Globalization, knowledge and competition have intensified the need for highly skilled workforce in both developing and developed nations as it enables them to accelerate the growth rate of their economy towards higher trajectory. Today all economies need skilled workforce so as to meet global standards of quality, to increase their foreign trade, to bring advanced technologies to their domestic industries and to boost their industrial and economic development. Thus, skills and knowledge becomes the major driving force of socio-economic growth and development for any country. As it has been observed that countries with highly skilled human capital tend to have higher GDP and per capita income levels and they adjust more effectively to the challenges and opportunities of the world of work.

For India, skill development is also critical from both socio-economic and demographic point of view. For the economy to grow at 8% to 9%, with the targeted growth rate of 10% for secondary, 11% for tertiary and 4% for agriculture sectors, a multi-faceted and highly efficient skill development system is imperative. Further, India is destined to be a contributor to the global workforce pool, leveraging this demographic dividend with the growth rate of higher working age population as compared to its total population. With the second largest population by 2025 India is expected to have the highest population in the world driving home the distinct advantage of having the youngest population with an average age of 29 years as against the average age of 37 years in China and the US and 45 years in Western Europe.

India’s first Department of Skill Development and Entrepreneurship was established in July 2014 under the Ministry of Youth Affairs and Sports to specifically focus on addressing the above challenges. This Department became a full-fledged Ministry of Skill Development and Entrepreneurship (MSDE) in November 2014.

Skill India was launched by Prime Minister Narendra Modi on 16 July 2015 with an aim to train over 40 crore people in India in different skills by 2022. The initiatives include National Skill Development Mission, National Policy for Skill Development and Entrepreneurship 2015, PradhanMantriKaushalVikasYojana (PMKvy) scheme. The Prime Minister, Mr. Narendra Modi, outlined his vision for "Skill India" while launching the "National Skill Development Mission" in New Delhi. Noting that India will have a surplus manpower of 4 to 5 crore over the next decade, the Prime Minister emphasized the need to provide this youthful, poor and under privileged manpower with skills and ability to tackle global challenges.

PradhanMantriKaushalVikasYojana (PMKVY) is the flagship outcome-based skill training scheme of the new Ministry of Skill Development & Entrepreneurship (MSDE). The objective of this skill certification and reward scheme is to enable and mobilize a large number of Indian youth to take up outcome based skill training and become
employable and earn their livelihood. Under the scheme, monetary reward would be provided to trainees who are successfully trained, assessed and certified in skill courses run by affiliated training providers.

The objective of this scheme is to encourage skill development for youth by providing monetary rewards for successful completion of approved training programs. They include:

- Encourage standardization in the certification process and initiate a process of creating a registry of skills
- Enable and mobilize a large number of Indian youth to take up skill training and become employable and earn their livelihood.
- Increase productivity of the existing workforce and align the training and certification to the needs of the country.
- Provide Monetary Awards for Skill Certification to boost employability and productivity of youth by incentivizing them for skill trainings
- Reward candidates undergoing skill training by authorized institutions at an average monetary reward of Rs. 8,000 (Rupees Eight Thousand) per candidate.
- Benefit 24 lakh youth at an approximate total cost of Rs. 1,500 Crores.

In order to capitalize the demographic dividend, India will need to empower its workers with the right type of skills in the targeted age group of 15-59 years in the form of

- general educational levels
- vocational training levels

The Technical and Vocational Education and Training is multi-sectoral in nature. Each ministry/department in Central as well as State Government is responsible for manpower development in that sector. The main government organizations that are responsible for imparting skills development training within India are:

Ministry of Human Resource Development and State Ministries of Education through:
- Vocational Education in Schools
- Polytechnics

The Directorate General of Employment and Training (Ministry of Labour), through:
- Industrial Training Institutes (ITIs)
- Industrial Training Centres (ITCs)

Challenges before Skill Development Initiatives in India:-
Despite various concentrated efforts, there is still a long way to bring the skill development mission to completion due to the presence of certain serious key challenges in the path of the mission. Some of these hindrances along with their possible solutions are outlined below:

