digital documentation system.



Complain is the work of cowards!

Braves took over the task of preparing the way!

- Sardar Patel

Design & Engineering- the Anchor of Consultancy

The building construction industry is a wide industry that encompasses many professionals. The importance of Healthcare Sector within the construction industry is due to the uniqueness of specialized design catering to infection control, functional layout, orientation, movement of patients, doctors, services, ambience, aesthetics, equipment layout, and waste management besides achieving environment sustainability through GRIHA (Green Rating for Integrated Habitat Assessment) rating.

The three major engineering departments of HSCC are Design & Engineering (D&E), Project Management and Procurement. Of these the Design & Engineering department which comprises of Architects, Civil Engineers, Quantity Surveyors, Electrical Engineers, Mechanical Engineers and Computer Engineers is clearly the backbone of the Organization.

The Design & Engineering department of Civil Engineering Design has further specialized branches like Structure Design, Public Health Engineering and Quantity Surveyors. Likewise, Mechanical Engineering department besides HVAC, also specializes in Special Services of Operation Theaters, Gas Manifold systems, Kitchen, Laundry, CSSD, AERB and other detailed regulatory requirements of Hospitals, BSL Laboratories etc. The interlinking of these specialized services is through regular Coordination meetings at concept level as well as working level.

Hospital building differs from other building types in the complexities of functional relationships that must exist between the various parts of the hospital. Apart from providing right environment for patients and care providers, it should also be sensitive to the needs of visitors. The architectural design work is a continuous process of preparation of basic conceptual plans and its approval from the end user after various meetings and presentations. The evolving of the conceptual architecture drawings includes patient management at registration counter and waiting areas, patient and staff movement in various areas from entrance to exit, segregation of clean and dirty areas/corridors/lifts on critical floors of OTs and ICUs with special provisions and location of scrub station, instrumentation room, change



rooms, preop and postop stores, dumbwaiters e t c . N o offsets and

windows need to be sealed with double glass, laminar flow and SS doors, sealed lights, joint less ceiling, anti bacterial paint, pass box, instrumental panel, X-Ray view box etc. are some of the pre requisites in designing an Operation Theater.

Statutory approvals of architectural drawings from Municipal Corporation, Fire, Urban Arts Commission, Airport Authority of India, Archeological Survey of India, Environment Impact Assessment etc. are indigenous to the design process. The PHE, HVAC drawings also supplement the same

with water supply, sewerage disposal schemes and layout along with fire fighting system and heat load calculations.

The type of Hospital also plays a key role in the design process. For eg, a Cancer Hospital design includes more cheerful interior finishes for the patients. On the other hand, a Mental Hospital requires concealed lights and fixtures besides a soothing landscape as an integral part of the hospital design. The design of complex Bio-Safety Level-II, III, IV laboratories



MANISHA TANKHA Deputy General Manager, HSCC

A Civil Engineer from Delhi College of Engineering, Delhi University with more than two decades of experience In Design Engineering. In HSCC since 2008, she is heading both Structural and Architectural divisions and is responsible for designing healthcare infrastructure projects from concept to construction stage. Her profile also includes planning and maintaining work systems, procedures, and design methodologies that enable and encourage optimum performance of the staff and other resources within the department.



adheres to stringent functional and access requirements, air cleanliness level etc.

HVAC design system plays a key role with optimization of fresh air intake to provide a suitable environment for specific areas of the buildings depending upon the function of the area, the number of people involved and the degree of hazard to which patient is subjected. The air circulation system is designed using high efficiency filters to prevent contamination whether it is from outdoor air or from recirculated air within the space.

There is often a bottleneck of patients created at central registration. To solve that challenge, the IT department has

introduced patients to digital connectivity. A patient kiosk offers a convenient, on-site method of interface that patients can use to access a self-service system. Check-in can be completed at any kiosk for patients who have completed online appointment. The IT system also includes a patient-flow management system that tracks room availability and ultimately reduces waiting time. The entry sequence of the floor is designed so the kiosks are a central focal point between the elevator lobby and the circulation stair but are still adjacent to open staff workstations in case assistance is required. The IT department through its various packages like HMIS, PACS, QMS, Telemedicine, Call Centre, Library Management System and Education Management System has reduced the paper work and effectively used the Hospital resources.

