

Maritime Labour Market Dynamics (MLMD) and Futuristic Approach in Developing Skilled Global Maritime Labour (SGML)

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Abstract: Oceans are very vital for humans because holding 97% of water, 70% of the oxygen we breathe, ecosystem, food, energy, trade and leisure. The globalized maritime industry with more than 74,000 merchant ships transporting 90% of the world's cargo with around 1.89 million seafarers. The world will be experiencing a few megatrends demanding high skilled workforce. Sustainable development is impossible without upskilled force. LMD is always changing, attributable to demand and supply, matching efficiency, innovations, high-tech systems, education level, productivity, unemployment etc. Maritime labour market data shows a decline in job offers. Supply and demand affected during recent times due to Covid -19 pandemic and the Russian / Ukraine conflict. This paper highlights MLMD and SGML and suggests a futuristic approach for remodeling maritime labour skills. A survey through IAMU member universities will present a very clear picture of the issue. Paper suggests approaching IMO/IAMU to introduce MLMS Course in collaboration with the ILO and other maritime stakeholders. It also suggests IAMU Maritime Skilled Labour Data Program (MSLDP), IAMU Maritime Labour Market Data Program (MLMDP), and IAMU Maritime Skilled Labour Standards (MSLS) according to maritime industry requirements.

Keywords: Maritime labour market, Labour skills, Future demand and supply, model course, up skills

1. Introduction: Oceans are very vital for humans because holding 97% of water, 70% of the oxygen we breathe, ecosystem, food, energy, trade, and leisure (1). Almost 40% of the world's population lives near the coastline (2). Masses had been living around the rivers and coastline for their survival. Oceans regulate our climate and weather, if streams do not transfer heat from the equator towards the poles, life on some parts of the earth will freeze. Food has always been a basic human need. Seafood is the most essential part of our daily food intake. It adds nutritional value like sodium, calcium, magnesium, etc. Fish only, being the diet of billions of people, accounts for about 16% of all animal protein consumed globally (3). Oceans can best be the source of feeding people compared to other animals on earth. These are also very vital for sustainable development by creating millions of jobs. An OECD report estimates that, by 2030, ocean-based industries will employ more than 40 million people worldwide (4). Roughly, more than 3 billion people in developing countries rely upon oceans for their livelihood. The globalized maritime industry with more than 74,000 merchant ships transporting 90% of the world's cargo with around 1.89 million seafarers (5). If the oceans were a country, it would have the seventh-largest economy in the world (6). Millions of workers executing maritime operations on hi-tech ships, ports, offshore installations, and terminals.

The world cannot survive without shipping and the shipping industry cannot operate without seafarers.

2. Shipping Industry and Seafarers: The shipping industry's role places it at the center of the world economy. It is a highly complex, innovative, committed, and global industry for the world's future sustainability with affordable import/export. Ships transport roughly, 11 billion tons of goods each year, which is around 1.5 tons per person based on the world population as mentioned by ICS. It is the cheapest mode of transportation. Fig-1 shown below explains the future of the shipping industry. Increasing human needs increases shipping as compared to population growth and relatively high GDP growth.

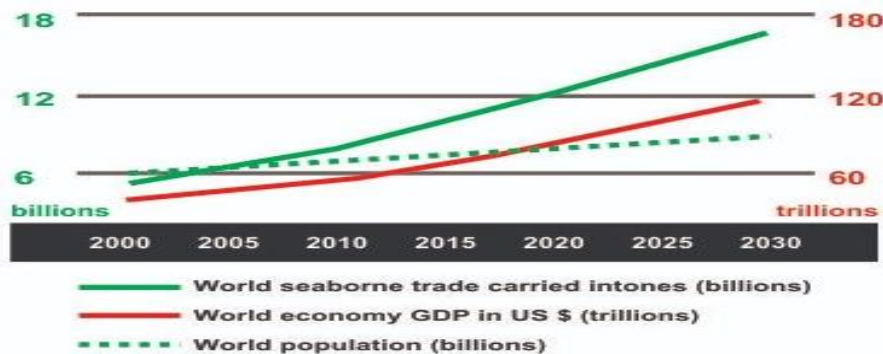


Fig-1 Predicted increases in world seaborne trade GDP and population (Source ICS)

