Abstract

To eradicate poverty enhancement of education is most important. Pakistan’s 72% youth force is literate. Should they be purposefully educated an economic revolution can be achieved. Regular vocational education and training system and surprised apprenticeship schemes do not work effectively because of corruption. An informal technical training system in which children (Chota) are trained as petty workers at some workshop is simultaneously in use. When sufficiently trained they work as a skilled worker (Karigar) and becoming senior they work as senior technician and can train others (Ustad). They can establish their own workshop too. This informal but socially accepted system replaces the formal system. People are trained as well as have some earning. It concludes to improve and formalize the system to make it more beneficial. Surveying workers and owners of two industries it is tried to determine deficiencies and suggestions for improvement.

Keywords: Poverty, Literacy Rate, Unemployment Rate, Statistics

Introduction

The unavailability of choices and opportunities and deprivation in basic necessities of people living in an area is termed as poverty. It is considered as a serious issue all over the world.

According to Human Development Index (HDI) Pakistan is at number 146 in 187 countries of the world [UNDP, 2014]. It is a level lower than Bangladesh and India. There are certain factors that
enhance the level of poverty. One of the important factors is lack of education. Unfortunately, despite all efforts Pakistan as a country is unsuccessful to attain a considerable status of education and literacy. In literacy Pakistan is at number 180 among 221 countries [UNESCO, 2012].

Fortunately, the literacy rate among youth between the age of 15-24 years is better and was 72% in 2012 [UNESCO, 2012]. So this youth force must be supportive effectively in the alleviation of poverty. It depicts that either the educational system is defective and people are not really educated or the education provided is insignificant to contribute in the development.

Otherwise such a youth force educated purposefully can bring revolution in the economy of the country. This youth force is considered an asset all over the world that contributes as an important tool in the alleviation of poverty. The current and the past two governments in Pakistan aimed to use this force effectively and planned to provide free education to all from primary to secondary level with many incentives such as free books, uniforms and increased number of scholarships at the secondary level. These efforts are yet not very successful. The educated masses too are not yet able to get involved effectively in the efforts to alleviate poverty.

One approach to alleviate poverty is to enhance the technological development. This is an era construed to the development of new technologies and this development needs enhancement of technical knowledge and up gradation of the skill level of the available human resource. In new countries the paradigm is shifted from semi-skilled economic structures to skilled economic structures. In under developed countries like Pakistan a shift from non-technical/agro environment to technical environment is gravely needed.

This shift can only be made possible through the enhancement of skill/technical based knowledge via formal skill development training and technical education.
Regular vocational education and training along with various apprenticeship schemes are commonly utilized to do so. Such activities in turn are also helpful in the alleviation of poverty. Pakistan is a poor country and all efforts for enhancing literacy and formal technical education become fruitless relatively most of the children leave formal education even at the lowest level.

Usually parents send them to a workshop as petty workers for their earnings. In due course of time, they get some technical knowledge and those who are consistent enough become knowledgeable to start their own workshop or to work as senior technicians on a workshop. Many children have to work as domestic servants to earn their living and they neither get a formal education nor a knowhow of a technical specialty.

These ground realities lead to the conclusion that if the informal hands on technical training could be formalized in some way, combined with a proper education it would increase the formal literacy together with an enhancement of technical skills. If properly managed, this practice can be helpful in the effort of alleviation of poverty. This study in this perspective attempts to explore the aspect of developing and implementing such a scheme. For this purpose two industries are surveyed to determine such possibilities.

After reviewing the current situation of literacy and poverty this study proposes an effective curriculum at the secondary level that can help not only to upgrade the quality of literacy but also help to lower the level of poverty. In this course the study will also review the effectiveness of existing technical and non-technical education and an alternative working system of on the job training as apprentice.

1. Youth Literacy

As considered in the 1998 census of Pakistan literacy is the ability of a person to read and write. In 1950 overall literacy rate in Pakistan was 14 % as compared to India which was 20% whereas it became 60% in 201 3 in Pakistan while in India it was 75%
In youths (15-24 years) in 2012 this rate in Pakistan was 70.3% and in India 81.4% [http://www.unicef.org/infobycountry/india_statistics.html]


![Graph showing literacy rate of Pakistan from 1950 to 2013](image)

The youth population of Pakistan under the age of 24 years approximates to 100 million [The Nation, 28 June 2012, “skillful Youth may be brighten Pakistan’s Future”]. If they are literate, skilled and trained, they can contribute to economic uprising of the country. Unfortunately, despite the presence of huge plans and institutions, and spending heavy amounts there is no considerable success yet. According to UNESCO 32 percent of the total youth population is illiterate. If they are literate, skilled and professionally trained, this potential can be utilized to contribute to the economic development of the country.

