Curriculum Vitae

Engr. Rajasegaran KUPPUSAMY

Dipl. Engr; AASc; B.Sc.; M.Sc.; DM (IFRC - (TISS -TATA)

Experience: Humanitarian Crisis Engineering - Project Management
Skills & Expertise: Emergency Crisis Community Development Infrastructure Projects

- 1- Qualifications
- 2- Experience, Skills and Expertise:
 - Academic Institution
 - Corporation
 - United Nation (UN Migration Agency)
- 3- UN International Humanitarian Relief Response Field Mission Work
- 4- Training Provider HRDF (Malaysia) And UN IOM (CCCM, WASH Infra, Shelter & Settlement Projects)

5-. Publications

Career Objectives

Experienced project management professional capabilities in managing major infrastructure construction projects. Devoted over 36 years with international corporation overseeing new green field airports and railways. Last 15 years served united nation migration (UN IOM) agency in humanitarian relief mission overseeing emergency response disaster management programs worldwide.

Specialty area in civil infrastructure in economic recovery community development projects for shelter, schools, hospitals, WASH (water and sanitation), flood controls drainage system and IDP / Refugees camp construction. Additional skills in capacity building training humanitarian field workers in emergency disaster response projects. Supervised more than 200 field workers and technical staffs in engineering planning, design, and QAQC construction management. Recognition given by UN stakeholders for excellent project management leadership and communication skills working in challenging and difficult environment projects in Middle East and South Asia.

Capable and willing to lead as technical advisor and project coordinator in emergency response projects in challenging field missions with UN partners, NGO's and local state government. Willing to up short-term assignment and travel upon short notice.

1- Qualifications

- ❖ Disaster Management (post graduate certification program), IFRC TISS, (TATA Institute Strategic Studies, India, and International Federation Red Cross (IFRC Geneva 2014)
- Master of Science Construction Project Management, CSU Fort Collins, Colorado USA, 1994
- ❖ Bachelor of Science Industrial Construction Management, CSU Fort Collins, Colorado USA, 1989
- ❖ A.A.Sc Degree: Building Construction Engineering, Milford College, Nebraska USA, 1987
- Diploma: Building Engineering, Malaysia, Federal Institute Technology, Kuala Lumpur Malaysia 1982

2- Experience, Skills and Expertise:

- **❖** Academic Institution Sr. Lecturer:
- Federal Institute Technology (FIT), Engineering College, Malaysia, 1978-1985,
 - Subjects Project Management subjects (Planning, design drawings, Construction materials)
- International Corporations:
- URS Greiner- Morrison Knudsen City of Denver (Partners), USA.
 - ❖ Project Engineer (Project Management Team), New Denver International Airport, Denver Colorado USA 1990-1994,
 - ❖ Sr. Planning and Construction Manager, URS Greiner KLIAB Malaysian Government (Partners), KLIA 1 New Greenfield Airport Project, Malaysia. 1994- 2000
 - ❖ Sr. Project Manager, KLIA Consultancy Services Malaysian Government KL Monorail Construction Project, New Malaysian KL Monorail Project, Malaysia 2000-2006

United Nations Agency – International Organization for Migration (UN IOM), Humanitarian Aid Agency (Summary work description below)

- Technical Consultant, Emergency Post Crisis Shelter construction projects, Jogjakarta Indonesia, 2006-2007
 - **Technical Construction Manager**, Emergency Post Crisis Shelter Projects, Aceh Indonesia, 2007 2009
 - **Technical Project Manager** Intercepted Migrants Immigration Shelter Projects, Tanjong Pinang, Batam, and Kalideras Jakarta Indonesia, 2008 2009
 - Technical Advisor QAQC Manager, Construction Health & Educational Facilities (CHEF-EDID), Hospital, Colleges and Universities, Kabul Afghanistan, 2009 2013
 - Technical Consultant (STA) IOM UNDP Facilities Space Planning, Nepal, Katmandu
 - Sr Shelter & Settlement Officer / Sr Engineer —Rehabilitation and new greenfield camp construction for IDP/ Refugees and shelter projects, Iraq mission 2014 2018
 - Head of Technical Engineering Department Planning, Design and Construction Management emergency, reconstruction and economic (Community) development projects for multiple program support as technical (planning & design) and construction (QAQC supervision) unit, Iraq Mission, 2018 -2020
 - Technical Design Audit Review Consultant Provide engineering and construction management (Home Based) project advisory and technical design reviews, procurement support in tendering process. Undertaking project planning, design, construction management multiple economic community infrastructure development projects, IOM Kabul April 2021 – September 2021
- 3- United Nations International Humanitarian Relief Response Mission (UN IOM Indonesia (Aceh, Djokjakarta, Jakarta, Batam, Tanjong Pinang), UN IOM 2006 2009, Indonesia
 - 2006-2007:
 - ❖ Technical Research and Development Consultant, IOM Jogjakarta, Indonesia, 2006 -2007 Undertake Research and Development (R&D) seismic sustainability bamboo structure low-cost residential unit with UN IOM - Gadjamata university, Jogjakarta, Indonesia