Every global industry is striving for sustainable development. The Labour force in general and the highly skilled labour force are the keys to the success and sustainability of any industry. Despite its sensitivity, crucial and vital for global survival, it is very invisible and ignored as far as seafarers are concerned. Their due credit is not given. They are considered a highly paid and tourist type species. They are very brave, risk-taking, away from families, fighting against rough sea conditions, working round the clock, fatigued, stagnating lifestyle onboard ships and burning their midnight oil to run the global economic engine. If the world looks beyond their lucrative salary and fancy travelling schedule, they are the most neglected lot not only by the world organizations but by their countries also. "There are no ordinary citizens to witness the workings of an industry that is one of the most fundamental to their daily existence," Shipping is "the reason behind your cheap T-shirt and reasonably priced television. But who looks behind a television now and sees the ship that brought it?" Rose George writes in her book "Ninety percent of everything" "Life on the ship can be tough, and all personnel on board, goes through highly exhaustive and responsible work patterns. George then talks about the multi-cultural presence on board. However, not surprisingly, the number of Europeans and British seafarers is low, because of the exorbitant salaries they demand. The effect is so tremendous that, in 2009, Lloyd's List reported that Maersk had sent a memo that stated, 'Zero Recruitment in Europe' (p.59). Many global cruise liners are detained over wages and contracts, mostly ship owners' "make money" mindset, crew not looked after properly, safety laps, contracts, wages, and working hours, there are so many issues with the maritime labour market that no one is taking serious note of it. Some eyewash is done like seafarers' day, bill of rights etc. Global trade binds nations through shipping but little interest or capability at national and international levels when it comes to taking the challenging decisions of dealing with seafarers as stated by splash 247.

3. Survey Analysis: A survey conducted for analysis of the maritime labour market, job availability, skills, and IAMU role to develop a course and data for the labour market as well as availability of labour. The survey indicates the following:

3.1 Respondents from different countries and from maritime-related fields. A number of students in maritime faculties ranging from 200 to 4000 per year in different maritime majors like Nautical, marine engineering, port management, offshore installations, survey, transport, etc.

3.1.2 As for jobs available in the maritime sector, 33% of respondent's countries have more than 200000 jobs, 12% more than 100000 12% 50000 and 25% have less than 10000 jobs in their maritime sector. If we analyze the number of students and job availability, there is still a shortage of highly skilled labour as compared to job availability. (A wide range of surveys required for more details that are specific and that will be conducted during the IAMU research project)

3.1.3 About the conduct of "labour market skill course" in the maritime universities/institutes, 78% of respondents answered negatively. This encourages the development and introduction of this course by IAMU as well as IMO. That 22% conducting this course did not share the content, however, that is also not as effective as it could be to connect skilled maritime labour and the maritime labour market. Interestingly, 60% of the respondent's universities' other departments are conducting such courses.

3.1.4 As for labour market skills criteria/ standards, around 75% of institutes are following some criteria like STCW, ILO and some other international standards. However, we need to define such criteria in that course after feedback from all stakeholders (Fig-1 elaborates that). Sixty-five percent responded "yes" to having any feedback system from the employer regarding the emerging need for maritime labour skills. However, this can be solidified at the IAMU level for the benefit of all member universities

3.1.5 Most respondents agree that their students get jobs in their own country but maritime being the global industry, migration of labour is unavoidable and underdeveloped countries do not have more jobs. That is why it is important to have a database at the IAMU level to share with the member universities so that labour market data and skilled labour data can provide an opportunity to get jobs easily. About 77% of respondents shared that expatriates get jobs in their maritime labour market and that is the evidence of the maritime labour market being a global industry. About 33% of respondents say that they do not maintain any data about job opportunities for their students.

3.1.6 An important question in the survey was whether IMO should introduce a "Maritime Labour Market Skill course". Sixty seven percent of respondents responded in "Affirmative" and more encouraging was the response, 89% of respondents agreed, that IAMU may develop this course and all member universities may include that in their curriculum

3.1.7 The majority of respondents, 89% agreed that maritime faculties/universities should maintain data for the availability of maritime-related jobs. 88% were of the opinion that this data be maintained at the IAMU level to share among the member universities. Eighty nine percent were of the opinion that IAMU may have maintained the labour market job opportunity data also. Seventy-seven percent agreed that all member universities should open their labour market to each other.