As regards the youth unemployment, it is desperate to know that less than 10 percent of the youth are unemployed and only 6 percent have any professional skill [The Nation, 28 June 2012, “skillful Youth may be brighten Pakistan’s Future”]. Technical
Education and Vocational Training (TEVT) and National Vocational and Technical Training Commission (NAVTTC) are responsible institutions for enhancing the technical and vocational training of the youth but their success still has a question mark. One reason for the retarded rate of success may be the general perception that technical education is a second rate education. However, a lot of people earn their living by working in small technical and industrial establishments set by small entrepreneurs. In such establishment illiterate people are given on the job training.

So they become skilful but at the cost of giving up proper education. In most of the situations the employees are exploited. They are paid less and they carried work hard. The workers are employed irrespective of the age limit. A number of workers are children who are paid less and had to work hard in an inappropriate environment. They are not allowed to carry regular education. The case of woman and adults is not different because most of them started with working as a petty worker called CHOTTA meaning the child laborer. These workers grow up in a CHOTA-KARIGAR-USTAD system. Irrespective of other complaints they complain most that in the efforts of earning for their living they had to say good bye to education and remained illiterate. Some of them who now are well off still feel the necessity of traditional education.

**Youth literacy rate (15-24) (%), [EFA Global Monitoring Report 2012, “Youth and Skills putting education to work”, UNESCO]**

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2. Youth Unemployment

Youth unemployment is a matter of interest all over the globe but it is of utmost importance for Pakistan in the current scenario of terrorism. The unemployed youth can be easily exploited and provoked by the terrorists. A better solution to combat terrorism is to literate, vocationally train and employ the youth. The youth unemployment is a universal problem. Unemployed youth has to face ignorance, disgrace, frustration and psychological perish and social disparity. In this situation they can easily become the victim of drug and human traffickers, political and religious exploitation and street crime mafia. It is noticeable that in recent suicidal attacks mostly youths between the age group 15-24 were found to be involved.

In Pakistan it has been observed that most of the suicide attacks in recent years have been carried out by the youths of age group 15 to 24 years. In 1992 the global youth unemployment rate was 11% which increased to 13.1% in the year 2002. In 2007 it fell to 11.6%. It then again started to increase and till 2012 it ascended to 12.7%. The overall youth unemployment rate in Pakistan in 2008 was 7%. The provincial unemployment rate in Pakistan for the year 2010 was approximately 24% (urban), 11% (rural) in Punjab, Sindh and Khaiber Pakhtoon Khwah whereas, in Balochistan it is very high.
that is overall 78% [Masroor Ahmed Shaikh (2012). National Round Table Conference on Technical Education and Vocation Training Organized by NAVTTC in Collaboration with UNESCO, Karachi, pp. 1-17.].

This situation of youth unemployment in Pakistan is in worse than the situation of general unemployment (10.3% versus 6.0%). The situation of general unemployment is depicted in the following.

**Pakistan youth unemployment, ages (15-24) and Pakistan general unemployment rate (%) :**

[http://data.worldbank.org/indicator/SL.UEM.1524.ZS ]

![Graph of youth and general unemployment rates](image)

2. **Non-Governmental Vocational Skill Enhancement and Training (CKU System)**

Chota-Karigar-Ustad system is a non-formal system of training and apprenticeship which is very common in use in Pakistan to get skilled labor to work in small/home industries and workshops. Approximately 52.1% out of school children engaged in child labor. The situation of out of school children is depicted in the following.

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Those who are acquired for technical jobs are trained through CKU system. In this system parents or some of the guardians of a child/youth brings the ward to the owner of a technical concern for employment/training. In many cases the guardian do so to clear their debts acquired from the owner. These children who are termed as CHOTA are usually under age to work as a labor (against labor laws).

In the beginning they are utilized as personal servant/(slave) with no payment or a meager payment to their guardians. In most of the cases they have no technical knowledge, no formal education, and even have no idea of the job. When they become familiar with the environment which in most cases is abusive and tormented, he is handed over to a senior worker called Karigar. They all work under the supervision of a master trainer (in most cases he is the owner) called USTAD. He trains them “on the job training basis”. The trainees who learn properly and become perfectly skilled become Karigar. A few of these Karigars on the basis of their skills and investment become entrepreneurs themselves and start their separate establishment as owner/ustad.

