ECONOMIC IMPACT AND PURVIEW OF SKILL DEVELOPMENT PROGRAMS IN UTTAR PRADESH

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Abstract: Although studies show that the limited number of skill programs haven’t been able to provide much benefit to the states, this is majorly because semi-skilled opportunities and jobs for such candidates in the fields of training chosen by the Project Implementing Agency are very few. Hence it becomes important to select training fields with adequate employment opportunities as well as ease of instruction which can be understood from the previous studies done. After a thorough analysis of the employability statistics, upcoming government projects as well as the practicality of trades possible, the report reaches a conclusion that Calibration Technician – Capital Goods; (CSC/Q0801) is the best option for training of students in the area. This is because of:

1. Launch of schemes by UP Government towards increase of manufacturing facilities in the state of Uttar Pradesh
2. Negligible Pre-Requisite Qualifications
3. NSQF Level 4 rating – pertains to school level education
4. Upcoming opportunities in manufacturing sector due to arising poor trade relations of China and the Rest of World.
5. Massive public and private investment in this sector in latest years

JEL Classification: 1230

Keywords: employment, government, rural, trade, trainings

Chapter 1: Introduction

This report is prepared on the basis of 2 months of practical experience at PGCPL, a firm that is involved in the Skill Development Programs of the Government of India under the DDU-GKY scheme. DDU-GKY is a part of the National Rural Livelihood Mission (NRLM), tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth. The company has an ongoing project in Assam where it is training around 90-100 students in the field of Retail Trade and has up and coming projects in the state of Uttar Pradesh, Sikkim and Jammu-Kashmir. Skill India is an activity propelled by the Government in 2015 to prepare more than 40 crore Indians for various industry-related occupations. The vision is to make an enabled workforce by 2022 with the assistance of different plans and instructional classes. Some portion of the Skill India scheme takes into account skill advancement in India through an outcome-oriented system that relates with the requirements of the business. Further, Skill India enlistment includes a clear online technique and permits you to enroll yourself either as a mentor or a candidate. This campaign aims to converge and monitor all skill development across the country. The main focus is to provide vocational training for all occupation like carpenters, cobblers, blacksmiths, nurses, tailors, weavers etc. More emphasis will be given in a new area like real estate, construction, transport, textile, banking, tourism etc. This campaign covers both rural and urban areas. For rural areas, Deen Dayal Upadhyay Grameen Kaushal Vikas Yojana (DDU-GKY) has been launched and in urban areas, many training centres are being established across the country.

DDU-GKY targets mainly and uniquely the unskilled rural youth between 15-35 years of age. As part of the scheme of Skill India, it plays an impactful role in supporting other government programs like Make in India, Digital India etc. This scheme is present in all 29 states of the government and is implemented by PIAs or Project Implementing Agencies which are firms from the private sector and are referred to as the partners. PGCPL is such a partner and is supported through investment, capacity building, retention strategies, linkages for placements and tech support.

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2 Dr Manisha Raj is an Assistant Professor at the Amity School of Economics. She is a graduate of Delhi University and her area of interest and her PhD is in the field of Financial Economics.
1.1: Objectives
This project report focusses mainly on the state of Uttar Pradesh, in which the organisation has recently acquired the tender to set up a training centre.
1. Minimally analyse the impact that the previous projects under various skill development programs have had on the state.
2. Identify the scope of new projects and give trade recommendations according to the policy and schemes in place in UP.

1.2: Method of Study
The research has been performed using secondary sources of information via digital publications, government reports, as well as previously written relevant papers and other sources of information.

1.3: The State
Uttar Pradesh (UP) is organized in the north of India and is surrounded by Bihar in the east, Madhya Pradesh in the south, UP, Delhi, Himachal Pradesh and Haryana in the west and Uttarakhand in the north. The state has a general population of 166 million. It has the longest arrangement of streams and channels at 28,500 km developing its agribusiness. The mineral resources in the state are fundamentally glass-sand, marble, bauxite, limestone, dolomite, non-plastic fireclay and uranium. Favoring with rich land, solid climate and unending stream structures, the state has for a long while been the storage facility of India. Agribusiness is the critical generator of compensation for around 72 percent of the general population. The state is one of the primary makers of food grains and different business crops in the country. The state has a created ordinary industry other than mineral based industry. UP is by and by flexing its status as the principle provincial state in the country to ascend as a supported area for the food-preparing industry in the country. The state has probably the most seasoned energy department and at present is one of the biggest electricity makers in the nation. It has a decent correspondence organize including one of the longest rail and street lengths. The state is quick to improve the modern framework and has created coordinated mechanical municipalities like Noida with cutting edge offices. Noida trade zone has a decent inflow of speculation from numerous household and global players. The state has set up four agro export zones and three Special Economic Zones (SEZs) are under execution. The Center for Monitoring Indian Economy (CMIE) file of Relative Development of Infrastructure of the state (2002-03) is at 103.3 against an all India figure of 100. The state with its human resource potential, proactive policies and commitment to ensure encouraging climate to the investors is poised to emerge as a manufacturing hub in the country. It has become a hub for corporate R&D with many domestic players and MNCs establishing their facilities in several cities across various districts. Thus, it seemingly holds large potential for skill development programs and can be a driving factor to lead the country to higher employable levels.