- ❖ Fabrication and project implementation Seismic tolerance sustainable durable solution transitional Shelters residential housing project.
- ❖ Technical consultant for UN IOM Jogjakarta during emergency Post Crisis (EPC) shelter and Infrastructure Reconstruction Projects
- Provided technical training shelter and Water supply and Sanitation (WASH) response for humanitarian workers in the field

• 2007-2008:

- ❖ Technical And QA-QC Construction Manager, IOM ACEH, Indonesia, 2007 2008
- Undertake Research and Development (R&D) seismic sustainability pre-engineered (prefabricated) reinforced concrete structure low-cost residential units with UN IOM and Indonesia government (JV) research testing laboratory in Bandung, Indonesia. Joint project with UN IOM Aceh Bandung Institute for material research, Indonesia
- ❖ Technical QA-QC manager in project implementation Emergency Post Crisis (EPC) Shelter, WASH, and Infrastructure Reconstruction Projects
- Provided technical training permanent housing shelter and Water supply and Sanitation (WASH) response for humanitarian workers in the field

2008-2009:

- ❖ Sr. Technical And QA-QC Construction Manager, Undocumented Migrants (MCCIP) Project
- ❖ Design Build 600 bed capacity New Detention Center Project, Tanjug Pinang, Bantam and Jakarta, Indonesia.
- Oversee project management, supervised construction 3 story, 600 intercepted migrant inmate's capacity facility
- Manage and supervise the rehabilitation existing detention facilities in Batam and Jakarta, Indonesia
- Provided project management technical training for local government, technical staffs, UN technical engineers

(3.1) UN IOM Afghanistan: 2009-2013

Technical Advisor Design & Construction Management (QAQC Manager),

- Construction of Health and Educational Facilities Projects (CHEF EDID), Afghanistan, 2009
 2013
- ❖ Implemented Planning, design, and construction 50 and 100 Bed Hospitals, Universities, Health clinics, Schools and Government Administration facilities
- ❖ Directly supervised as QA-QC Manager, CHEF- EDID Projects, Afghanistan
- ❖ Supervised more than 20 Quality Control engineers throughout Afghanistan
- Provided project management technical training for local government technical staffs, UN technical engineers

(3.2) UN IOM Nepal: (Special Short-Term Assignment), 2013-2014

Technical Consultant, IOM Nepal & UNDP Nepal

- Undertake UN compound planning & design for space utilization studies
- Performed seismic design audit and assessment for IOM new Building, Nepal, Katmandu (2014)

(3.3) UN IOM IRAQ: 2014 – 2020

Sr Field Engineer, Shelter and Settlement Program Officer (November 2014- 2017)

- ❖ Undertake site planning, design development and construction management new greenfield IDP (internal displaced people) camps construction in Shekhan, Dawodiya, and Mamrashan, Gayarah, Haj Ali (Mosul) governorates
- Undertake CCCM camp care and maintenance projects with capacity building trainings for IDP's and field engineers in IDP camps Baghdad, Iraq
- Supervised shelter rehabilitation and reconstruction projects for IDP returnees damage houses include upgrade informal and critical shelters
- Designed and supervised construction management Low Cost Transitional and Core Shelter housing projects for returnees and displaced communities in Al Alam, Tikrit Salah Al Din and Kirkuk, and Mosul Iraq
- Contributed technical project management training in DRR resilience planning, preparedness, and response and QAQC construction management humanitarian field workers

