Impact of Counterfeiting On Quality In Construction Industry In Peshawar

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Abstract

During the studying and job author noticed that in construction industry, the counterfeit items, are many and becoming a high reason of concern for the population. Further digging out the subject, exploring the other parallel industries of neighboring economies shows that the counterfeit items are produce in such manner that it become an industry itself. And it has penetrated the other national and international trades of all sorts, where civil work industry is also not spared keeping that its growing day by day and profit margin is higher for the opportunist of the counterfeit material manufactures and distributors. China, Turkey, Taiwan are the main lands of these manufacturer to produce the counterfeit items where Honking, Malaysia, UAE are the main distributing hubs for these counterfeit products due to weak law enforcement or flexible business rules. The impact and presence of counterfeit material in civil industry Peshawar region, 150 participants were selected in three subgroups such as Contractors, client and consultants to collect data through open and closed ended questionnaires, interviews, discussion, physical inspection visits of manufacture, warehouses and deliveries regarding the availability, use and volume of the counterfeit products in the Peshawar market. This data was further analyzed and evaluated with SPSS. The outcome of the data evaluation on the subject exposes the enormous increase of counterfeit material in the industry special in wood work, water sanitation, electric items and civil works as these items were the target of this research. Most factors are the unawareness, low price, scarcity of original product in market that these items exist in substitute product.

Keywords: construction industry, counterfeit items, civil work industry, profit margin, data analysis with SPSS
I. Introduction

In 1980s, the US custom estimated that about 9% of the total world trade is counterfeit product where as many countries have signed agreement to protect intellectual property and fight against the counterfeit products but still the products are more available in both national and international market. According to the World Trade Organization (WTO), world trade jumped to 47% greater than before from 1990 to 1995, whereas the market of counterfeit product jumped to 150 % during this same period and the problem has continued to grow. As of 2003, the total value of counterfeit products marketed is $1 trillion annually.

There is much more about counterfeit product in literature but in general there is nothing about counterfeiting in construction period which result in loss of many valuable life and also the public money .counterfeiting in construction field is almost neglected caused significant negative impacts to safety, project schedules, overall costs and quality of construction.(I)

The vastness of the industry is beyond the imagination today due to daily improvement or new items are coming in the market and the people have very less know how about the specs of the product so it give entry to the counterfeiters to in the market In china some companies are producing the original product during day time and fake items in different shifts means the original and fake material is in same supply chain which make it impossible to detect as the documentation and resource line are same too. (IV)

According to James Moody, former chief of the FBI organized crime division, counterfeiting will be the crime of the 21st century (III) . As it increased with 273 percent between 2000-2006 and cover up to 5-7% (VII). The report mentioned that about 60 % of counterfeit goods are produced by China. (XI)

Counterfeiting defined by Lai and Zaichkowsky (1999) is that 100% direct copy of original item with inferior quality with intention to deceive consumer. There are two types of counterfeit products; deceptive and non-deceptive counterfeits (X)

In many countries around the world Government had made laws and treaties against the companies and punish counterfeiters in order to protect their citizens and local industries from those who would attempt to usurp the brand names of successful companies. (VI)

The ratio of fake material arrived at US borders is shockingly high and indicate the corruption level in production of counterfeit products circulated in global market. (V)

According to this research the same logistics infrastructure is used and authorization/paperwork of these counterfeiting products is also at place as there are some manufactures that are capable to produce both same and original to make money and cover the market with their products. (VIII)
China, Thailand are not the only culprit but Mexico, Philippine, Russia, Turkey, and Saudi Arabia are also coming in high ranking counterfeiting manufacture in the given report. (II)

The user of such product is robbed for the price of original in compare to performance and consumer satisfaction cause devalue of the spent amount and product unreliability resulting the damaged reputation of the original product. (IX)

Previously counterfeiting of grey structure, pipe, circuit breaker & wires has been done & in this project we will ensure the counterfeiting of finishing materials of building like tiles aluminum, glass, false ceiling door closer, door locks etc.

II. Methodology

The researcher of this article used the combination of quantitative methods such as questionnaire and physical evaluations, interviews, most suitable for the given subject of the research “the impact of counterfeit material on quality in construction industry Peshawar”.

The findings are true representation of real time experience of civil work personals directly involved in ongoing or completed projects. This participant sub grouped further in three as given:

- Govt. Sector Professionals
- Projects Managers/Clients
- Contractors

To capture the concept of persons related to counterfeiting material and their behavior qualitative method of questionnaire and on handful experience of on job professional is the most suitable approach at hand of researcher.

Around 150 questionaries’ were distributed between various companies, ongoing projects of government such as C&W (Communication and Works Department), P &D (Planning and Development Department), social sector, corporate sector and such. Out of 150 questionaries’ total of 105 filled questionnaire received with data which researcher used for SSPS (Statistic Package for Social with assigned scores to each factor by the respondents were entered and consequently the responses from the 105 questionnaires were subjected to statistical analysis for further insight & investigating about the impact of counterfeiting on quality in Construction Industry.

Author of this article had visited many construction sites to inspect the material being used in ongoing projects along with the main actor of the project and investigate the whole supply chain process. Meeting with manufacturer, distributors of material including sanitary, electric, construction material. The author investigates the finishing material like electrical points and fixture, wood joinery, & some civil works finishing materials.
As the last two decades civil industry get very huge resulting the presence of counterfeited material in whole supply chain line of these civil work items along its appalling potential risk attached, it was important to informed the authenticity of the supplied or purchase item geniuses. And that was the main focus of the physical inspection of the items and many points from manufacturing till the installation.