Chapter 2: Literature Review
(Ansari & Khan, 2018) led an investigation on "Role of Education and Skill Development to Promote Employment in India". The objectives of the examination were to dissect and provide the status of contemporary training as for skill development and to give a few proposals dependent on the perceptions and investigation of the research. The investigation depends on secondary information gathered from distributed reports, studies, media reports and so on. It is concluded that to sum up skill development for India is critical from both the socio-economic and demographic points of view. It is a significant device for decreasing poverty, upgrading competition and employability and to advance entrepreneurship among youth. With this new methodology, our economy can without a doubt accomplish its results. In India, around 12 million youth enter the workforce consistently, with poor training and unimportant work abilities, and if they are jobless because of absence of skills, enormous social turmoil could emerge. Presently the time has come to quit spending on that defective methodology and exhaustively grasp the internationally demonstrated preparing based model. Specifically, to move further into an information - based economy, to elevate modern turn of events and to accomplish high monetary development, it must expand its investment in education and training for youth with an appropriate harmony between them.

(Gupta & Aggarwal, 2018) directed an investigation on "Training Prospects in Power Sector in India". The goal of the examination was to discover the different training exercises going on in the power sector. It likewise centres around the level of training provided, sort of association engaged with bestowing such training and its length. The investigation will cover private and public players associated with granting training in power sector. The investigation reasoned that such programs in power area are directed for each level through different modes like short term, long term, and workshop, graduate and post-graduate projects. Endeavours are being taken to re-aptitude the current workforce and refreshing them with the new avenues accessible and approaching into the segment. Still there is a disparity between the labour required and the labour accessible. Power Sector Skill Council alongside National Skill Development Corporation has thought of new projects, and to keep up the guidelines, included the private players in giving abilities to the young people of India.

(Shrivastav & Jata, 2017) led an investigation entitled "An Analysis of Benefits and Challenges of Skilling India". The primary motive of this paper was to contemplate the possibilities and difficulties for skilling initiatives in India. The particular targets of the paper were to contemplate and dissect the Indian experience of skill improvement in India and break down the difficulties in such advancement programs in India as far as we talk about financial assets. Information has been assembled from secondary sources for the research. The information was principally gathered from the Ministry of Micro, Small and Medium Enterprises (MSME), sites of the new organizations, sites of the different Government offices and, their yearly reports. The investigation uncovered how the various sorts of projects propelled by Government of India...
can produce openings for work in India with new Industrial aptitude prerequisite. The investigation discovers the general status of Skill capacity accessible, skill prerequisite, skill gap and activities taken by Government of India for Skill Development. The current skill advancement strategy in India needs a pressing treatment. The institutional structure needs simplification with more noteworthy interest in preparing foundations and an accentuation on supporting a casual work force that should be accompanied with motivators for private area cooperation as well.

(Deka & Batra, 2016)* led an examination entitled "The Scope of Skill Development, Employability of Indian Workforce in Context of Make in India: A Study." The objectives of the study were to comprehend through the literature review the impact of "Make in India" activity on employability, to break down through the review of literature if the Skill Development estimates will assist with overcoming any issues of existing skills and required aptitudes of workforce and Labor power in India. The investigation depends on survey of Secondary Data. The information has been gathered by getting to different libraries, emerald and government entries of "Make in India", Skill India and so forth. The examination uncovered how "Make in India" can produce work openings in India with new Industrial ability necessity. The study discovered the general status of Skill limit accessible, skill necessity, skill gaps and activities taken by Government of India for Skill Development. To make "Make in India" venture fruitful, young people of the country ought to be engaged with formal instruction, specialized and professional training to meet the Mechanical prerequisite according to worldwide guidelines.

