Hanmant Rangrao Kulkarni

With Bachelor's Degree in Civil Engineering and Master's Degree in Public Health Engineering He is a seasoned and distinguished name in the sector of Water Supply & Environmental Engineering sector with an experience of over 43 years.

He has been associated with various Government Organisations at National & International levels. He have successfully handled numerous illustrious projects like 450 MLD Water Treatment Project in Italy, 50 MLD Waste Water Treatment Plant in Bauchi State Water Board (BSWB), Bauchi, Nigeria. During his successful carrier he handled various responsible positions, few of them are:

Organisation: Government of Goa, Daman & Diu Secretariat, Panaji – Goa, Designation: Assistant Engineer

Investigation, detailed survey and preparation of estimates for rural population under centrally sponsored Accelerated Rural Water Supply Schemes and for more than 10 problem villages water supply schemes were prepared. (Nov. 1972 to April, 1973). Bore hole drilling scheme under UNESCO programme. Investigation, survey, design and formulation of Project Feasibility Report of 160 MLD capacity water supply schemes from Salauli impoundage costing Rs. 138 Million.(1977 – 1978). Water Supply to greater Panaji (Nagali).

Organisation: Military Engineering Services - M.E.S, Panaji

Formulation of project report on modification of Sewerage Network, Sewage Treatment & Disposal of effluent of I.N.S. Mandovi Complex at Verem, Bardez, Goa.

Organisation: Bauchi State Water Board, P.M.B. 0055, Bauchi, Bauchi State, Nageria. Designation: Principal Water Engineer

Member of Expert Technical Panel (ETP) was to study design details, technical considerations, financial arrangement, legal aspect of the tenders submitted by the firms and recommend to the Bauchi State Government, one of the capable firms for execution of the Scheme. 45 MLD Cubi Dam Water Supply Scheme comprised of 45 MLD water Treatment Plant, 800mm dia. D.I. pumping main, 700mm, 500mm, 300mm dia D.I. ring, trunk, distribution mains. These firms of international repute specialised in water supply engineering who offered to do the job, were: M/s Degremont Ltd., Paris France, M/s SGEN Ltd., Lagos Nigeria, M/s BWK Ltd., West Germany, M/s Matai Consultants Ltd., Hannover, West Germany, M/s G.P. Nig. Ltd Nigeria. M/s Sulzer Broths Ltd., Winterthur, Switzerland, M/s Uni Contractors NIG Ltd., Lagos Nigeria. M/s Lurgi, Frankfurt, west Germany and M/s Pianimpianti, Milano, Italy.

Organisation: Public Works Department Designation: Superintending Engineer.

- > Implementation and monitoring of potable water supply augmentation works.
- Opa Water Supply Scheme for urban & Rural areas of Ponda and Tiswadi taluka. Main components are 40 MLD Water Treatment Plant, gravity main 1118mm dia MS x 1000m, 900 mm dia D.I. x 26550 m, 700mm dia D.I. x 4620m long etc.
- > 30 MLD Sanquelim Water Supply Scheme for Urban & Rural areas of Bicholim, Bardez and Sattari taluka. Main components of the scheme are Head works, 700mm dia D.I. x 700m rising main, 40 MLD Water Treatment Plsnt, and gravity main 600mm dia D.I. x 8700m, 500 mm dia D.I. x 1700m, 450 mm dia D.I. x 4100 m long and other works.
- > Strengthening of conveying Pipe main of 1118 mm dia M.S. x 1470m, 1000 mm dia x 17235 m, 900mm dia x 2710 m and 750 mm dia x 2770 m long and other works.
- Execution of free water connections to BPL (Below Poverty Line) families in various parts of North Goa.
- Operation and maintenance of 4 Regional water supply schemes and also several rural water supply schemes for 220 villages (439200 population 1991 census) and 18 Urban centres (225604 population 1991 census) of 6 talukas of North Goa District.
- Low cost pour flush water seal latrines in Rural and Urban areas.
- External financial Assistance for infrastructure projects.
- Initiated measures for workshop on "Water loss detection and control" to train PWD Engineers.160 MLD Salauli Water Supply Scheme at Xelpem, Sanguem, Goa.
- Operation and maintenance of 160 MLD Salauli Water supply scheme at Xelpem, Sanguem.
- Laying, jointing, hydraulic testing and commissioning of 1400mm dia x 500 m long M.S.pipeline in vulnerable stretches.
- ➤ Identification, formulation of 200 MLD Salaulim water supply augmentation scheme on "Build, Own, Operate and Transfer" basis. Computation of water tariff.