Demand & Supply Mismatch:-
The demand made by the industries and supply of labour-force mismatch lead to aggravate all types of skill development initiatives of the Government and its partner agencies as:

- The number of people formally trained in a year is only 1,100,000 by Ministry of Labour and Employment and approximately 3,200,000 trained by 17 other central government ministries.
- According to the Manpower Group (USA), in Germany, USA, France, and Japan, the percentage of employers who find it difficult to fill jobs is 40%, 57%, 20% and 80% respectively as compared to Indian employers (67%). Thus an ideal scenario is one in which supply of labour can be transformed into skilled workforce which is easily absorbed by the industrial-sectors.
- It has been observed that there is a serious mismatch between the education and skills that the youth attain and what the labour market demands. While there are more people than the available jobs at the low skills level, there are more jobs at the high skills level than those available for such jobs. This indicates that there is a lot of scope to create a people-centric approach for skill development and it is required that the skill development initiatives be coordinated with demand and supply scenarios across geographies, industries and labour markets so that the new skills required by industry or changes in supply of labour are speedily adjusted with adequate and efficient training programs.

Geographical Problem:-
It is another serious problem plaguing the labour market and has a more serious impact in larger economies like India as the geographical set-up or outreach of the people for skills in India are uneven and in dismal share:

- The states with much higher economic growth rates have more new jobs with lower rate of labour-force. At the same time the states with slower economic growth rates have higher population growth rates with fewer new jobs. Thus growth-lagging states need to rely on migrant workers so as to cope with their counterparts.
- People living in the notified backward areas in the country learn the basic skills required for earning their livelihood mostly through NGOs as a part of social development programs. These types of skills are often not formally assessed and as a result are not recognized for employment by industrial sectors.
- Majority of formal institutions— both in the public or private sector are located around urban areas. They hardly show any interest to operate in rural areas as a result of which large proportions of rural population do not receive any quality vocational training.
- There is lack of block level mapping of employment demand, local economy activities, youth population profile, social demographic profile etc. This leads to sub-optimal planning of skill development initiatives resulting in a gap between skill development and local employment demand.

It is necessary that the Government along with its partner agencies should set-up more standardized skill-based institutions or skill development centres across the country, more particularly in backward states with a view to provide equal access to all segments and sections of the society, so that the whole society gets the benefits of the skill initiatives and strategies.

**Low Educational Attainment:-**

The educational structure in India is generally referred as a (10+2+3) pattern. The first ten years provide undifferentiated general education for all students. The +2 stage, also known as the higher secondary or intermediate education, provides for differentiation into academic and vocational streams and marks the end of school education.

- There are about 1.5 million schools in India with a total enrolment of 250 million students (from pre-primary to high/senior secondary levels) i.e. schools constitute the maximum number of enrolments. Higher education sector comprises around 20.7 million. The total number of students enrolling for open universities and other diploma courses constitute 24.3% of the total students. Out of approximately 0.4 million engineering students graduating every year in India, only 20% are readily employable.
- Proliferation of educational institutions further lead to multiplicity of curriculums for the same skill resulting in uneven competency levels.
- It is estimated that 38% of Indian workforce is illiterate, 25% has education below primary or up to primary level and remaining 36% has an education level of middle and higher level. Further, the drop-out rates of educational institution in India is estimated to be 50% in the age group of 5-14 years and 86% after 15 years of age, more particularly in female students. Comparatively, the participation rate of the workforce rises rapidly after 14 years of age and therefore it results in a semi-literate workforce which finds it difficult to absorb higher form of skills. 80% of Indian workforce does not possess any marketable skills.
- Some regions still lag behind as compared to other regions in terms of accessibility of education and skills at the rates affordable, particularly in the rural sector due to inadequate transport facilities.
- Poor quality of education which result in lack of literacy and numeracy skills on the part of students. These students find it extremely difficult to absorb even basic skills. Many skills taught in curriculum are obsolete and their end result is that workers are unable to find jobs according to their aspirations.
- There is lack of platforms where industrial and governmental agencies can meet regularly for systematic up-gradation of curriculum for new skills. Ultimately it results in lack of co-ordination between the job aspirants and employers.
- Technical Education in India consists of a well-knit chain of polytechnics and engineering colleges which provide broad based education in engineering as well as some non-engineering areas. The minimum qualification for entry into a polytechnic is a Secondary School certificate (Class 10) while for engineering degree courses the minimum entry qualification is Senior Secondary School Certificate (Class 12). The courses are generally of three year duration in polytechnics leading to an award of a Diploma and four years for the award of an engineering degree in engineering colleges. Individual State Boards of Technical Education at each state are responsible for designing the curriculum, designing of assessments and awarding of qualifications. The training is mostly institutional (with some industrial experience gained by occasional industry visits), the curricula predominantly theory oriented. Polytechnics have to be approved both by the State Directorates of Technical education and the All India Council for Technical Education (AICTE). About 60 percent of all
polytechnics are set up by private education trusts while the remaining 40 percent are set up and run by state governments.