4. Maritime Labour Market Dynamics (MLMD) and Maritime Labour Skills: In broader terms, Labor Market (LM) is defined as the demand and supply of labour for any job, any type of labour, skilled/unskilled viewed at micro and macroeconomic levels, gauging unemployment rate, labour productivity, wages and workload. Labour Market influenced by many factors like job opportunities, wages, labour age and skills, poverty, education, immigration, flow in/flow out, pandemics/wars, natural calamities, policies, outsourcing, new business trends, changing business environments, self-employment, multicultural/multilingual labour force, gender, caste and creed discrimination and competitiveness. At present, very fast hi-tech systems with automation displacing the labour force with a slow approach to inculcate matching skills have a major impact on the labour market. LMD refers to "changes in jobs that take place as well as entries into and departures from economic activity affected by hiring, separation and the establishment and closure of self-employment activities" (7). Labour Market Dynamics (LMD) is always changing, attributable to demand and supply, matching efficiency, innovations, high-tech systems, education level, productivity, unemployment etc. Maritime labour market data shows a decline in job offers especially ratings whereas officers are in access

“The impression portrayed is that in the past, organizations had a rigid hierarchical structure, and operated within a stable environment, thus, careers were predictable, secure, and linear. In contrast, the organizational system is now in a mode of all change, all dynamic, total fluidity, and thus careers are unpredictable, vulnerable, and multidirectional” (Baruch, 2006, p. 125) (8)

4.1 Maritime labour market trends, problems and labour issues are less emphasized in international forums despite a conviction on the critical role of the maritime industry in the global economy, but seafarers are the ignored species. If we look at the OECD labour market fact sheet 2021, it mentions all employment sectors except the maritime industry. In the recent past, drastic changes in MLMD like new shipping trends and technologies, Less crewing more workload, Autonomous shipping, ban on many nationalities to work on some flag state ships, Shore job lucrative salaries as compared to seafarers, discrimination in wages, Same rank/rate, different nationalities, different wages on the same ship, more globalization and digitalization, Pandemics / wars / unrest

4.2 The world will be experiencing a few megatrends like more globalization and digitalization, navigating towards a hi-tech-oriented work environment, and demanding high skilled workforce. Sustainable development is impossible without upskilled or reskilled labour force (5). This may be more diverse with the induction of autonomous shipping. Supply and demand affected during the recent Covid -19 pandemic and the Russian / Ukraine conflict because these two countries make up 25% supply of seafarers (6). In view of the changing dynamics, maritime labour needs to have skills that are more professional but in addition to that, they need comprehensive knowledge of labour market dynamics, job seeking/ retaining skills.

5. IAMU Maritime Skilled Labour Standards (MSLS): Skilled Global Maritime Labour refers to highly educated, well trained, experienced, dedicated; physically and mentally fit to perform complex tasks. That needs prolonged and extensive professional training to compete with the maritime labour market demands. It needs to know the labour market requirements, supply and demand and employee preferences. At present, seafarers-supplying countries are striving hard to achieve highly skilled labour but a grey area where ships are constructed in highly developed countries with very high-tech equipment and seafarers are produced mostly in underdeveloped countries where seafarers' training is inadequate due to basic education levels and financial issues. Minimum competence standard under STCW with time taking amendment process is another hurdle for high skilled labour. Although many countries have developed curriculums to compete with the maritime labour market requirements but those are changing very rapidly as compared to curriculum changes. The Global Maritime Professional – BODY OF KNOWLEDGE is a great effort by IAMU to improve seafarers' competence level, but it also does not mention maritime labour skills, matching to new maritime labour market trends, except for a small portion talking about Maritime Business. The IAMU members MET institutes while adopting a futuristic approach for remodeling maritime labour skills; train them in labour market changing dynamics, up skills, tricks, and trades for seeking and retaining a job, progression, and becoming an efficient, effective, and skilled maritime team member. A combined effort needed to develop maritime labour skills standards matching the day-to-day changing maritime labour market dynamics. That needs to develop Maritime Labour Market Skills Course. Paper suggests approaching IMO and IAMU academic committee to introduce Maritime Labour Market Skills Course, in collaboration with the ILO and other maritime stakeholders. IMO may also be approached to include this course in IMO model courses or make it part of STCW.