(Pal, 2014)** wrote a paper on “Socio Economic Development of Uttar Pradesh”. The basic objective of the paper was to analyse the socio-economic development of UP by delineating its poverty and unemployment status. The paper is based on secondary data collected from various governmental sources like Five Year Plans, Economic surveys, Human Development Reports etc. The paper discovered that demographic transition is generally correlated to growth and that rising rural incomes which are consequent to high productivity create a multiplier effect, thereby increasing non-farm and farm products and services. This in turn stimulates the rapid growth of employment opportunity in other sectors. It re-iterated the role of skill development programs and relayed the information that such programs were minimal in number in the state due to problems like poor infrastructure etc. It went on to talk about how such programs fail in the state due to lack of jobs, which are supposed to be the ultimate outcomes of such schemes.

Chapter 3: Data Analysis
The following figures and statistics depict the dearth of job opportunities for the candidates who apply for such via various platforms provided by the government. Some light is also shed towards the work of the government in order to provide occupations and jobs to the people in the state of Uttar Pradesh, specifically in the semi-skilled and minimally skilled categories.

A skill gap analysis has also been performed on the basis of projected estimates based out of a report by the NSDC’s District Wise Skill Gap study of Uttar Pradesh. It aims to display and analyse the picture of the requirements of labour of various skill levels in the state.

### 3.1: Training and Placement

<table>
<thead>
<tr>
<th>Trainees under ITIs in UP</th>
<th>2011-12</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td>267</td>
<td>300</td>
<td>305</td>
</tr>
<tr>
<td>Intake Capacity</td>
<td>39764</td>
<td>89139</td>
<td>123941</td>
</tr>
<tr>
<td>Actual Intake</td>
<td>41785</td>
<td>96542</td>
<td>108273</td>
</tr>
<tr>
<td>Number of successful trainees</td>
<td>24966</td>
<td>92157</td>
<td></td>
</tr>
</tbody>
</table>

*Statistical Diary, (Uttar Pradesh Government, 2019)*
As is evident, ITIs or Industrial Training Institutes have had considerable success in UP when compared to the year 2011-12. The success rate of candidates climbed up to 95.4% from 59.7% just a decade back. This shows a high rate of conversion in latest years. Information for the year 2018-19 hasn’t been made available yet. A lot of people have been taken in, (even in excess amounts) showing an urge from the citizens to be skilled via the initiatives of the government.

Work done by Employment Exchanges

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates Registered</td>
<td>5454.8</td>
<td>326.3</td>
<td>422.4</td>
</tr>
<tr>
<td>Candidates Placed</td>
<td>0.5</td>
<td>0.1</td>
<td>0.05</td>
</tr>
<tr>
<td>Number of Employment Fairs</td>
<td>0.2</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Number of candidates selected</td>
<td>8.2</td>
<td>47.8</td>
<td>113.8</td>
</tr>
<tr>
<td>Vacancies Notified</td>
<td>2.7</td>
<td>0.93</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Statistical Diary, (Uttar Pradesh Government, 2019)

Work being done by Employment Exchanges has increased subsequentially over the years. Number of employment fairs have increased steadily and the number of candidates being selected have been increasing too.

This success, till some amount can be credited towards the Skill India Programs. But it is seen that the number of registrations for these exchanges has gone down and the percentage of candidates being selected has been phenomenally low when based on the number of registrations.
### 3.2: Skill Gap Analysis

**Projected increment in supply of Labour force in UP**

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>Incremental Supply (2012-2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
</tr>
<tr>
<td>Population</td>
<td>20,35,26,356</td>
</tr>
<tr>
<td>Working Age Population</td>
<td>11,31,34,743</td>
</tr>
<tr>
<td>Projected Labour Force</td>
<td>6,91,77,579</td>
</tr>
<tr>
<td>Projected Work Force</td>
<td>6,81,51,988</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Projected Increment in demand of labour from various skill levels in UP**

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>Incremental Demand (2012-2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimally Skilled</td>
<td>43,31,638</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>35,24,702</td>
</tr>
<tr>
<td>Skilled</td>
<td>31,70,031</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,10,26,371</td>
</tr>
</tbody>
</table>

Source: District Wise Skill Gap Analysis of UP, National Skill Development Corporation™

As is seen from the tables, the incremental supply of labour to jobs under ‘Minimally skilled’ and ‘Semi skilled’ levels far exceed the incremental demand by the labour market by about 1.7 Million and 3.4 Million respectively. But, on the other side, a deficiency of 2.1 Million exists.