Organisation: Goa Pollution Control Board

Designation: Member Secretary

As Member Secretary of Goa State Pollution Control Board, he was responsible for implementation of the Prevention and control of pollution Acts for (a) Maintaining and restoring wholesomeness of water (b) Prevention & control of water pollution (c) Prevention, control and abatement of air pollution (d) Protection and improvement of environment. Enforcement of provisions of Water (P&CP) Act 1974, Water Cess (P&CP) Act 1977, Air (P&CP) Act, 1981, Environment (prot) Act, 1986. Consent management for establishment of industrial units and also commencement of operation of the industry.

Environmental Public Hearing for Industrial Projects listed in EIA Notification 1994.

Organisation: SNC -Lavalin Designation: Deputy Team Leader

Asian Development Bank assisted North Karnataka Urban Sector Investment Program for providing basic urban infrastructure – water supply, sewerage and sanitation, urban drainage, urban roads, poverty alleviation, etc for seven urban local bodies – Belgaum, Nippani, Gokak, Banahatti-Rabakavi, Jamakhandi, Ilkal & Badami.

Organisation: HNB ENGINEERS, PUNE Designation: Vice President, (Engg).

Popularising improved **BioTower Technology** sewage treatment process so also Combitreat- anaerobic and anaerobic process of sewage treatment in view of low power consumption, reduced land area, low capital investment, flexibility in operation due to shock loads and quality of effluent on par with any advanced aerobic suspended growth process sewage treatment system. Construction of 15 mld sewage treatment plant on turnkey basis for Govt of Goa. Pollution of Colva Creek- Findings and recommendations to mitigate problem.

Organisation: GIDSL, UK Designation: Senior Advisor

Visited Accra, Ghana for studying the feasibility of rehabilitation & augmentation of water supply schemes for urban and rural habitations.

Organisation: Globe Consultants, Bangalore-Karnataka

Designation: Team Leader.

- A- Formulation of **Detailed Scheme Report-DSR under World Bank** assisted "Jal Nirmal programme" to provide water supply and sanitation to 27 villages of 10 Gram Panchayat of Belgaum Batch II, Karnataka implementation of these basic infrastructure works. Globe Consultants as Support Agency-Technical is meant to act as facilitator and also assist to empower rural community
- B- Formulation of detailed project report in respect of providing **Urban Infrastructure for Rural Areas-PURA** (Govt. of India sponsored Rural Development scheme) to 13 villages of Kampli cluster of Bellary District, Karnataka.
- C- Formulation of Conceptual Design Report-CDR to provide safe drinking water under Rajiv Gandhi National Drinking Water Mission to (I) 29 villages (18 chemically affected and 11 No Safe Source) of Bhalki Taluk and (II) 28 villages (18 chemically affected and 10 No Safe Source) of Aurad Taluk of Bidar District.

Participation in specialized trainings & seminars:

- i) Attended training programme on "Planning, Appraisal & Implementation of Water Supply & Sanitation Projects (1991-92)" at Development & Project Planning Centre, University of Bradford, Bradford, U.K.
- ii) Attended a short course on "Waste Recycling Utilisation for Agriculture" (March 1975), sponsored by CPHEEO, Ministry of Works & Housing, Govt. of India and conducted by the Department of Public Health Engineering, College of Engineering, Guindy, Madras, India.
- Participated in the Executive Development Programme for Engineers on "Understanding the finer aspects of Indian Contact Act and Arbitration clause" 5th to 15th June, 1989 organised by the Goa Institute of Management Studies, Miramar, Panaji, Goa-403001.
- iv) Attended training course on **"Environmental Management and Municipal Authorities" (10-19 May, 1993)** at the Indian Institute of Public Administration, Indraprastha Estate, Ring Road, New Delhi 110 002.
- v) Attended training course on "Formulation and Financing of Urban Water Supply Projects" (29th Sept. 12th Oct.1993) sponsored by CPHEEO at the Indian Institute of Public Administration, Indraprastha Estate, Ring Road, New Delhi 110 002.