6. Suggested Course Description and objectives: Education and training are the key measures to help people meet changing labour market demands and skills requirements and this course will:

- Prepare students to understand Maritime Labour Market Dynamics (MLMD) and to improve their professional, interpersonal, managerial and teamwork skills

- Aim to improve working capacity as co-workers, subordinates, leaders and entrepreneurs and promote the availability of skilled labour for the maritime industry
- Improve the matching of the supply of and demand for skilled workers/labours because seafarer's skills development has an important role in the future maritime industry in managing challenges of changing job requirements with new technologies at the local, regional and global levels and enhancing possibilities of finding an appropriate/ suitable job or retaining one.

6.1 The main objectives of the course are:

- Provide participants with an introduction to the main functions, components, and applications of Labour Market Dynamics (LMD).
- Better, understand the skills anticipation and matching characteristics, methodologies, institutional arrangements, mechanisms, and modalities needed for identifying labour market imbalances in terms of skills, in addition to recognizing the current and future skills needed in a broader macroeconomic policy framework.
- Understand the main components Labour Market, Skills required for a successful carrier in the maritime industry. Understand labour statistics, main sources of labour statistics, and main uses of labour statistics. Switching jobs for a better future.
- Understand the main functions of the skilled Labour market, analysis, monitoring and reporting on policies, coordinating the interaction among different actors and institutions that produce and utilize labour market information)
- Analyze different methods and tools related to quantitative and qualitative methods to identify labour markets supply and demand imbalances and analyze different methods to measure skills matches and mismatches
- Understanding of function of international labour market skill criterion and information about ILO regarding rights and responsibilities of seafarers

6.2 Course Proposed Content: Although some course contents proposed, but this needs more deliberation with consultation of member universities and other maritime stakeholders, specially the employers, considering the maritime labour market demands. Attitude, Goal Setting, Etiquette, Ethics, Politics, and cultural diversity, Personal, Financial, Time and Stress Management. Organizational Skills, Quality Organizations and Service

- Accountability and Workplace Relationship and Human Resources and Policies
- Communication, Motivation, Leadership, and Teams, Conflict management and Negotiation
- Job Search and retaining Skills, Resume Package, Career Changes, Interview Techniques
- Labour Market Dynamics, Maritime Labour Market Dynamics, Skilled, low - skilled and unskilled Labour, Maritime employer skills requirements and Expansion of professional/high-tech education and Labour Market relationship. Developing Professional skills to coop up the fast-changing maritime industry
- New technologies, Compatible skills, Disparity between educational institutes and the modern labour market

- Recruitment and selection criterion of the maritime labour market (they are looking f
- A variety of skills/ occupational skills/employer preference). Impact of skilled and unskilled labour on the country’s sustainable economic growth and Labour and global trade and economic growth

7. IAMU Maritime Skilled Labour Data Program (MSLDP) and Maritime Labour Market Data Program (MLMDP): IAMU activities are not widespread as compared to its organizational structure, influence, and strength. There may be reasons behind this due to the sovereignty of member countries, national curriculum, legal framework, and local maritime market demands. Member universities are versatile in many aspects. Many are seafaring providers, shipbuilders, big shipping companies, trade, and technologies. Thousands of jobs in the maritime sector are available in the member countries. Shipping is a globalized industry and needs multicultural/multilingual crew/labour. The idea behind this is to make a strong committee and facility to collect data from all member universities about their available skilled labour. Sophisticated software will be developed for member universities to upload that data. On the other hand, that software will also facilitate uploading data about jobs available in the maritime labour market of member universities. This will also facilitate that to keep upgrading time-to-time maritime labour market requirements, keeping abreast with the modernized shipping industry. Member universities will collaborate with the concerned national organizations to collect data about labour market demand and supply. A separate IAMU research project will be initiated for MSLDP and MLMDP. This Data will provide a very sophisticated way for the maritime labour market and maritime labour force to interact for future employment.

