



## VOCATIONAL EDUCATION IN INDIA

**Prin. Dr. Rajkumar M. Kolhe**

*Founder President, Jahnvis Multi Foundation, Vande Mataram Degree College of Arts, Commerce & Science, Kopar.*

### **Abstract**

*Throughout the post-independence period there have been many attempts to reform the Indian vocational education system and make it more applicable. The list of vocational education policy reforms that have been attempted over the last 60 years is quite extensive. Without raising standards, efforts have been made to go forward with market-oriented reforms to the vocational education system. This study mainly focuses on the present parallel (vocational) education system with the help of the indicative data. This article also proposes certain policy interventions in the parallel educational system.*

*"We cannot teach people  
anything;  
we can only help them  
discover it"*

*Galileo Galilei*

### **Introduction**

Vocational education or skill based education are in certain disciplines which enables students to acquire skills which are traditionally non-academic and totally related to specific trade, occupation or vocation. They are also known as Technical Education. Career and Technical Education (CTE) or vocational Education and Training (VET) as they directly develop expertise in a particular group of techniques or technology through manual or practical activities.

Vocational courses are primarily designed in such a way that they impart a thorough application-based study wherein theoretical concepts of a field are not studied independently but are subordinated to the understanding of techno-operational aspects of specific job.

Understanding the changing needs of the world that today every company is looking for specialist and skill based employees, CBSE Central Board of Secondary Education India has included following vocational subjects in their senior secondary education:

#### **Commerce based**

1. Office Secretary ship
2. Stenography and Computer Applications
3. Accountancy and Auditing
4. Marketing and Salesmanship
5. Banking
6. Retail
7. Financial Market Management
8. Business Administration

#### **Engineering based**

1. Electrical Technology
2. Automobile Technology
3. Civil Engineering
4. Air Conditioning and Refrigeration Technology
5. Electronics Technology
6. Geo Spatial Technology
7. Foundry
8. IT Application

#### **Health and Para Medical based**

1. Ophthalmic Techniques
2. Medical Laboratory Techniques
3. Auxiliary Nursing & Midwifery
4. X-Ray Technician
5. Healthcare Sciences
6. Health and Beauty Studies
7. Medical Diagnostics



#### **Home Science based**

1. Fashion Design & Clothing Construction
2. Textile Design
3. Design Fundamental
4. Music Technical Production
5. Beauty Services

#### **Others**

1. Transportation System & Logistic Management
2. Life Insurance
3. Library and Information Sciences

#### **Agriculture based**

1. Poultry Farming
2. Horticulture
3. Dairying Science and Technology

#### **Hospitality and Tourism based**

1. Food Production
2. Food and Beverage Services
3. Mass Media Studies and Media Production
4. Bakery and Confectionery
5. Front office
6. Travel and Tourism

#### **Aims and Objectives of Vocational Education in India**

Now our country is developing due to the development of science and technology. This has been possible because of the availability of material and human resources. Our country is too rich in these two resources. What is needed is their proper utilization. This requires expansion and development of vocational education. The need of the hour is to impart vocational education in order to acquire expertness in the field of “technical know-how”.

Vocational education is concerned with the training on vocation. It is related to productivity. Vocational education prepares individuals for jobs. It has adequate employment potentialities. It helps in broadening of horizon. It leads to dignity of labour. It is helpful in the maximum utilization of the material resources of the country. When vocational educational education is mixed with general education it is called vocationisation of education. Vocationalisation of education is designed to introduce manual skills in general education. Vocationalisation of education means training in some vocations at the secondary, Higher Secondary level with general education.

According to the recommendation of the Secondary Education Commission (1952-53), the aim of vocationalisation of education is to improve the vocational efficiency of the students. Therefore, the Commission emphasised on increasing the productive & vocational efficiency of our students and it recommended for diversified courses in multipurpose schools.

The Indian Education Commission (1966) pointed out that vocationalisation can bring education into closer relationship with productivity. It also recommended to give a strong vocational bias to secondary education and to increase the emphasis on agricultural and technological education at university stage.

The National policy on Educating (1986) and its revised formulations gave stress on the introduction of systematic, well planned and rigorously implemented programmes of vocational education.

Following are the aims and objectives of vocationalisation of education according to the National Policy on Education, 1986.