By enhancing waiting areas and a robust Wi-Fi system, patients and their families can experience a new level of comfort and convenience not typically associated with healthcare facilities.

The rapid advancement and pervasive influence of technology has created the opportunity to re-imagine the delivery of healthcare. As designers, we're tasked with the challenge of integrating known technology that will enhance the patient experience in current time while strategizing future technological advancements and possibilities. Our insights, resourcefulness, and ability to visualize physical space with emerging technology will help shape the future patient experience and care model. However it is vital that the functionality of a hospital remains at the forefront of the design process. For a hospital to operate successfully, every aspect of the design must be considered.



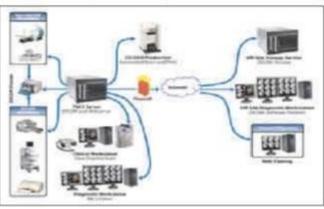


ICT in Healthcare

Information and Communications Technologies (ICTs) now a day play a critical role in improving health care for individuals and communities. By providing new and more efficient ways of accessing, communicating, and storing information, ICTs help bridge between health professionals and the communities they serve and between the producers of health research and the practitioners who need it. Through the development of databases and other applications, ICTs also provide the capacity to improve health system efficiencies and prevent medical errors.

Use of IT for increasing Patient Care Services like Online appointment, reduce waiting time, SMS/e-mail services, faster diagnosis and treatment.

Use of Hospital Management and Information System (HMIS) – A comprehensive solution that automates the Clinical, EMR, Administrative and supply chain function thereby enabling the improvement of operational effectiveness, reduction in cost and medical errors while raising the quality of patient care. Integration of hospital functionalities i.e. Registration, Admission



Discharge and Transfer (ADT), services, Laboratory, Radiology, Blood Bank, OT and ICU management, pharmacy, CSSD, Laundry, Accounts and Billing, HR etc. Access to medical records any where

through Unique Health Identification Number (UHID).

PACS (Picture Archival and Communication System) replaces film based system. Store all images from different modalities e.g. CT, MRI, X-Ray & Surgeries to a central server for years. It enables practitioners in different physical locations to access the same information simultaneously for Tele-Radiology. Radiologist has 3D & 4D view of Radiology images.



Telemedicine is a rapidly developing application of clinical medicine where medical for the purpose of consulting and sometimes remote medical procedures or examinations.



AJAY KUMAR NEMA Deputy General Manager (System & IT Head, HSCC

Educational Qualification: MCA from NIT, Raipur

Key Qualification: Having more than 22 years of

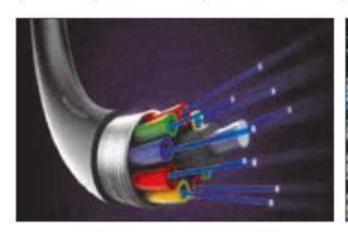
experience in the area of Information Technology. During the period, he has been associated with Development and Implementation of Commercial Applications, Project Management & Project Co-ordination for Turn-key projects, Resource Management, ERP Implementation, Database Administrator and other areas like drawing hardware specifications, quality procedures and inspection of Hardware. He has been working with HSCC since 2001, and looking after projects involving Development of IT Infrastructure for Hospitals and Medical Colleges (HMIS (Hospital Management & Information System), PACS (Picture Archival & Communication System) etc.), Establishment of LAN, WAN, Wi-Fi and CCTV (IP-Based) System for Hospitals and large organizations & Implementation of Queue Management System (OMS) for Hospital OPD and Consultant room. He is also looking after e-Tendering System for Civil Works and Procurement.

Use of high speed 10Gigabyte based network – For new upcoming Hospital, OPD and Medical College, HSCC set-up a State-of-the-Art, high performance, fault tolerant, secure and highly available IT network infrastructure and utilize the latest best of products, open standard based technology.

Advanced Queue Management System (AQMS) is web enabled and provides Tablet/Mobile interfacing. It manages patient flow through live-web queue view and smart SMS Interactive solution. This system cover all the services including Pharmacy, Laboratory & Radiology services with same token number assigned during entry/appointment of the patient. It manages the



queues so that queues in different departments are automatically prioritized depending on load on the other departments.