(3.4) UN IOM IRAQ, 2017- May 2020

Head of Technical Engineering Department (TEU), November 2017 – May 2020

Program Support Multitasking Portfolio (Duties and Responsibilities)

- Undertake technical and engineering support functions in overall humanitarian response construction project
- Undertake design planning, construction contracts and documentation development, provided technical training, supported UN procurement, and bid evaluation committees in tender, performed QA-QC field supervision during construction and completion handover phase
- ❖ Undertake coordination with management and procurement unit in construction contract disputes resolution (pre construction and post construction phase)
- Develop, shared, and directly undertake capacity building training international standard practices (IBC, UBC and Sphere standards construction tools, techniques, and documents for construction in all UN IOM Iraq program
- Developed, contributed, and published international standard humanitarian project construction documents (Technical drawings, Bill of Quantities, Technical Specifications, Work plan and Work schedule)
- Contributed to providing technical and budget proposal technical papers for multiple UN donors with IOM PDU program
- ❖ Undertake construction management (QA-QC supervision) with field engineering team
- Undertaken technical project management training in DRR resilience planning, preparedness, and response management in flood mitigation, camps storm water management, and project management training for humanitarian field workers

(3.5) UN IOM Bangladesh, Cox Bazar: (STA Assignment - Rapid Surge Response Team), 2017: Camp planning and site development response team, Rohingya refugees Camp

- Contributed to Disaster Risk Reduction (DRR) Preparedness and Response project development world largest refugee's camp
- Undertake technical and engineering quick rapid response site planning and assessment services for accommodation major surge Rohingya refugees in emergency transit camp centers in Cox's Bazar, Bangladesh.
- ❖ Development and implementation disaster risk preparedness and mitigation response infrastructure projects in camp access roads, hillside slope protection with retaining walls, storm drainage and culvert crossing and pedestrian and vehicle bridges
- Undertake planning and design and construction multiple DRR projects (flood mitigation storm drains, roads, retention walls, shelters, others)

(3.6) UN IOM Kabul, April 2021- Current

Technical Design Review and Audit Consultant – Home Based external project advisor, trainer, mentoring and auditor technical documents

- ❖ Undertake online virtual project mentoring (M&E), training, auditing and assessment function including virtual supervision project for IOM RADA engineers and CDP development teams
- Provide planning, design and construction management technical audit and advice and virtual supervision ongoing multiple economic infrastructure development projects under IOM RADA program
- Provide technical support IOM procurement and logistics unit development tender preparations, review, and audit construction documents for construction major economic and community development infrastructure projects (Water & Sanitation, Irrigation's systems, schools, hospitals, other public infrastructure projects)
- Review, advise and upgrade existing IOM Kabul procurement systems (construction contracts documents) standardization with IOM global (GPSU guidelines) procurement standards used by other field missions worldwide

<u>4.0 Freelance Training Provider (Ad hoc Basis</u>), Workshops, Seminars, Conference (Include Virtual Online Training, Coaching and Technical Advisory Services)

Endorsed Trainer – Human Resources Development Program (HRDF Malaysia), Project Management Body of Knowledge (PMBOK), Disaster Risk Reduction Management (DRR) Resilience (Emergency, reconstruction infrastructure projects), CCCM Global (UN IOM)

• 2005-2021 (16 years):

- Project Management courses (PMBoK) Essential project management knowledge and practices in engineering, and construction management. Independent trainer for KLIA Training College (Mal), CIDB (Mal), UiTM (Mal), NIOSH(Mal), others reference available in website: www.cmtss.com
- ❖ DRR Project management (Disaster response PM) Pre and post crisis emergency and reconstruction humanitarian response under United Nation IOM. Appointed trainer for construction QA-QC inspection in humanitarian field mission. Training and coaching for field workers during emergency disaster crisis and reconstruction.