1. To develop a healthy attitude among students towards work and life.
2. To enhance individual employability.
3. To reduce the mismatch between the demand and supply of skill man-power.
4. To provide an alternative for those intending to pursue higher education without particular interest or purpose.
5. To prepare students for identified vocations spanning several area of activity.
6. An emphasis in vocational education will also be on development of attitudes, knowledge, and skills for entrepreneurship and self-employment.
7. To provide opportunities to fulfil the needs of women, rural and tribal students and the deprived sections of society.
8. To give opportunities for professional growth, career improvement and lateral entry into courses of general, technical and professional education through appropriate bridge courses.



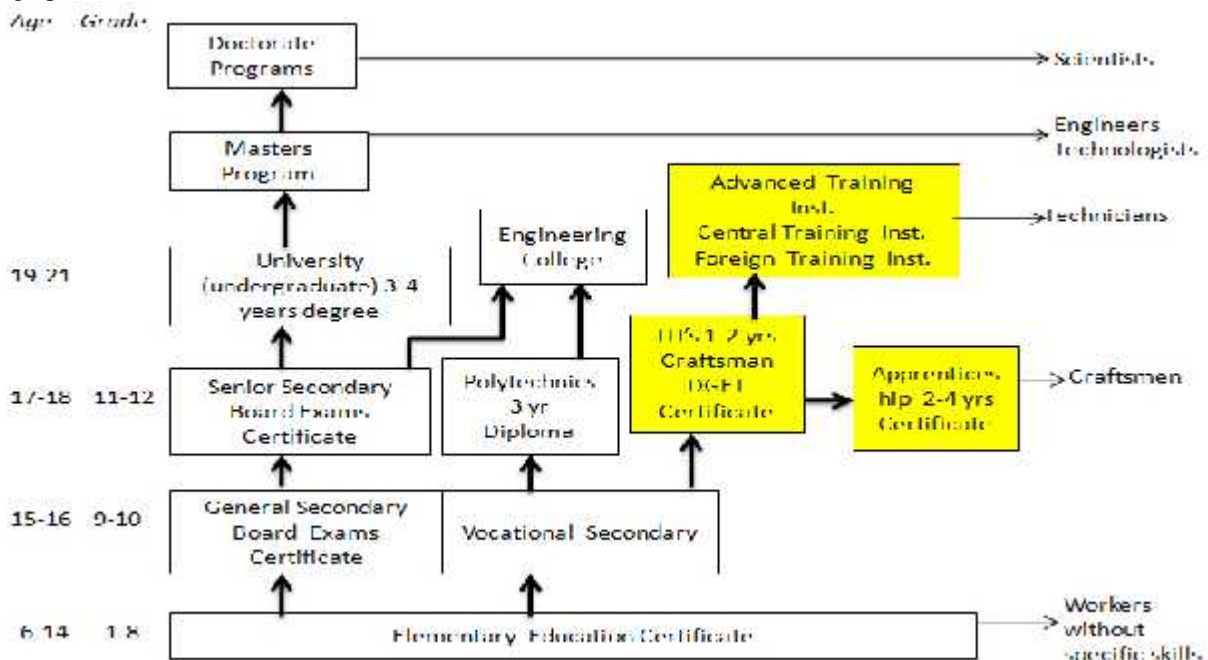
From the above discussion we may conclude some of the common aims and objectives of vocationalisation of education. These are as follows:

1. To increase the productive potential of the country.
2. To raise the economic standard of people.
3. To reduce the level of unemployment by providing self-employment schemes.
4. To utilize man-power to fullest extent.
5. To make the students skilled technician.
6. To help for equitable sharing of benefits of economic development to ensure social and economic justice.
7. To help students understand the scientific and technological aspects of contemporary civilisation.
8. To make use of material and human resources.
9. To exploit the scientific and technical knowledge for betterment of the society.
10. To generate in pupils a love and appreciation for work.

Now-a-days, vocational education has got due impetus due to the development of science and technology. So planning and implementation of the programme will certainly help in controlling and solving the problem of educated unemployment of our country.