A key thing to note here is that just because the numbers show that supply of Minimally and Semi-skilled labour is larger than the demand, it doesn’t nearly mean that the labour is employable. The numbers show only the quantitative side but the qualitative side still shows the need to up-skill the population. The data only implies that there is very sufficient availability of labour and manpower for opportunities in the job market.

For instance, in UP, the need for people in small scale manufacturing, agriculture, unorganised sectors etc is completed via the minimally skilled group. Now to be part of this category, the minimum requirement may be to pass the 10th standard. However, to be employed in the afore-mentioned sectors, some amount of vocational training is required.

Chapter 4: Findings

4.1 Government Plans

Uttar Pradesh is the largest producer of electronic goods and is the fourth largest exporter of software products from the country. With a productive and cost-effective manpower, the state has attracted some of the largest MNCs to set-up their manufacturing facilities – Coca-Cola, Pepsi, Glaxo, Daewoo, Honda, and Piaggio to name a few. Manufacturing remains an important part of the economy, especially in the renewable energy sector. With large investments being made in this field, Uttar Pradesh promises to become a hub for green energy in the country. The government has launched several schemes and projects which will provide a huge boost to the economy in terms of employment and production capabilities.

Under the 5 Trillion economy plan, Yogi Adityanath talked about his plans in September 2019 and announced that manufacturing and infrastructure in UP will play a great role in the pursuit of this target. Even before this, during the Investor Summit of 2018, it was announced that manufacturing was one of the key sectors that the UP Government was planning to focus on.

Uttar Pradesh’s industrial policy has identified certain regions that need greater setup in manufacturing as they believe these regions haven’t fully tapped into their industrial potential yet. One of these Corridors has been identified as the area of Agra-Aligarh-Firozabad-Khurja – Kosi. Bulandshahr is also being seen in larger nationwide projects as a great area for manufacturing setups and has also been identified for a large industrial manufacturing cluster under the mega Amritsar-Kolkata Industrial Corridor, according to directions issued by UP chief secretary Rajendra Kumar Tiwari.

UP was one of the first states to bring in power reform in the country. It has the capacity to produce 30.27 GW of renewable energy and hence the state government has set an objective of annual addition for production capacity of solar energy to 2,000 MW. The state is rapidly increasing its installations for renewable energy production. There has been 38 per cent increase in production capacity of grid connected to renewable energy in 2017-18. This growth comes from installation of power plants across the state which require great setups in the form of power plants for energy creation. This provides a great avenue for employment

Other than this, 1200 Crores has been put it in the state budget to facilitate 30,000 start-ups in the state so as to boost employment in the state. Statements by the Chief Minister announce that industries have received over USD 3 trillion in investment in the industrial sector by both private and public sector, and this will help in the employment of people around the state.

4.2: Current Scenario

The entire economy has been shaken by the advent of the Coronavirus epidemic. This has undermined all principles and assumptions that analysts and policy makers used to take for granted during formulation of strategies. However, industries are a huge part of the economy and one of the most important part of the country’s foundations. Maybe this is why, even when the country was on lockdown, 9 industries were still functioning in UP (with 50% employees).

Experts across global markets have said that this epidemic may have come as a blessing in disguise for South Asian countries, especially India. Dr Ghosh, Group Chief Economic Advisor of SBI recently gave a statement saying that while China has always had an advantage in Capital Goods, it’s bittering relations with the rest of the world was going to become a huge opportunity for India to capitalise on. He, along with several experts believe that the Industrial sector will play a huge role in the coming years in the country.

Due to the large migration of labour causing increasing problems in this state, the Government has planned to even setup more industries in the coming months so as to provide employment to the daily wage labourers and their families so that they don’t travel here and there for food, work or shelter.
4.3: Trade Recommendation

In essence, Calibration technicians (CSC/Q0801) maintain, test and repair a variety of instrumentation and equipment. Their primary job is to make sure that instruments, gauges and testing devices are calibrated correctly and give accurate reading.

This trade is highly general in nature and is required in almost each and every factory or manufacturing unit across several industries.

The National Skills Quality Framework or the NSQF defines Calibration Technician to be a Level 4 trade. This implies that it can be undertaken by someone with as less as a high school education. There is no requisite of any technical degree to enter this occupation, and this makes both training, as well as avenues for employability after training easier for PGPCL.