COMPOSITE CONSTRUCTION IN HEALTHCARE BUILDINGS

1. INTRODUCTION

Healthcare sector buildings cater for a range of functions, which often change over time, and therefore flexibility and adaptability are essential characteristics to facilitate future re-configuring. Further, on existing hospital sites, fast construction, generally taking advantage of off-site manufacturing is preferred, to minimise disruption to the hospital. Other important design requirements for many health buildings include noise and vibration control in sensitive areas such as hospital theatres. Many health buildings require a high level of servicing and therefore the distribution and integration of services within the structure are important design considerations.

The structural steel building can provides a number of frame solutions that respond to above key requirements including standard steel construction, Slimdek, long span construction and cellular beams. Steel construction enables designers to meet these diverse requirements efficiently and cost effectively.

2. ADVANTAGES OF COMPOSITE CONSTRUCTION

- a) In composite beam, the construction depth is reduced by approximately one third.
- b) The weight of beam is considerably reduced (by up to 50%)
- The presence of concrete may be utilized to meet the necessary fire resistance
- d) The use of propping system, to carry the load of weight concrete, may be eliminated since the corrugated metal deck serves the purpose of permanent shuttering for the concrete slab and act as tension reinforcement for the composite slab spanning between main beam and results in speedy constructions.
- e) The use of concrete column (encased I-section or filled hollow section) results in high load carrying capacity.
- Reduced section results in a reduced load on foundation and consequent economy in foundation design.

3. IS CODE

The design of composite construction is done by using IS 11384: 1985, as per working stress method.

4. STRUCTURAL SOLUTION RANGE FOR COMPOSITE CONSTRUCTION

- Steel beams with precast concrete or composite slabs for buildings of spans up to 9m
- Modular construction for mainly cellular space, particularly in hospital extensions, where speed of completion of the project is crucial
- Slimdek for medium-sized buildings often with special control of vibrations and requirements for service routing, with spans up to 9m
- d) Steel beams with multiple circular openings (cellular beams) for larger multi-storey hospitals in which the adaptability of space use is the controlling factor.

5. COMPOSITE CONSTRUCTION

- a) In composite slabs, the steel decking acts as permanent formwork and, after the concrete has gained strength, provides sufficient shear bond with the concrete for the two materials to act compositely. In addition, the decking provides a safe working platform during construction and provides for diaphragm action so that no horizontal bracing is required.
- b) Composite beams are hot rolled or fabricated steel sections that interact compositely with the floor slab by shear connectors attached to the top flange and welded through the steel decking. Relatively light mesh reinforcement is placed in the floor slab.



VINOD KUMAR Deputy General Manager, HSCC

A Post Graduate Civil Engineer with specialization in structural engineering and has over 22yrs professional experience as Lead Structural Engineer. He is responsible for concept design, feasibility studies, formulating plan, detailed structural analysis & design, oversee preparation of detailed construction drawing for the assignments mainly includes Institutional, Industrial, Commercial, Aviation/Aiports, Institutional, Residential, Tunnel, Railway, Metro, River jetty, Water & waste water, STP, WTP, CETP, SPS, BPS, Mill building and other infrastructural project.

I am Fellow of the Institution of Engineers of India (FIE) and Fellow of the Indian Association of Structural Engineers (FIAStructE).

- c) Down-stand beams acting compositely with the slab through welded shear connectors provide excellent stiffness and economy in use of materials. For normal design, beam spans up to 10-12m are achievable using standard rolled steel sections.
- d) Composite slabs normally use decking of 45mm to 80mm depth to create a 120mm to 160mm deep slab. Deck spans of 2.5m to 4.5m can be achieved without requiring temporary propping, and composite action is sufficiently good that heavy equipment may be supported. Services can be suspended from the soffit of the floor slab.

6. PHOTOGRAPH



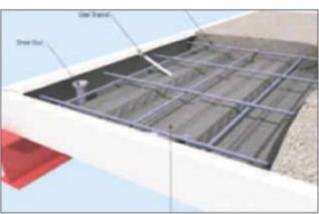
Braced Frame Construction



Moment Resistance Frame



Complex Services Integration in Cellular, Long-Span Beams



Deck Slab Construction

Every human being is worthy of respect, as much as it should have respect above should not be afraid of him falling down.