Vocational education consists basically of practical courses through which one gains skills and experience directly linked to a career in future. It helps students to be skilled and in turn, offers better employment opportunities. These trainings are parallel to the other conventional courses of study (like B. Sc., M. Sc. etc.). Time management and meeting deadlines play an important role in success in a vocational course and during their studies students normally produce a portfolio of evidence (plans, reports, drawings, videos, placements), which is taken as a demonstration of students' capabilities for a job. After finishing the courses, students are often offered placements in jobs. Vocational trainings in a way give students some work related experiences that many employers look for. According to a National Sample Survey Organization (NSSO) report (No. 517, 61/10/03) two types of vocational trainings are available in India: a) Formal and; b) Non-formal. Formal vocational training follows a structured training program and leads to certificates, diplomas or degrees, recognized by State/Central Government, Public Sector and other reputed concerns. Non-formal vocational training helps in acquiring some marketable expertise, which enables a person to carry out her/his ancestral trade or occupation. In a way through such non-formal vocational training, a person receives vocational training through 'hereditary' sources. Often 'Non-formal' vocational trainings are also received through 'other sources'. In such cases training received by a person to pursue a vocation, is not ancestral and is different from the trade or occupation of his/her ancestors.

Data and graphs used here are all indicative, not exhaustive.



Academic, Technical and Vocational parallel training structure/system in India-a flowchart

SOURCE: Skill development in India: The vocational education and training system report no.-22 World Bank



**Type of Institutions for Vocational training according to National Sample Survey Organization (NSSO):**

Different institutions which impart vocational training can be classified into five categories: (i) Government, (ii) Local body, (iii) Private aided, (iv) Private unaided, and (v) not known. According to a NSSO report vocational training is received by only 10% of persons aged between 15-29 years. Out of this only 2% receive formal training, while non-formal training constitutes the remaining 8%. Out of the formal training received by that particular age group only 3% are employed. Most sought after field of training is computer related training. Only 20% of formal vocational training is received from ITI/ITCs. In India, technical education and vocational training system follows patterns like graduate - post graduate, engineer - technologists through training colleges, diploma from polytechnics and certificate level training in ITIs through formal apprenticeships.

The Vocational Training in India is imparted by mainly two types of bodies:

- Public Industrial Training Institutes (ITIs)
- Private owned Industrial Training Centres (ITCs)

The Indian Government has invested a lot for the development of skills through ITIs. The DGE&T generally regulates these ITIs and ITCs at national level and implements policies for vocational training.

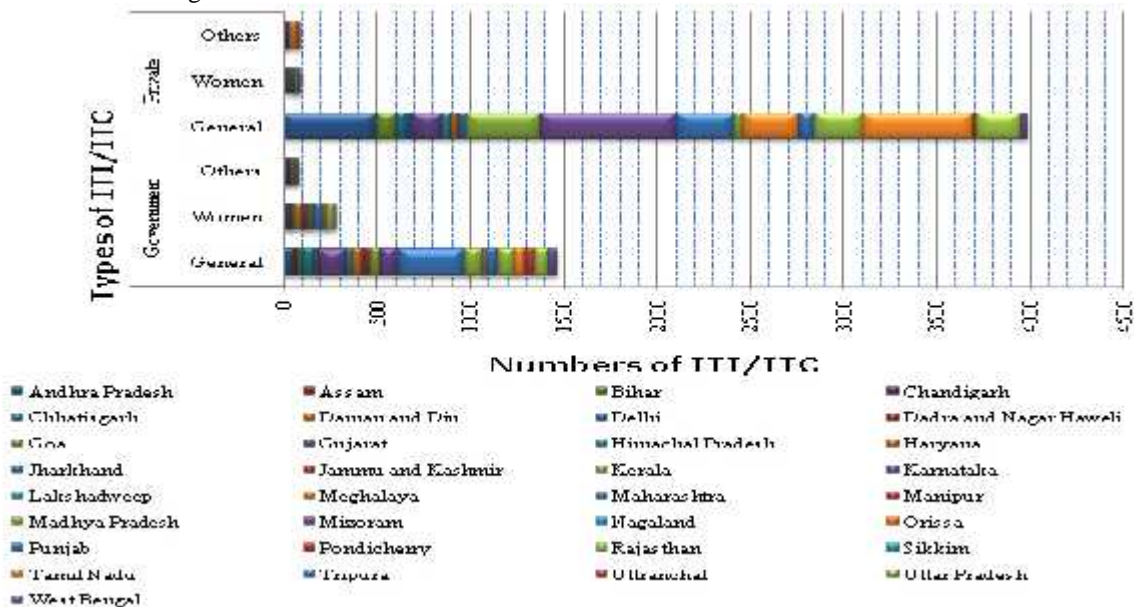
**Training statistics of ITI/ITCs - main formal vocational training institutes in India:**

Some of the principal training schemes are:

- The Craftsmen Training Scheme (CTS)
- Apprenticeship Training Scheme (ATS).

