Title: Assessment of Health sector Human Resource and Employment related issues, demand and supply of human resource with focus on sustainable development of the Sri Lankan Health sector human resource.

1.1 Background and Rationale

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Current Sri Lankan population is 21.7 million (2018, Central bank Report) and from that 8.38 million is the labour force (2018, Central bank Report). According to 2018 central bank annual report, labour force participation rate is 51.8 percent and current Sri Lankan unemployment rate is 4.4. Seventy percent from the total population lives in the rural areas

Twenty percent point five of the employees from the current labour force is engaged in the agriculture sector; Twenty seven point nine percent works in the industry sector and forty six point six works in the Service sector. From them 68.1 percent are worked in an informal arrangement. Therefore, larger proportions are employed in vulnerable forms of economic activities.

Sri Lankan population is fast aging and growth has been contained in the recent past. Over 60 years of age population accounted for 12.4 percent of the population in 2012 and forecasted to be 16.0 in 2021, 19.9 in 2031 and 23.3 in 2041. This has many implications relating to labour force activities and dependency. Sex ratios are also changing. By 1981 sex ratio had been 106.1 and by 2001 it was reduced to 97.9 and by 2012 to 93.8 percent. There are more women than men in formal working places and many higher educational institutions. Fertility rate among childbearing age women continue to decline from 3.4 children per women in 1974 to 2.4 in 2012 and further reduced to 2.2 in 2016 (Dept of Census) Life expectancy of women also on the increase where life expectancy at birth of a women had been 63.7 years compared to 63.3 years for men during 1962-64 period. This trend has been changed during the formative years and by 2011 this has changed to 68.8 years for men and 77.6 years for women.

There are issues on awareness related to the nutrition, occupational health and safety among the work force. It is found that in most of the Sri Lankan work arrangements especially informal arrangements have very low attention placed on maintenance of the occupational health and safety standards in their work place. On the other hand there is lack of human resource to impose the low in the means of inspection, conduct awareness and training. There are no proper mechanisms and human resource developed in relation to waste disposal; specially hazards substances.

Non- communicable diseases incidences are abbreviating with the present day lifestyle. That may have linkage with the present day work arrangements. There should be synchronization of lifestyle, work lifestyle dynamics in order to betterment of the employee. During a survey conducted by the Department of Census in 2014, it has been reported that

in the population 39 percent were reported to treated for High Blood Pressure, 30.4 percent for Diabetes, 13.8 percent for Asthma, Heart disease 9.0 percent and Cancer 1.7 percent.

And also poverty and malnutrition has direct relationships with the above informal arrangements. This is crucial in rural areas. Studies have to focus to find out means to human resource development in order to ensure daily minimum calorie intake and balance nutritional diet for every citizen. Maternal health and nutrition, feeding and infant and child health and nutrition, health and nutrition of the young generation, health and nutrition of the working age population have to consider. Human resource requirement projections and existing supply projections in human nutrition sub sector with spacial sensitivity is needed for future planning and policy decisions. Plantation agriculture still plays a vital role in our economy. Majority of larger proportion of plantation workers do not get balanced diet yet; therefore productivity is very lower than actual potential.

Due to unorganized and scattered nature and prevalence of wider micro and small institutional/organizational arrangements, productivity; especially labour productivity remains very lower than the actual potential level which can be achieved with the proper human resource (With proper nutrition). Malnutrition among the workforce may lead to that lower labour productivity.

Physical exercises and sports are vital for proper human resource development, maintenance of the work force and recreational purpose. Early childhood, young generation, working age and elderly people should be engaged in some kind of physical and/or mental sport or exercise system as a preventive health act or capacity development act. Therefore, have to critically analyze the need in this health sub sector and have to analyze the gap with supply projection and demand projections with spacial sensitivity.

According to the demographics of the our country dependents getting higher in age categories of below 15 years of age and more than 60 years of age. Fulfillment of the health needs of those categories is critical and higher emphases have to be given to human resource requirements of those dependents; especially of the elderly people. spacially sensitive data is required.

Unorganized Drug administration and lack of proper awareness also found widely .Most of the pharmacies are run by the untrained workers and there is huge shortage of the qualified pharmacists to run the existing pharmacies. Drug production also needs human resource and it is identified as highly profitable business in present day context. Foreign and domestic investments have been diverted in drug production to the country; and that need humane resource.

Ayurvedic and traditional medical system also prevails in both organized and unorganized formas. Human resource needs projection and supply projection is needed to develop this sub sector in sustainable manner. Development of human resource in this subsector has an advantage on gaining foreign currency.

Preventive health and community health related human resource needs have to analyze. AIDS and other transmitted disease can seriously harm the human resource in the country. Public health inspectors and mid-wife roll are critical. And also clinical waste and slaughter house waste disposal, general household waste disposal, industrial waste disposal also comes under this category.