The need of the hour is to provide quality educational curriculum at all levels with targeting skills development programs. Hence, the instructional material or syllabus must be prepared jointly by the industry and the educational planners. It should be regularly updated and must include more of practical learning than theoretical, so that students imbibe the necessary job skills as demanded by the industrial sectors.

Vocational Training:–
India is progressively moving towards knowledge economy, where skills are widely recognized as the important lever of economic growth, but the perception about vocational education is still doubtful i.e. it is generally meant for those who fail to get admission in the formal system. Thus, it still need time to be considered as a viable alternative to formal education.

Vocational training in India is primarily imparted through the government and private industrial training institutes (ITIs). Despite the total no. of nearly 9,500 ITIs in the country with a total seating capacity of nearly 1.3 million, current annual is 20% less than the industrial requirement of 22 million skilled workers a year.

As it was observed in India, around 90% of the jobs are skill-based i.e. they require some sort of vocational training whereas in reality only 2% of the population (in 15-25 years age group) enrolled for formal vocational training in India as compared to 75% in Europe and 96% in Korea, and 80% in Japan.

- Around 93% of the Indian workforce is employed in the unorganized or informal sector, which lacks any kind of formal skill development training.
- Barely 2.5% of the unorganized workforce reportedly undergoes formal skill development in comparison to 11% of organized sector.
- In addition, only around 12.5% and 10.4% of the workforce in the unorganized and organized sectors, respectively, undergoes informal skill development. This indicates that around 85% of the work force in the unorganized sector does not receive any form of skill development—formal or informal.

The current capacity of vocational training is 31 lakhs against an estimated annual capacity of 128 lakh workers whereas the overall national target of skilling is 50 corer of workers by 2022 i.e. India needs to impart vocational training to at least 300–350 million people by 2022 which is significantly lower than the government target of 500 million.

In India, around 12 million people are expected to join the workforce every year whereas the current total training capacity of the country is around 4.3 million, thereby depriving around 64% entrants of the opportunity of formal skill development every year.

Poor rural representation:–
Moreover, the private sector provide skill training as required by service sector mainly to educated youth (especially 12th pass) and largely in urban regions. Ultimately, hundreds of workers in unorganized sector do not get any kind of skill training which results in low productivity levels and employability gaps among majority of workforce.

Due to lack of awareness about industrial requirements and the availability of matching vocational courses, most of the prospective students in the country do not go for vocational education.

Poor credibility:–
Despite various efforts on the part of Government and its partner agencies, the lesser credibility of vocational courses in India and the low reputation linked with vocational and low compensation levels among people with such skills, is distracting students from taking vocational education. The participation of India’s workers in vocational is relatively low, part given its reputation as a backup option for those who fall out of the academic system. One of the biggest problems for skills development is the poor brand equity of vocational education in the region. Therefore, initiatives that link skills training with tangible job prospects is important to improve the reputation and attractiveness of the sector. Poor convertibility of qualifications between vocational and academic streams of education has also been a deterrent to uptake. This lack of optionality prevents potential students from viewing skills
training as a mainstreampath to good employment. To improve matters, standardization of qualifications and a robust accreditation framework, recognised by both mainstream academic institutions and employers, are needed.