According to the Planning commission report for the 11th Five year plan there are about 5,114 Industrial Training Institutes (ITIs) imparting training in 57 engineering and 50 non-engineering trades. Of these, 1,896 are State Government-run ITIs while 3,218 are private. The total seating capacity in these ITIs is 7.42 lakh (4 lakh seats in government ITIs and the remaining 3.42 lakh in private ITCs). Figures below this text represent detailed information on the number and capacity of ITIs/ITCs in different states/UTs. A number of vocational training institutes are being run by private training providers. The formal training system of India starts at Grade 8 and above. According to a report of ILO, the quality of DGE&T's skills development programmes compete with other programmes, such as high vocational schools (10 plus 2 stream), colleges, polytechnics, etc. The share of ITI-based training seems to capture around 10-12 per cent of the total number of school pass outs at Grade10 level. Some training schemes provide by DGE&T other than Craftsmen Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) are:

- Craft Instructors' Training Scheme(CITS),Advanced Vocational Training Scheme(AVTS)
- Supervisory/Foremen Training Scheme, Staff Training and Research Program
- Instructional Media Development Program
- Women's Training Scheme,
- Hi-Tech Training Scheme



Number of ITIs under Government and Private Bodies in main states of India, *Source: Ministry of labour DGE&T.*

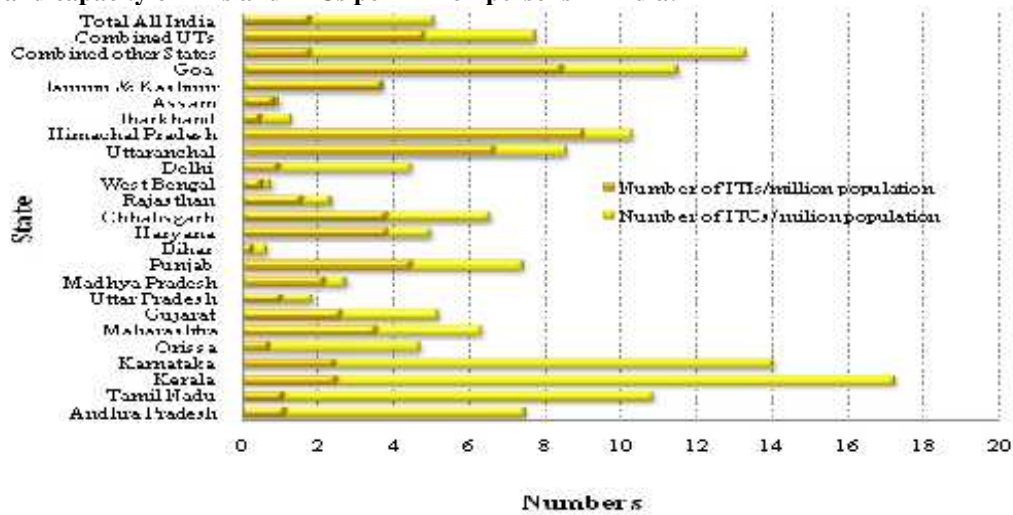




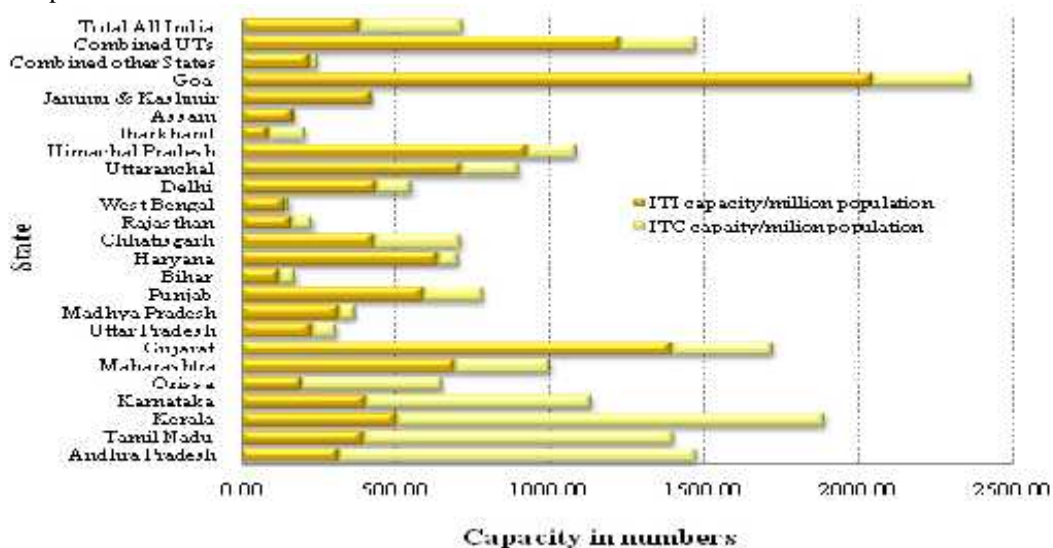
From the above graphs we may conclude that Tamil Nadu holds the majority stake in private owned ITCs and Maharashtra holds a similar position for Government owned ITIs.