Health sector related supportive services are vital for effective functioning of the sector. Each sub sector has different human resource needs and synergistic effect of all will contribute to the overall performance of the sector. Standardized and consistent quality human resources are needed in this sub sector. Medical lab technicians,x-ray/CT-scan/MRI-scan/PET-scan, Eco-cardiograph, Ultra Sound Scan ,ECG, Blood sampling, Blood bank related operations, dialysis, drug and equipment storage and supply, sub fertility related technicians, technicians in dental treatment related are needed for proper functioning of the health sector.

There is an issue of people with disabilities and that accounts approximately for 7 % from the total population. People with mental illnesses are abbreviating; workplace stresses have a considerable linkage with those mental illnesses.

Hence, Health sector cannot function without proper coordination its sub sectors; special emphasis have to be placed on occupational health and safety, maternal and infant health, nutrition ,workplace related stress and mental health, prevention of non-contages diseases ,maternal health ,care of elderly population , standardization of the human resource in the medical support servicers

1.3 Main Objective of the Study

Main objective of this assignment is to quantify the Human Resource demand for each Health subsector in all possible skill categories for five consecutive years from 2021- to 2025 in order to align the current human resource supply forces to meet the future Human resource demand in Sri Lankan Health sector.

1.4 Specific objectives

- 1. Study the Sri Lankan Health sector policy context and policy fit related to Human resource development.
- 2. Make scientific projections of Human resource supply and demand in relation to the common Health sub sectors for 2021-2025 with a special sensitivity (provisional)
- 3. Identify skills demands, skill supplies and gaps in each profession that act as barriers to labour in each sub sector.
- 4. Identify methods to formalizing the informal Health arrangements
- 5. Identify human resource development requirements to mitigate the risk and vulnerability in Human resource supply which required to optimal functioning of the economy and day to day social lifestyle
- 6. Identify health related extension human rescores development need in each sub sector
- 7. Identify the Health related training providing/human resource developing institutes geographically with their deliverables.
- 8. Identify strategies and activities which have comparative advantage which can produce higher return on labour

2. Scope

The Researcher /consultancy institute should work towards addressing the interface between, on the one hand currently available skills/ Human resources, and those projected in the future from 2021 to 2025 time frame. On other words Health sector labour market skill, Human resources / demand in short, medium and long term including all sub sectors. The higher emphasis is expected to be given to the informal sector Health arrangements, estate sector and Health extension related human resource development to achieve higher productivity, tap comparative advantage of our human resource and uplift nutritional level of the country as a whole. Following sub sectors should be covered and, current Human resource /skill profile and supply side projections and projected demand side human resource /skill profile in each consecutive year should be presented in detail and quantitative manner. (with job titles). Human resource /skills supply projection is needed in order to identify the gaps for initiate actions to plan the supply Occupational health and safety

- 1. Nutrition/Nutritional Advisory/food science
- 2. Preventive health and Curative health
- 3. Pharmacology/pharmacists/drug production
- 4. Quality control systems
- 5. Storage and logistics and quality management
- 6. Para Medical /Laboratory tests/human resource need for effective health service delivery
- 7. Mental health/Psychiatry and psychology
- 8. Physical disability

- 9. Management of elderly people
- 10. Sports
- 11. Medical research occupational health and safety

3. Bidding process

The bid document should clarify the detailed methodology in the in the technical offer which will also have repercussion on the financial offer. The latter must reflect all the costs that are to be associated with the study particularly as directed by the proposed methodology.

4. Deliverables

- An inception report with detailed methodology, timeline, and budget.
- Draft report submitted and discussed with MOL/DME
- Final Research report covering specific objectives with the projected Human Resource/skill projected supply; projected human resource demand/skill demand for each health subsector, with all possible skill categories for five consecutive years from 2021- to 2025 with a spacial sensitivity. (up to provincial level)

5. Duration of the study

The study will last 10 weeks.

6. Language preference

English

7. The duty location

Sri Lanka

8. Payment

Payment for this contract will be based upon a competitive detailed budget proposal. Candidates are therefore invited to present such a budget proposal.

9. Terms and conditions of the Payment

Payments shall be made according to the following schedule:

- Twenty per cent (20%) of the contracted amount, after submission of the inception report and acceptance;
- Forty per cent (40%) of the contracted amount, after the first draft is delivered and accepted.
- Forty per cent (40%) of the contracted amount, upon final production delivery of the study.

10. Qualifications

- ✓ A postgraduate degree preferably at PHD level in health sector/ economics or related field.
- ✓ At least 10 years of experience in conducting quantitative and qualitative health related economic research;
- ✓ Relevant publications in reputed journals;
- ✓ In-depth knowledge of Sri Lanka's economy and institutional framework is required;
- ✓ Experience in working with government officials is welcome;
- ✓ Ability to do statistical projection and prepare statistical models for sub sector HR demand;
- ✓ Experience in conducting studies to assess the impact of Health in development, health related economic policies on human resource development is welcome;
- ✓ Previous work experience with international organizations
 - (*Acceptance of qualification is with the hold of MOL/DME)