An efficient and comprehensive vocational training system with proper awareness generation programs is the need of the hour. These programs help in spreading information about existing skill development courses and market requirements which lead to increase the student enrolment as well as enhance the credibility of vocational institutes. As education and vocational training are the important contributors to overall skill capital pool of an economy. Education provides a base in the form of ability in literacy, numeracy and cognitive abilities and vocational training equips an individual with specific skills. Vocational training is practical/manual in nature in contrast to education which is purely theoretical in nature. Thus linkages of both serve simultaneously the hand and the mind, the practical and the abstract aspects.

**Under-representation of women workforce:-**
In India, women also form an integral and substantial part of the workforce; but the working percentage rate of women in total labour force is declining. The share of women workforce (between 25-54 years of age) is about 35% in in India, which is quite low as compared to 82% in China and 72% in Brazil. Further, women in India are mainly concentrated in the informal sector and are engaged in low paid jobs with no security benefits. This represents lack of employment opportunities and skills for women workforce. Currently, a majority of the female workforce in India is unskilled, i.e. a very low percentage of women have any kind of formal education. In India, around 65% of women in rural areas and over 30% of women in urban areas lack basic primary school education.

In order to unlock the full potential of women workforce in India the planning should focus on women specific policies for their effective participation in the employment market. As it would help India to meet its skilling target and reap benefits of having the largest workforce by 2025.

**Private sector participation:-**
The private sector is not involved adequately in curriculum development and policy formulation related to educational and vocational training. Most of the private sector institutes are located in urban areas out of reach of rural population due to their location and affordability as well. A strong policy measures and operational linkages are needed to bring together the public and private sector to improve the quality and relevance of training.

**Placement:-**
A major problem of India’s existing skill (or education) development system is lack of linkages between education and placement of that trained workforce. The vocational training in India is offered nearly in 120 courses and mostly of long duration of 1 to 2 years’ duration. Comparatively, in China, there are approximately 4,000 short duration modular courses, which provide skills more closely aligned to employment requirements. In India, as compared to large firms, the micro, small and medium enterprises (MSME) find it difficult to invest in skill development institutions and this result in deployment of semi-skilled workforce in many MSME firms.

Majority of ITI/ITC do not offer job placement services i.e. the trained candidates struggle for appropriate employment except in areas with high economic activity. Sometimes the trainees are not able to get jobs or some dropped due to inadequate wages or poor working conditions etc. Lack of correlation between demands of local economy and provisioning of skills by local institutions create an employment gap and lead to job related migration creating social tension also.

Highly skilled workers who are flexible and analytical in nature are recognized as the driving force for innovation and growth. India needs a flexible education system with multi-faceted and highly efficient skill development system. This system must provide linkages between each of its constituents and provide a seamless integration between skill development and employment.

**Overlapping of Institutional Framework:-**
Over the past few decades, India has witnessed significant progress in the skill development landscape as various types of organizations have been set up both at national and at state level. Around 17 ministries, 2 national-level agencies, several sector skill councils, 35 state skill development missions and several trade and industry bodies come forward with a view to push the national skill development agenda. Complex institutional setup with
overlapping and conflicting priorities and poor co-ordination and standardization ultimately resulted in fragmented outcomes with limited impact.

It is necessary to introduce integrated reforms in the form of establishing some nodal authority or bodies ranging from advisory to executive in nature with a view to coordinate and governs various skills development and policy making initiatives

The unorganized sector:-
It is necessary to focus more on the labour force of the unorganized sector. Though the better and superior skills are essential requirements of the competitive market but practically the unorganized sector do not have the affordability to hire expensive labour of high quality.