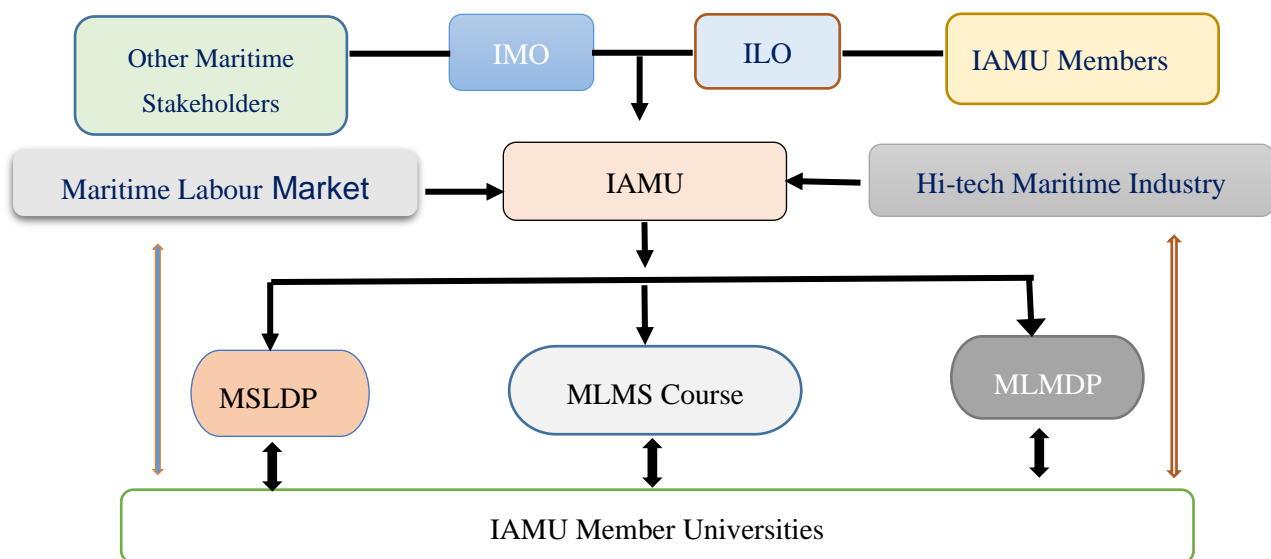


Fig-2 Cooperation between Maritime stake holders and IAMU ©

Fig-2 explains the IAMU collaboration with IMO, ILO, IAMU Member universities, the Hi-tech maritime industry, and the maritime labour market. From Hi-tech industry, information regarding new maritime trends, technologies and required skills they intend to implement and need to operate their modern ships, ports, and other maritime entities efficiently. That information shared with the IAMU member universities to upgrade the maritime labour market skills course, already designed by IAMU. IAMU also prepares MSLDP and MLMDP. All information shared with the concerned stakeholders and a strong feedback network to improve maritime labour skills as well as to facilitate maritime labour to seek and retain jobs.

8. Template for MSLDP: In future, an IAMU research project will have more detailed data program for both maritime labour and maritime labour market. In that, all member universities be asked to provide available maritime skilled labour data of all ranks and rates. A small secretariat established at any member university or in the IAMU secretariat. A software will be developed to accommodate that data according to the skills, qualifications. Similarly a data of maritime labour market, meaning by jobs available in the countries of all member universities. Both type of data shared among the member universities. In addition, Maritime labour skills updating process will provide an opportunity to develop labour that is more skilled as per the maritime market requirements.

9. Recommendations:

- a. Sustainable Ocean management system for sustainable development to get more benefits from the oceans, which is not being derived now.
- b. IMO and IAMU academic committee to introduce Maritime Labour Market Skills Course, in collaboration with the ILO and other maritime stakeholders. IMO may also be approached to include this course in IMO model courses or make it part of STCW
- c. A separate research project needs to carry out a detailed study and propose refined course contents, MSLDP and MLMDP through software because it needs a lot of consultation, regulations, and agreements between member universities

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