National Council for Vocational Training’, an advisory body, was set up by the Government of India in the year 1956. The National Council is chaired by the Minister of Labour, with members from different Central and State Government Departments, Employers and Workers organizations, Professional and Learned Bodies, All India Council for Technical Education, Scheduled castes and Scheduled tribes, All India Women’s Organization, etc. And State Councils for Vocational Training at the State level and Trade Committees have been established to assist the NCVT. Main mandate of the NCVT, according to DGE&T, is to establish and award National Trade Certificates in engineering, non-engineering, building, textile, leather trades and such other trades which are brought within its scope by the Government of India. It also prescribes standards in respect of syllabi, equipment, scales of accommodation, duration of courses and methods of training. It also conducts tests in various trade courses and lays down standards of proficiency required for passing the examination leading to the award of National Trade Certificate etc.

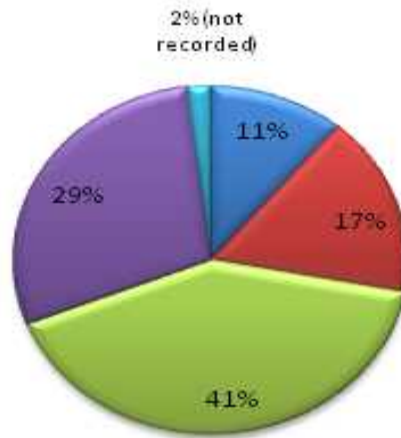
**Total number and capacity of ITIs and ITCs per million persons in India:**



Number of ITIs and ITCs available per million persons in different states in India, *Source:* The vocational education and training system report no.-22 World Bank.



Intake capacity of ITIs and ITCs per million persons in different states in India, *Source:* The vocational education and training system report no.-22 World Bank.



Percentage of persons who received vocational training in Rural India (per thousand person) (duration of training wise)



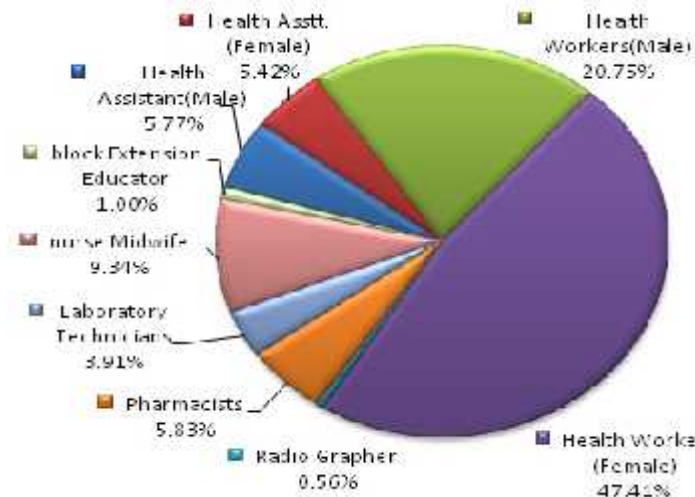
Percentage of persons who received vocational training in Urban India (per thousand person)(duration of training wise)

NSSO Report No. 517 year 2004-05

Despite efforts made to popularize these courses, several problems prevent ITIs/ITCs from reaching common masses and youth.