- Sardar Patel

Health and Economic Productivity

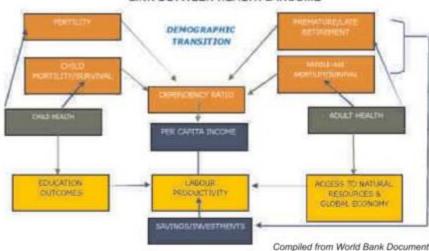
Macroeconomic Evidence

Since publication of Adam Smith's The Wealth of Nations over two centuries ago, economists have sought answers to the question of why some countries are wealthy and others poor, why have economic growth rates differed? The main empirical tool now used to study economic growth is cross-country analysis of the relationship between economic growth (typically measured in terms of the growth rate of per capita GDP) and a range of variables believed to account for why growth rates differ? Among the factors being explored are: levels and patterns of educational attainment (schooling); population growth, density and age structure; natural resource abundance; personal and government saving (investment rates); physical capital stock; economic policy (i.e., the degree of trade openness) the quality of public institutions; and geography (i.e., the location and climate of a country) etc.

Recent research has added several specific health indicators to these factors, and looked at the links between them and economic growth. There are direct links between economic performance and health indicators such as life expectancy. Some variables, such as geography and demography, indirectly link health with economic growth. Geography, particularly tropical location, is highly correlated with disease burden, which in turn affects economic performance. Demography, on the other hand, is determined in part by health status, and has a direct effect on economic growth through the age structure of the population, in particular the ratio of the working age to the total population. A major result to emerge from recent research is that survival rates or life expectancy are powerful predictors of income levels or of subsequent economic growth.

Health improvements also influence economic growth through their impact on demography. For example, in the 1940s, rapid improvements in health in East Asia provided a catalyst for a demographic transition there. An initial decline in infant and child mortality swelled the youth population, and somewhat later prompted a fall in fertility rates. These unparallel changes in mortality and fertility, which comprise the first phase of the demographic transition, substantially altered East Asia's age distribution. After a time lag, the working-age population began growing much faster than the young dependent population, temporarily creating a

LINK BETWEEN HEALTH & INCOME





BIRESH K MOHANTY Senior Manager (Economist), HSCC

Educational Qualification:

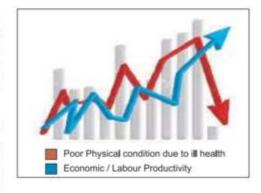
M.Phil in Economics from Jawaharlal Nehru University, New Delhi, MBA (Healthcare Services) from Sikkim Manipal University, LLB from Utkal University Odisha, NET in Economics from University Grant Commission

Key Qualification:

Having more than 22 years of, Research, Consultancy and Project Management experience in development sector. During the period, he has been associated with various projects both at national & international level. He has also Research Publications in repute Economic Journals. He is working with HSCC since 2001, and looking after Strategic development, budget planning, documentation and planning & conceptualization of methodology and approach including qualitative and quantitative analysis, execution of system study projects, report writing and documentation of large scale healthcare projects, preparation of concept and Techno-feasibility Reports, Detailed Project Reports (DPRs)/ Expenditure Finance Committee Memorandum (EFC Memo) on health infrastructure projects.

disproportionately high percentage of working -age adults. This bulge in the age structure of the population created an opportunity for increased rates of economic growth. By introducing these demographic considerations into an empirical model of economic growth, analysts were able to show that East Asia's changing demography can explain perhaps a third to half the economic "miracle" experienced between 1965 and 1990.

Some researchers are analyzing the effects of climate on income and conclude that countries in tropical regions suffer important disadvantages relative to those in temperate zones. In addition to the effects of climate and geography on soil quality, this work suggests that an important causal mechanism through which this effect operates is the interaction of tropical



climates and tropical diseases, particularly malaria which can have a significant cost in terms of economic performance.

Another line of analysis suggests that the interaction of exogenous demographic changes with human and physical capital development can lead to a virtuous cycle of growth, enabling a country to break free of a poverty trap.