- vi) Attended training programme on **"Environmental Management"** (December 11-16, 1995) sponsored by Ministry of Environment and Forests, Government of India and conducted by Administrative Staff College of India, Bella Vista, Hyderabad.
- vii) Attended World Bank aided Indo-British training programme on "Environmental Impact Assessment of Industrial Projects" (Jan 29- Feb.9, 1996) conducted by NEERI, Nagpur and sponsored by Central Pollution Control Board New Delhi and British Council, England.
- viii) Attended training workshop on "Leakage detection and Waste Prevention in water supply distribution system" on 21st, 22nd February, 2003 conducted by the Public Works Department, Govt. of Goa, Altinho, Panaji & Goa Polytechnic, Altinho, Panaji-403001, Goa.
- ix) Attended work shop on "Public –Private Partnerships (PPP) for Water Supply and Sanitation Service Improvements Opportunities in Karnataka" held on July 1, 2009 organized by Asian Development Bank and Karnataka Urban Infrastructure Development and Finance Corporation Government of Karnataka Undertaking.
- x) Indo French Seminar on "**Protection of Water Resources" (27-28 Sept. 1989)**, at Chennai organised by French Agency for Technical Industrial & Economic Co-operation (ACTIM), HYDROPLAN (France) and French Trade Commission, Delhi & Bombay, Water & Power Consultancy Services (India) Limited (WAPCOS), New Delhi.
- xi) Participated in the UNICEF sponsored workshop in "State Programme of Action for Children and Formulated Draft Plan for Water Supply and Sanitation" (1994-95)
- xii) Attended "WEF-TECH ASEA" conference on Water & Waste Water in March 1998 at Singapore.
- xiii) Indo-French Water meet on "Management of Water Resources" (12th, 13th November 2000) at Bangalore, India.
- xiv) INDO BRITISH PARTNERSHIP, Represented Thames Water Asia (UK Company) as a part of Business Delegation under British Outreach Programme in Goa (28th & 29th August 2003) led by British Dy. High Commissioner, Mumbai.
- xv) "Environment, Industrial Hygiene Practice & Health Risk" (March 1998) in association with National Institute of Occupational Health, C.S.I.R, Ahmedabad, Gujrat & Goa State Pollution Control Board, Panaji.
- xvi) "Hospital Waste Management" (May 1997) in association with fine Envirotech Engineers, Mumbai & Goa State Pollution Control Board, Panaji.

Publications:

- I) Research paper titled "Characterisation of Textile Wastes and Recovery of Caustic Soda from Kier Waste" was published in:
 - i. Environmental Health, Vol.13, No.2 120 127 (1971) and
 - ii. Colourage, Vol XVIII No. 13, 30-33, July 1st, 1971.
- II) Booklet on "Women and Water (1998)" prepared by Goa State Pollution Control Board.

Member of Expert Technical Panel (ETP):

- ➤ In Nigeria (1985-86), Bauchi State Water Board(BSWB), Bauchi,, Nigeria nominated him as one of the members of the Expert Technical Panel (ETP) to scrutinize and recommend one of the competent agencies to under take self financed 10 MGD Gubi Dam Water Supply Project comprising of intakeworks, 800mm dia pipeline, 10MGD water treatment plant, clear water pumping machinery, pumping main, storage reservoir, distribution system, etc.
- Directorate of Municipal Administration, Govt. of Goa July 1999 co-opted him as one of the technical experts on the committee to assist Mormugao Municipal Council MMC for the establishment of municipal solid waste treatment plant for aerobic bio conversion of MSW. Based on the technical advise of the technical committee, MMC established the treatment plant for aerobic bio conversion of MSW into organic manure.

Commonwealth Service Abroad Programme:

Enrolled on the Roaster of Commonwealth Secretariat, Pall Mall, London SW1Y 5HK as Environmental Engineer (Roaster Regd. No. 302220 of 8.6.2001).

Memberships of Professional Organisations

Member - Indian Association for Environmental Management-MIAEM (LM657).

Member - Indian Water Works Association - MIWWA (LMO3724).

Member - Indian Environmental Association - MIEA (A39).

Member – Association of British Scholars (ABS) Goa Chapter.