The competitive job market demands persons with superior skills which the unorganized sector may not be able to afford hiring such persons. Such conflicting objective can be resolved with an integrated approach that gradually enhances labour quality while maintaining a purposeful balance with the demand and affordability of labour markets.

Availability of workforce with higher skill levels will result in increase in the competitiveness of unorganized sector. It is will also benefit some of the workforce with low education levels but with higher skill competency levelsto get absorbed in the organized sector later in the career.

Infrastructure:-
Availability of basic infrastructure is an essential requirement for the skill development; however most of the training centres, particularly in the rural institutions suffer from lack of proper infrastructure. Such institutions either do not have the required equipment, tools, and laboratories/workshops or have outdated machines which serve no purpose to the aspirants. Some of the institutions have a linkage with neighbouring industries compensating for their lack of infrastructure but most of them rely on theoretical training sessions, leaving the candidates deficient in skills.

The policy-makers must focus on providing the required infrastructure and equipment and qualified instructors so that they provide high-quality skills as required by industrial sectors and relevant practical exposure to the students. Appraisal of institutes against standard norms and guidelines need to be conducted regularly and ratings should be based on percentage of successful trainees placed on jobs and such other outcomes assigned to the institution.

Further, the government should focus on conducting training programs for the trainers for upgrading their basic skills. In India the total requirement of trainers as today is around 80,000 and the estimated incremental requirement is 2,000 per year in order to meet the requirement of the targeted workforce in the country upto the year 2025. The estimated requirement of trained personal is 3.5 million per annum against the 12.8 million new entrants into the workforce each year.

The Government and its participating agencies therefore should focus on the provision of more effective training centres of the trainers, judged otherwise this mismatch between demand and supply of trainers could impede the success rate of the whole skill and training framework. Further, the educators/trainers must be chosen on the basis of academic qualification, theoretical knowledge, technical and pedagogical skills updated with new technologies in the workplace.

Inefficient Labour Management Information:-
There is no effective labour management system available in the job market except the Employment Exchanges where the data is available only for the candidates who register themselves. At the same time there is no proper system available in the job market where the industrial, job seekers and government come forward and share the relevant information among them and derive collective benefit from it. An integrated labour management information system is the need of the hour in system planning for skill development and integrating the local employment & skill requirement.

A major part of the challenge will be to ensure alignment of skills training with national policy directives. For many states in India, migrant labour is an important pillar, given the economic gains are derived from remittances back home. Training workers in the construction, healthcare and domestic services sectors to compete in increasingly
competitive global markets is now a key component of the skills agenda for India. This area should receive further attention, given that remittances will remain an important source of income and foreign exchange for these countries in the foreseeable future. The service-oriented nature of India and of its migrant labour forces increases the importance of horizontal skilling. The export-led models of countries like China & Japan of the East have required workers to have specific technical skills related to manufacturing to drive economic growth. But for India, it is soft skills such as English language and communications that will enhance the competitiveness of workers in key sectors such as business-process outsourcing and hospitality.

The main objective of education and vocational training is to develop a workforce with skills that are synchronised with the needs of key industries. Therefore educational and vocational system has to be linked to the job market in such a way that it must be competent to provide relevant information about the growing employment opportunities, types of skills required by different jobs, and where and how the skills can be acquired.

And this will ultimately lead to enhance the socio-economic relevance of education and vocational training along with strengthening the performance of the market institutions in the economy.

Conclusion:-
India’s skills development initiative offers other Southeast Asian countries possessing similar technical training expertise a wonderful opportunity to reap the benefits from India’s demographic dividend. With India poised to become a reservoir of surplus skills within the next two decades, Asia’s industrialised economies can contribute to building these skills in a manner conducive to their future requirements. Given the shortage of skilled labour likely to be faced by these economies in the longer term, India’s skilled workforce will be an obvious option to address the skills deficits. Active involvement in equipping the young Indian workforce from now on can ensure the economies of neighbouring countries to access a capable body of diversely skilled workers in the near future.

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