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

1.1 Background and Rationale

Current Sri Lankan population is 21.7 million (2018, Central bank Report) and from that 8.38 million is the labour force. According to Labour Force Survey of Department of Statistics (2018), labour force participation rate is 51.8 percent and current Sri Lankan unemployment rate is 4.4 percent of the Labour Force. Seventy percent from the total population lives in the rural areas and majority of them are engaged in agriculture directly and/or indirectly. GDP contribution from the agriculture sector is 7%. (2018, Central bank Report)

Twenty six percent of the employees from the current labour force are engaged in the agriculture sector; from them more than 80 percent are worked in an informal arrangement. Therefore, larger proportions are employed in vulnerable forms of economic activities. And also poverty has direct relationship with the above informal arrangements. Studies have to focus to find out means to promote decent work in the informal agricultural arrangements. By its very nature of operation the agriculture sector is divided into two main sectors as Domestic agriculture and Plantation crop agriculture. The domestic sector dominated by paddy cultiviation where most of the well irrigated lands are being used to cultivate paddy mostly in Maha season and to a lesser extent in Yala season. The domestic sector is also crowded with cultivation of many other crops both in home garden and other agricultural lands. Land policy to an extent restricts other crop cultivation in irrigated asswaddumized lands prepared for paddy cultivation. Non paddy agriculture production dominates coarse grains, Fruits, vegetables and other edibles.

Plantation sector is dominated by Tea, Rubber and Coconut cultivated in large land holdings. In addition minor export crops which forms a sub category away from domestic and plantation sectors. Main crops come under the category are Cinnamon, Pepper, Cardamom, Nutmeg, beetle.

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 which can be achieved with the proper human resource development. (With Training and knowledge upliftment)

Plantation agriculture still plays a vital role in our economy. Majority of larger plantations, medium scale plantation and small holders in that sector face labour scarcity. Young generation does not show preference to work in this sector and they move towards townships for convenient and reputed jobs even at the lower remunerations. Therefore, serious labour shortage will be experienced in near future in plantation agriculture. In the plantation and export agriculture crop sector majority workers are low skilled and semiskilled. Therefore, productivity is very lower than actual potential.

Prevalence of larger proportion of the agriculture sector employment may lead to economic vulnerability due to environmental, pest and disease problems. Only remediation is development of human resource to mitigate above/or manage above conditions. (Improved irrigation management, protected culture, pest and disease management related human resource development and continuous research)

Low level of improved technology adaption can be observed in all over the country. Most of the traditional farmers do not have enough exposure and training on new sustainable appropriate technologies and possible mechanization in agriculture. The technology transfer, advisory and farmer empowerment related extension service posses serious issues that are to be solved immediately. Public sector extension service cannot cater effectively to the clients who need the service; most of service needed persons are excluded from the system in present extension approach. All the agriculture communities have to uplift simultaneously.

There is phenomenon of rural aging; young generation moves away from the agriculture and the moves towards cities for better working environments. Only elderly people remain in the rural area and that area faces serious gradual labour shortage and it makes difficult to sustain the rural agriculture in future.

Floriculture is an emerging sub sector in Sri Lanken agriculture. Young people can be attracted towards this sub sector and that still can develop further. Human resource development in this also needed in order to develop this.

Hence, resolve the structural low productivity or low contribution issue to the national economy by agriculture compared to total human resource engagement, promoting decent work in informal sector, mitigate economic and environmental vulnerability in agriculture, establishment of proper extension service which accommodate all excluded farmer communities. Develop areas which young people can engaged and effectively contribute can be shown as main guidelines to this study to asses human resource needs. Other than that export related and import substitute related human resource development demands have to asses. With all those issues country should tap the comparative advantages in each of the sub sector by developing human resource in a planned manner.

1.2 Main Objective of the Study

Main objective of this assignment is to quantify the Human Resource demand both in skilled and non skilled categories in a volatile economic environment and changing socio economical considerations and comparatively low productivity regime for each agricultural 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 agriculture sector.

1.3 Specific objectives

1. Study the Sri Lankan agriculture sector policy and policy fit in relation to Human resource development taking into account the "push" and "pull" factors relating to employment in agriculture.
2. Make projections on human resource supply and demand in relation to agricultural sub sectors as specified in section -2 for the period 2021-2025 with spatial sensitivity, participation by gender and by age categories (at provincial level) and constraints.
3. Identify Human resource/skill demand, supply and gaps (pl.see the section -2) in each agricultural sub sector

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 . On other words agriculture 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 agricultural arrangements and agricultural extension related human resource development to achieve higher productivity. Following sub sectors should be covered and, current Human resource /skill profile and supply side projections and projected demand side human resource /skills for the designated period should be presented in detailed 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 forces. The main five sectors in agriculture are;**

1. *Domestic non plantation Agriculture, (Paddy and other food crop sector, Vegetable and fruits)*
2. *Plantation Agriculture, Tea, Rubber, Coconut, sugarcane, oil palm ect.*
3. *Minor export crop sector (Cinnamon, Pepper, Citronella ,Arica nuts, Beetles etc)*
4. *Fisheries and Livestock sector (Dairy, Poultry, Piggery, Goat keeping including inland fisheries)*
5. *Horticulture/Floriculture/Agro -forestry*
6. *Manpower and technological requirement in relation to agricultural /fisheries/live stock including food processing ,storage and transport i.e*

   I. Plant breeding
   II. Plant protection/quarantine/integrated pest and disease management
   III. Plant nutrition/integrated plant nutrition management
   IV. Weed science/weed biology/integrated weed management
   V. Farm mechanization
   VI. Biodynamic agriculture
   VII. Organic agriculture
   VIII. Biotechnology/Tissue culture
   IX. Plant propagation and support activity to agriculture
   X. Value addition/post harvest management
   XI. Macro and Micro-irrigation
   XII. AGRICULTURE PRODUCTION UNDER controlled environment

3. Bidding process

The bid document should clarify the detailed methodology 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/NILES
- Final Research report covering specific objectives with the projected Human Resource supply and demand/skill supply and demand for each agricultural subsector, with all possible skill categories for five consecutive years from 2021- to 2025.

5. Duration of the study

 The study will last 10 weeks.

6. The duty location

Sri Lanka

7. Language

English

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 post graduate degree preferably at PhD level in Agricultural economics, economics, management, economic development, labour economics or related field;
- ✓ At least 10 years of experience in conducting quantitative and qualitative 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 sectors HR demand;
- ✓ Previous work experience with international organizations