Chapter 5: Discussion

Previous research suggests that the major problem of skill development programs lies mainly in the area of employment. A huge number of candidates are being trained in various areas for opportunities that are very few in number. Research done by the author has also reached the same conclusion. One such example is of the Pradhan Mantri Kaushal Vikas Yojana under the Skill India Mission. According to latest data provided by the Ministry of Skill Development and Entrepreneurship, about 5.2 lakh people were trained under this program. Only about 1.6 lakh were placed\[vi], which is about 30% of the full set. Surprisingly, this is the best performance by any state in the corresponding year among all the 28 states. This goes on to prove that if employment opportunities in the state are available, Uttar Pradesh can have the best placement records with respect to Skill Development Programmes in the country.

The Government of Uttar Pradesh as well as India is keen to make UP one of the best states in terms of manufacturing, industry as well as energy. Several schemes have identified Bulandshahr as the primary hub for industrial development (Industrial Corridor, Industrial Manufacturing Cluster etc), which will soon make it a highly employable district.

Even the advent of the coronavirus has shifted power from China to India and the government is capitalising on it by planning ways to move the competitive advantage in industries to our country. Ultimately, this too means larger number of manufacturing units all over the nation.

Training in the field of Calibration Technician is highly advantageous due to their massive demand in factories, manufacturing units and power plants. Since it is a largely general field, it’s employability figures will rise with the increase in the number of factories in the state, which are on the rise under the current government.

Chapter 6: Scope and Limitations

The scope of the study is as follows:

1. It aims to determine the prospect of Skill Development Programs in the state of Uttar Pradesh.
2. The study covers majorly the scheme of DDU-GKY for recommendation and no other schemes due to employer background in the named scheme.
3. Aims to perform analysis of Skill Gap in Uttar Pradesh.

The limitations are as follows:

1. Scanty figures and data available via publication or journals. This is because all such data is protected by a login ID and password given to PIAs by the government.
2. Not enough data pertaining to Skill Development Mission available due to it being a relatively young project.
3. The information regarding placements doesn’t cover futuristic aspects and talks only about placed candidates. It doesn’t mention how many of such employees actually continued their jobs in the future.

Chapter 7: Conclusion

In 2015, a study by the Ministry of Entrepreneurship and Skill Development concluded that there was a skill gap and a need of about a 110 million workers in 24 sectors across the nation by 2022. It was with this in mind that the government announced the Skill India Program which targeted skilling of about 40 crore people by the same year.

The connection of skill development to a better growth for the economy is a fairly simple one. Due to training of candidates in various trades across sectors, the supply side of the employment market becomes more refined. The employees have ample number of skilled labour to fill in positions in their firms and businesses and hence increase their own productivity. This increase in productivity leads to an increase in the company’s produce and services. At a macro level, this same ripple effect is seen across the entire country and an expansive movement in Gross Domestic Product is witnessed. By securing training and skilling, the labourers in Uttar Pradesh will also be able to get a grasp in the future job markets due to increasing number of training programmes in IT skills like Big Data etc.

Although the pace of skill development has been fairly decent, the major problem arises with employment opportunities. Although the supply side issues are being solved, the demand has been low. An article by Business Insider stated that out of 7.2 Million trained, only about 1.5M had been placed. However, the study shows that this might be changing for the state of Uttar Pradesh.

The study concludes that Uttar Pradesh provides good rewards and high social benefit for skill development programs in its boundaries. The only pressing concern is the dearth of employment opportunities and to overcome this, the best trade under the mantle of the Deen Dayal Upadhyaya – Grameen Kaushal Yojana will be Calibration Technician, since this position is highly sought in industries and manufacturing units. Such units are going to be primary for Uttar Pradesh under the various programs announced by the state and central government, and hence will provide great employment opportunities to the ones adequately trained in this field.
Chapter 8: Acknowledgments

I would like to express my gratitude towards my mentor Ms. Aditi Singh, who read and re-read my report to ensure that it was impeccable in all sorts of way. Our Project Head, Mr Keerti Singh was a source of inspiration and showed utmost faith in me during my 2-month tenure, and for that I would like to convey my heartiest regards to him. I would also like to heartfully thank my guide Dr Manisha Raj, who was always willing to solve any problems that I faced while researching content for my paper. A lot of credit also goes to my mother Mrs Pragya Tewari, father, Mr Mudit Tewari and brother Pranjay Tewari, who helped me gain the confidence and motivated me whenever I faced trouble or felt demoralised during my research sessions. Each one of these have helped shape this report in great ways, and I would like to thank all of you immensely.

ENDNOTES

(Ansari & Khan, 2018)
(Gupta & Aggarwal, 2018)
(Shrivastav & Jatav, 2017)
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(Pal, 2014)
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