And the system continues to extend cyclically till the attainment of saturation in a particular area. This is how the CKU system works. It has advantages and disadvantages both in an underdeveloped country, Pakistan. The worst aspect of the system lies in the fact that most of the Chotas has to sacrifice formal education. And they do not see the face of any school or had to leave the school for ever forcefully. The main culprit in this regard is considered poverty.
One aspect of this study is concerned with a survey about CKU system conducted in 2014 in the marble and glass industry. In the following it is presented the outcome and analysis of this survey. The main objectives of the survey were the following:

(i) To visualize the current situation of job openings for the youth
(ii) To explore the literacy level of the employers and the employees
(iii) To estimate the status of vocational skills of the workers
(iv) To study the need and scope of literacy and skill enhancement of the workers
(v) To survey the amount of possible support from the employers for such efforts

The survey was conducted in two different industrial concerns, the marble processing and marble goods manufacturing industry and glass furnishing industry. Chota/Karigar and Ustad were individually questioned (questionnaires provided in Fig.). Keeping Chota and Karigar in one set 31 questions were asked whereas, Ustads in the other set were put 23 questions.

3.1 Questionnaires: Summary and Discussion:
Two different questionnaires were distributed separately to workers and ustad (owner). The information is collected in the following.

I- Marble Industry
(A) Chota/Karigar (worker)

1) The average age of Chota/Karigar was found to be 22.9 years (min 16 years, max 32 years), 26.66% of Chota/Karigar had no formal education, 36.66% had Primary education, 36.66% had Secondary education, and above secondary 0%. Table A1

2) According to workers 6.66% employers had no formal education, 30% had Primary education, 33.33% Secondary,
23.33% higher education, and 6.66% had graduation. Table A2
3) The minimum salary of a worker was found to be 5000 rupees, 60% chota/karigar had salary less than 10000 rupees, 36.66% chota/karigar less than 15000, and 3.33% chota/karigar salary less than 20000 rupees. Table A3
4) chota/karigar on the average work 8.61 hours per day
5) The average number of family members is approximately 5
6) The average work experience in chota/karigar are 7.36 years
7) 3.33% are still continuing further education with their job
8) 90% considered general education to be necessary for their future life
9) 55.66% self support their further education
10) 90% were of the opinion that a formal technical training can improve their work
11) 56.66% agreed that this on the job training has increased their skills
12) 73% informed that they avail weekly off day (in most cases they are not paid for that day)
13) Only 6.66% get paid leaves annually on the occasion of Eid and other holy festivals.
14) No one replied clearly about the any disease because of the job
15) 90% were satisfied with their work environment
16) 70% complained of the use of abusive language while working

17) 63.33% of the workers confirmed the provision of safety measures during the work

18) All the workers were provided helpful guidance

19) 26.66% were rotated in different sections to work on different products

20) 76.66% were of the opinion wanted to get formal education in Mathematics, English and Social Studies etc.

21) 93.33% agreed that they get respect, facilities and support from the employer

22) Cent percent agreed that they have manageable workload.

23) 86.66% were interested to initiate their own workshop in future provided they get more technical knowledge support from the government

24) 30% were married

(B) Ustad

1) The average age of Ustad was found to be 44.6 years (min 20 years, max 75 years), 10% of Ustad had no formal education, 20% had Primary education, 40% had Secondary education, 15% had higher secondary education and 15% had graduate. TableB1

2) The average number of family members in ustad is 5-6

3) The average work experience in ustad are 22.2 years

4) The average monthly income 45025 rupees
5) No one is continuing further education

6) 100% considered general education to be necessary for their Chota/Karigar

7) 70% informed that they give for Chota/Karigar weakly off day (in most cases they are not paid for that day)

8) Only 10% pay their workers for annual leaves or festivals (Eid)

9) They all were of the view that any of the workers is affected by any disease due the nature of the job or because of the job environment.

10) 90% were satisfied with their work environment

11) 65% accepted the use of abusive language while working

12) 90% of the Ustad confirmed the provision of safety measures during the work

13) All the Ustad provide helpful guidance to their workers

14) 20% accepted that the assignment of the worker changes from time to time.

15) 100% wanted that their workers should be provided formal education in Mathematics, English and Social Studies etc.