Microeconomic Analysis

Unlike macroeconomic studies that compare the performance of countries over time, micro-economic analyses study the link between health and the income of households and individual. Until recently, much of the micro-economic literature dealt with the impact of education and training on labour outcomes. Recent individual and household level studies have, however, paid more attention to health (particularly nutritional aspects of health) and are reaching increasingly consistent findings.

At the household level, it is also possible to measure directly the economic burden created by particular diseases. The economic costs of diseases-chronic in particular are made up of two main elements. First, there are the direct costs of prevention and treatment (drugs, health care provider fees, transport, and costs of subsistence at a health centre). Second, there are the indirect costs of labour time lost because of illness.

Given these two components of cost, there are several ways in which diseases affects economic outcomes. The diseaserelated morbidity directly increases household and public sector expenditures. It reduces labour inputs and can reduce human capital as a result of declines in school attendance.

Pathways of Influence

Delineating potential pathways of influence sheds light on health's role within the larger web of determinants of income levels and growth rates. There is evidence that adult health depends in part on child health and itself directly influences labour productivity. Per capita income is defined as the level of income divided by total population. Clearly, the total population consists of economic dependents as well as the economically active. Improved adult health will improve the dependency ratio both by reducing mortality among the economically active and by reducing premature retirement that results from illness, and this ratio changes as a result of demographic transition.

Investments both in physical capital and in education underpin labour productivity. A rapidly growing literature documents the effects of ill-health on children's enrolment, learning and attendance rates in school. Many of the conditions affecting schoolchildren (e.g. intestinal worm infections and micronutrient deficiencies) respond to inexpensive but effective interventions. Recent studies in the psychological literature point to steady, long-term gains during the 20th century in the general intellectual ability of the populations of the high-income countries (where data were available to generate trends). One suggested determinant of this trend lies in improved health and nutritional status.

Some studies on Asia including India point strongly to the effect of better health on capital formation. Expectations of a longer life appear to stimulate savings. It is apparent that health and economic productivity are correlated the intrinsic value of health should not be lost sight of as today's health systems have the tools to vastly improve the welfare of the poor at modest cost. But neither should health professionals forget an important message for government: investing in health accelerates economic growth and is one of the very few viable approaches to rolling back poverty.

Foundation stone of Super Speciality Ward laid at AMC

From Descrict Respitale of the State would be appeared into Medical Colleges, says Union Hashib Michael Jagol Prakash Nodda

+1175 The Sangai Express

IMPHAL, THURSDAY 11 FEBRUARY, 2016

JP Nadda lays foundation stone



IMPHAL Feb. 18 : Foundation Stone for the Capitalty Block, creaty Block slong with

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Institute of Medical Science institute of the trail by the tion ble Union Minister for Health and family Welfan th P Nadda on 5th February 2010 at Imphal. Hospital Corporations (HSCC) has been orsignated as the project consistant and the project would be completed within a

would be completed within a spen of 2 years.

Sh. Gyanesh Pardey.

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3h. K.C. Samma, Joint Screeney, Health & Foundly Welfare along with MF Dr. I. Mennya, MP Thangso-Batte, MI.A Khovki alian, S.L.A. Bhabwajir and BiP Manajur Pradeoh General Secretary Atlinicisma were also present on the occa-



hindustantimes corporate buzz

AHMS hostels inaugurated by JP Nadda in Bhubaneswar, Orissa

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Compared to other states, Kerala is ahead in terms of providing education and healthcare delivery. The progress of work The progress of work The progress of work is faster there and agencies are focused, practive and they want to finish projects on time

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BUSINESS BY BIDS

THE TIMES OF INDIA, NEW DELHI SATURDAY, FEBRUARY 13, 2016

2nd Campus of IICB inaugurated

Second Campus of CSiR - IICB Translational Research Unit of Excellence was inaugurated by Union Minister for Science & Technology and Earth Sciences Harsh Vardhan in Kolkata recently Gyanesh Pandey CMD, HSCC, brinfed the minister about the project. Present on the occasion were Dr Y.S. Chowdary, Minister of State, Ministry of Science & Technology and Earth Sciences, along with Dr. Girish Sahni, DG & Secretary of DSRL