- ❖ DRR Resilience Project Management Training Contribution in planning, design, construction workshop training on refugees' camps and shelter flood prevention and mitigation methods during emergency humanitarian response (Long Term IDP and refugees camp settlement projects. UN mission in Indonesia, Afghanistan, Nepal, Bangladesh (Cox Bazar) and Iraq.
- Certified TTT in CCCM (Camp Coordination Camp Management Duly certified and approved UN humanitarian disaster response projects trainer. Training provider in refugees and internal displaced camps and shelter planning and construction management including camp and shelter care and maintenance
- HRDF Technical Project Management Training (Ad Hoc) Experienced technical and engineering trainer in planning, new normal construction contracts and new normal (CV 19 SOP Guidelines) methodology of approach in construction project management) for small, medium-large scale rapid / quick humanitarian aid response construction development projects.
- ❖ Technical Training Design Auditor Home Based external project advisor, trainer, mentor, auditor in Planning, Design, Construction Management multiple economic infrastructure development projects. Teach IOM technical support staffs UN agency (UN IOM procurement & logistics (GPSU)) standard guidelines approaches in project management principles in planning, contract management design plan, bill of quantity (BOQ), technical specifications, work plan documents for UN IOM field mission in Indonesia, Afghanistan, Nepal, Bangladesh (Cox Bazar) and Iraq.
- Guest Lecturer (Ad Hoc Basis) institution higher education (Colleges and University) Climate Change – Humanitarian Disaster Crisis and Response (Iraq Context), lectures in University East Anglia, UK, October 2018, and other colleges, Refer website www.cmtss.com for references
- Full Time Technical College Lecturer (Fmr), Federal Institute of Technology (FIT), Malaysia
 Lecturer major engineering courses for undergraduate students, 1978 1885 (7 years)

5.0- Publications: UN technical field workers handbook and guidelines for humanitarian relief and response projects

- ❖ 2006: Building Construction Handbook for undergraduate engineering college students.
- 2009-2013: Quality Control Manual for construction health and education facilities (CHEF), IOM Kabul.
 - <u>Safety</u>, <u>Health and Environmental Plan</u> for construction health and education facilities (CHEF), IOM Kabul.
 - Operation Maintenance Plan for construction health and education facilities (CHEF EDID) projects, IOM Kabul.

2014-2018:

- Quick Field reference handbook for humanitarian workers Shelter rehabilitation for returnees damaged houses, IOM Iraq.
- <u>Standard Operational Procedures (SOP) reference guidelines</u> "Standard international standards construction documents for IOM Humanitarian office / field engineers

- WASH intervention (water and sanitation) guidelines for IOM Humanitarian office / field engineers. IOM Iraq construction project, case study more than 200 projects through throughout Iraq
- BOQ (Bill of Quantities) standard international CSI- Fedics guidelines for IOM Humanitarian office / field engineers. IOM Iraq construction project, case study more than 200 projects throughout Iraq
- <u>Disaster Risk Reduction and Response (DRR & R Resilience) guidelines</u> In camp and out of camp flood mitigation storm water drainage, culverts, and roads report. Case study three (3) largest long-term IOM IDP camps construction and management, Mosul, Ninawa Iraq. Camps construction and management by IOM's and Mom governorate

2019-2021

- WASH reference booklet (Water Supply and Sanitation) reference handbook, Humanitarian mission workers guidelines in field work
- <u>Bill of Quantities (BOQ) reference booklet</u> for Humanitarian mission workers undertaking shelter and infrastructure construction projects
- Workers Dormitory Space Planning, Standard Operational Procedures and Guidelines for construction, manufacturing and service industry workers living quarters. Space planning for living floor space, recreational facilities, medical quarantine, and isolation facilities. Conformance with new normal public health and safety standards (minimum conformance, Malaysian contract workers housing building law)

6.0 Professional Certifications: 2009 - 2021

- Disaster Management –IFRC- TISS (TATA Institution Strategic Studies) Geneva India partnership
- Emergency Preparedness and Disaster Response Management, OSHMA- MSOSH, Malaysia
- ❖ Professional Certification in Project Management, Veritas University College, Malaysia
- ❖ Covid 19 Safety and Health Standdown, workplace environment, OSHMA- MSOSH, Malaysia
- CCCM Camp construction, UN IOM Migration Agency, Geneva
- ❖ HRDF Certified Trainer (Malaysia) Project Management

Reference available in personal website (https:// <u>www.rajakuppuswamy.com</u>), email: <u>rajakuppuswamy2003@gmail.com/drrfronliner@gmail.com</u>,

LinkedIn: https://www.linkedin.com/in/rajasegarankuppusamy/Mobile phone: +60125921608 (Malaysia)

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