#### Paramedical training status for rural India

Paramedical courses are one of the largest sources of vocational educated persons in the field of medical industry. Status of the total paramedical manpower in rural India is given in following graph.

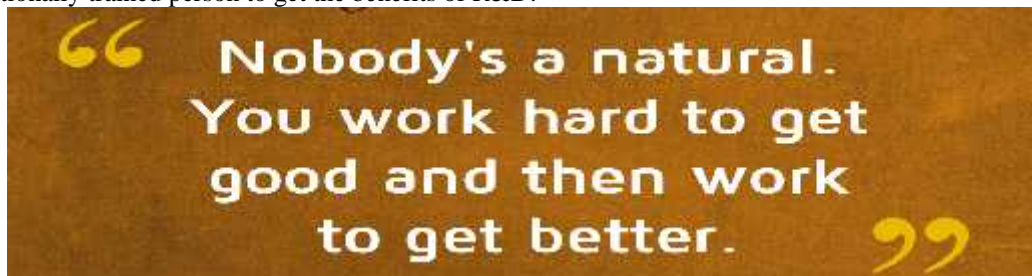


Trained paramedical practitioners available in rural India, *Source: MHRD, Annual Report 2002-03, India Year Book 2008, Manpower profile*



## Conclusion

- The training courses lack focus on the changing job market. As a result it was seen from various reports that the number of students is declining for long term vocational courses, mainly in ITIs. The training policy should be focused on the changing job market in order to attract young people. More autonomy needs to be provided to institutes and they should have market linked infrastructure. For publicly funded training, equity distribution is also a problem. But job creation must be done regionally, not centrally; otherwise it will create regional imbalances of trained manpower. According to NSSO report (No. 470, 55th round) about 27 per cent of the Indian population was migrants. The proportion of migrants was higher (33 per cent) in urban areas than (24 per cent) in the rural areas. It was mainly in search of jobs. Creating job opportunities regionally can help maintain the equilibrium in future days.
- Funding for the public ITIs is very low compared to other countries like China and USA which have restructuring-funds, whose share goes for improvement of vocational training systems in order to achieve international quality. Although things have changed for the better in the 11th five year plan with the introduction of the National Skill Development Mission. But it is also desirable to have mechanisms to raise funds privately for up gradation of ITIs.
- ITIs must focus on low-literate youth and provide new vocational qualifications/training programmes and also on unorganised sector, otherwise it will cause long term losses. To take an example automobile industry is a technology intensive industry but most of the workshops are running without formally trained staff (we have currently no database of that). Sometimes, lack of training skills may harm the delicate instrument of vehicles. A vital challenge is to formally train workers for the crafts industry where a considerable number of informally trained craftsman work together.
- Lack of accountability and training/supply management are also major problems for ITI institutes.
- In our country different institutes impart vocational training but they do not have coordination among themselves. Information about this sector is not available from a single source. In fact we need to create a central database from where one can get full access on vocational training system right from school level to ITI/ITC institutes.
- In rural sector, radiographer and other trained para-medical persons are very less in comparison to the large number of the rural population. Policy makers should focus on the paramedical vocational studies, so that incremental change in number of trained paramedical worker can benefit rural masses.
- A central vocational training standardization system, accredited nationally and globally, for maintaining the quality of the vocational education can enhance credibility of vocationally trained persons in the industry.
- To attract more students from school level, reorientation of vocational courses is needed.
- There should be a bridge organization to relate R&D institutes and vocational education system. It would help the vocationally trained person to get the benefits of R&D.



## BIBLIOGRAPHY

1. [https://en.wikipedia.org/wiki/Vocational\\_Education\\_in\\_India](https://en.wikipedia.org/wiki/Vocational_Education_in_India).
2. [http://www.developmentoutlook.org/2013/01/vocationalisation-of-education-in-india\\_9.html](http://www.developmentoutlook.org/2013/01/vocationalisation-of-education-in-india_9.html).
3. [http://www.unevoc.unesco.org/up/India\\_Country\\_Paper.pdf](http://www.unevoc.unesco.org/up/India_Country_Paper.pdf).
4. <http://labour.nic.in/>.
5. <http://dget.gov.in>.