Nalini Pizza, Ulubari, G.S. Road, Pt. 9685678736 / 31 SUNDAY OPEN अटकलों पर विराम, गुवाहाटी में बनेगा एम्स

नड्डा बोले-शीघ्र शुरू होगा निर्माण कार्य • जीएमसीएच के सुपर स्पेशिलिटी ब्लॉक का शिलान्यास

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400年時代於學院的時間



Jan Ekta, New Delhi

Tuesday, 29 March 2016

Inauguration of AIIMS Hostels by Sh. J.P.Nadda, Hon'ble Union Minister for Health and Family Welfare in Bhubaneswar, Orissa:

NEW DELHI March: (Harpert Cath) Hotels (Bross-Aland C) of the AIMS Housing complex in thildencework, Umias, under the project controllation of HECC (Index) Ltd. News body managements: by Sh J.P. Nadda, Hon ble Union Minister for Health and



The February & National Glex, Dr.(Frot.) Philatents Kumar Patasani, Mercher of Parliament I. Sh. B.P.Shamm. Secretary, Haelfs. Gov. of India. Sh. Suni Sharea. S. MoH&F-W. doog with other dignilaries were present on this experient Sh. Gyanest Pundey, CND, HSCC briefest the Hor ble Minute out the entire project

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Mini Ratna-I status awarded to HSCC

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अस्ट शुरू होगा डॉ. खड़ेएस प्रधार नाहन पेटिकान कॉलज



अजीत समाचार **

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प्रदेश के सभी जिला अस्पताल में होगी डायलिसिस सुविधा : नड्डा





Imphal | Sunday, February 07, 2016

Nadda reviews RIMS, pledges all possible Central assistance



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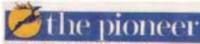
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THE INDIAN EXPRESS.



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THE TRUES OF INDIA, WE'VE DELHI STROMY, APOR 1, 2015.

BUSINESS BY BIDS

Inauguration of AIIMS Hostels

Histals Block A and C) of the AEMS housing complex in Bhuhaneswar, Grisse, under the project consultation of HSCC (India) List, was



inaugurated. by J.P. Nadřa, U n i o n Minister for Health and F a m i l y Welfare Dharmendra Pradhan Bradhan Minister of State for

Petrejesani & Natural Gas, Dr. Prasanna Kumar Patasani, MP, and BLP Sharms, Secretary Health, and Gysnesh Pandez CMD HSCC, were

एउ६० नाम कंडा नद्यादना नहीं द्यामार

नेवार वोक्से एक सर्थ महिन्दिरि शह अध्ये निकारामार्जनीयस्य (राजनी अन्यता राजसाहरी



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BUSINESS BY BIDS

Inauguration of AIIMS Hostels





Corporate Kaleidoscope

-MILLENNIUM POST | New Dalhi | Tuesday, March 29, 2016.



Minister of State (1/C) for Petroleum & Natural Gas Dhurmondra Pradhan was present at the inauguration of ALIMS Housing Complex's Hostel Blocks A and C. For which HSCC (India) Ltd served as gruject consultant, by Health & Family Welfora Minister J P Nadda in Rhubannswur, Odisho, on Manday. HSCC CMD Gyanesh Panday gave them a detailed briefing on the entire project.

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CORPORATE BUZZ HSCC (I) gets Mini Ratna



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The People's Chronicle

HSCC's Journey Continues for Restructuring Health Infrastructure

Green light for AIIMS

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Block for Women, Kids at Irinjalakuda General Hospital



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J.P. Nadda lays foundation stone at Dibrugarh



The foundation stone for Super Specialty Block in Assam Medical College, Dibrugarh, was laid by Jagar Proxid Nadda, Minister for Health and Family Gyanesh Pandey, and Family Gymesh Pandey CMD, HSCC has briefed the minis ter about the opcoming blocks with all project details. The ceremony was also graced by the presence of Sambimurata Sonowal, Union Minrater for Youth Affairs & Sports.

ह. स. कं. क. HSCC एव एस सी सी (इंडिया) लिमिटेड HSCC (INDIA) LTD.

भारत सरकार का उद्यम

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