16) 90% were married

17) They has never been such survey earlier
II- Glass Industry

(A) Chota/Karigar

1) The average age of Chota/Karigar was found to be 27.66 years (min 17 years, max 33 years), 16.66% of Chota/Karigar had no formal education, 16.66% had Primary education, 58.33% had Secondary education, 8.33% had Higher Secondary education and above Higher secondary education 0%. Table C1

2) The average qualification of employer, 8.33% had no formal education, 41.66% had Primary education, 33.33% had Secondary, 16.66% had higher education, and 0% had graduate. Table C2

3) The average salary of Chota/Karigar, upto 10% chota/kaigar salary less than 5000 rupees, 41.66% chota/karigar salary less than 10000 rupees, 33.33% chota/karigar salary less than 15000, and 25% chota/karigar salary less than 2000 rupees. Table C3

4) Chota/karigar on the average work 9 hours per day

5) The average number of family members in chota/karigar are approximately 4

6) The average work experience in chota/karigar are 15.3 years

7) 20% are still continuing further education with their job

8) 91.66% considered general education to be necessary for their future life

9) 66.66% carry self support their further education

10) 83.33% were of the opinion that a formal technical training can improve their work
11) 58.33% agreed that this on the job training has increased their skills

12) 100% informed that they availed weekly off day (in most cases they are not paid for that day)

13) Only 10% get paid leaves annually on the occasion of Eid and other holy festivals.

14) 33.33% Chota/Karigar were affected by any disease because of the job

15) 90% were satisfied with their work environment

16) 75% complained of the use of abusive language while working

17) 41.66% of the workers confirmed the provision of safety measures during the work

18) All the workers were provided helpful guidance

19) 58.33% were rotated in different sections to work on different products

20) 100% were of the opinion wanted to get formal education in Mathematics, English and Social Studies etc.

21) 90% agreed that they got respect, facilities and support from the employer

22) Cent percent agreed that they had manageable workload.

23) 83.33% were interested to initiate their own workshop in future provided they got more technical knowledge support from the government

24) 66.66% were married
25) There has never been such survey earlier

**B) Ustad**

1) The average age of Ustad was found to be 45.5 years (min 24 years, max 58 years), 10% of Ustad had no formal education, 20% had Primary education, 50% had Secondary education, 20% had higher secondary education and 0% had graduate. Table D1

2) The average number of family members in ustad is approximately 5

3) The average work experience in ustad is 29.1 years

4) The average monthly income is 37500 rupees

5) No one is continuing further education

6) 80% considered general education to be necessary for their Chota/Karigar

7) 100% informed that they gave for Chota/Karigar weekly off day (in most cases they are not paid for that day)

8) Only 10% got paid leaves annually on the occasion of Eid and other holy festivals.

9) 30% replied that their chota/karigar affected by the any disease because of the job

10) 90% were satisfied with their work environment

11) 70% reported that used of abusive language while working

12) 40% of the Ustad confirmed the provision of safety measures during the work

13) All the Ustad were provided helpful guidance
14) 20% accepted that the assignment of the worker changes from time to time.

15) 100% wanted that their workers should be provided formal education in Mathematics, English and Social Studies etc.

16) 80% were married

17) There was never been such survey earlier

Discussion and Suggestions

In view of the above analysis, it was concluded that on job training of young workers could be a fruitful way of providing a technical support for the alleviation of poverty. Though no formal education was provided the young apprentices got prepared to take part in the economic activity. Neither the workers nor ustad denied the necessity of formal education. At many places the environment was not morally suitable but in most cases both the category wished for a better environment.

To conclude it is to mention that the Chota-Karigar-Ustad (CKU) system despite all its shortcomings formed a parallel system of providing practical knowledge and technical training. In addition it provided a way for financial supports to millions of families. Though, the system seemed much informal and many drawbacks, it formed a strong base for a nongovernmental infrastructure to economy and industry. If the system could be modified and improved in some way to become part of the formal educational system, it would be more useful for the alleviation of poverty. The finding elaborates with the work [M. Etezaz Ibrahim and Muhammad Rashid Kamal Ansari (to appear), Dynamics of Poverty Growth Pakistan and suggestions for the improvement through the improvement of Curricula].

Serious shortcomings of the system formed the abusive environment, low and improper education and skills of the Ustad itself, a meager payment to the Chota and a working insecurity. If government’s help and support is provided to develop links
between the academic institutions and such training centers, a better technical and industrial infrastructure can be available for the alleviation of poverty.

A1 (Qualification Bar Chart, Marble worker)

A2 (Qualification Bar Chart, Employer according to Marble worker information)

A3 (Monthly salary Bar Chart, Marble worker)
B1 (Qualification Bar Chart, Marble Ustad)

C1 (Qualification Bar Chart, Glass worker)

C2 (Qualification Bar Chart, Employer according to Glass worker information)
C3 ((Monthly salary Bar Chart, Glass worker)

D1 (Qualification Bar Chart, Glass ustaz)

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