### III. Results/Discussion

The results that we got from the data & discussion on each point in a clear and concise approach. The purpose of this section is to present the results of the research. I admit that it was thought provoking task to collect and manage the multitude of complex information and presenting it in a lucid manner without carried away to different aspects.

Table show Mean, Standard deviation & Relative importance index to find the riskiest & least risky factors

#### Table 1. Experimental Results

| Questions                                                                 | N  | Mean | Std. Deviation | Relative Importance Index (RII) |
|---------------------------------------------------------------------------|----|------|----------------|---------------------------------|
| 1. Current risk of counterfeiting impact on quality to construction industry in Peshawar? | 105 | 3.48 | 0.867          | 0.695238                        |
| 2. What is the level of QC/QA in process of counterfeiting?               | 105 | 2.44 | 0.929          | 0.624762                        |
| 3. What is the frequency of consciousness of the impact of counterfeiting on the quality in construction industry in Peshawar | 105 | 3.12 | 0.917          | 0.487619                        |
| 4. Do you have know-how about counterfeit goods in past?                  | 105 | 3.00 | 0.941          | 0.60                            |
| 5. Accessibility of counterfeit goods in Peshawar?                         | 105 | 3.18 | 1.262          | 0.63619                         |
| 6. Your company ever been targeted of bad publicity due to counterfeiting. | 105 | 2.52 | 1.169          | 0.504762                        |
|   |   |
|---|---|
|   |   |
| 7. | Health & safety magnitude of counterfeiting impact. | 105 | 3.26 | 1.193 | 0.651429 |
| 8. | Prospect of threat when we purchase a counterfeited product | 105 | 2.98 | 1.109 | 0.59619 |
| 9. | Rate the prevention of counterfeiting in regard to counterfeit item in construction industry | 105 | 2.69 | 1.095 | 0.537143 |
| 10. | Counterfeit goods are long-lasting and steadfast in construction industry? | 105 | 2.57 | 1.239 | 0.514286 |
| 11. | Rate value of counterfeit material impact in construction industry. | 105 | 2.81 | 1.066 | 0.561905 |
| 12. | Involvement of Government in identification of counterfeit goods? | 105 | 2.45 | 1.109 | 0.489524 |
| 13. | Education about the identification of counterfeit goods? | 105 | 2.41 | 1.089 | 0.481905 |
| 14. | Project quality management also concern with the management of project & the product of the project. | 105 | 3.12 | 1.035 | 0.624762 |
| 15. | Overworking of the project team in order to complete the project & the product of the project. | 105 | 3.15 | 1.026 | 0.630476 |
| 16. | A hurry to complete the project result in poor quality of work not in compliance with the specification. | 105 | 3.46 | 1.029 | 0.691429 |
| 17. | The cost of quality includes training, safety, measures & action to prevent counterfeiting. | 105 | 3.21 | 1.149 | 0.641905 |
| 18. | Is bad communication among the management employees, consumer & stalk holder has impact on quality | 105 | 3.33 | 1.089 | 0.666667 |
| 19. | Know-how about the specification/ BOQs & other project document before the approval of the product. | 105 | 3.15 | .938 | 0.630476 |
| 20. | Pros & Cons to Client | 105 | 3.28 | 1.197 | 0.655238 |
| 21. | Pros & Cons to Consultant | 105 | 3.26 | 1.135 | 0.651429 |
| 22. | Pros & Cons to Contractor | 105 | 3.08 | 1.284 | 0.615238 |

Table show ranking of top six most risky factors with respect to relative Importance index

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Table 2. Experimental Results

| S.No | Questions about the impact of counterfeiting                                           | RII        | RANK |
|------|--------------------------------------------------------------------------------------|------------|------|
| 1    | Current risk of counterfeiting impact on quality to construction industry in Peshawar? | 0.695238   | 1    |
| 2    | A hurry to complete the project result in poor quality of work not in compliance with the specification. | 0.691429   | 2    |
| 3    | Is bad communication among the management employees, consumer & stakeholder has impact on quality | 0.666667   | 3    |
| 4    | Pros & Cons to Client                                                                | 0.655238   | 4    |
| 5    | Pros & Cons to Consultant                                                            | 0.651429   | 5    |
| 6    | Education about the identification of counterfeit goods?                              | 0.651429   | 6    |

Table shows the least risky factors with respect to relative Importance index

Table 3. Experimental Results

| S.No | Questions about the impact of counterfeiting                                           | RII        | RANK |
|------|--------------------------------------------------------------------------------------|------------|------|
| 01   | Health & safety magnitude of counterfeiting impact.                                  | 0.481905   | 22   |
| 02   | What is the frequency of consciousness of the impact of counterfeiting on the quality in construction industry in Peshawar | 0.487619   | 21   |
| 03   | Involvement of Government in identification of counterfeit goods?                   | 0.489524   | 20   |
| 04   | Your company ever been targeted of bad publicity due to counterfeiting.             | 0.504762   | 19   |
| 05   | Counterfeit goods are long-lasting and steadfast in construction industry           | 0.514286   | 18   |
| 06   | Rate the prevention of counterfeiting in regard to counterfeit item in construction industry | 0.537143   | 17   |
Based on the ranking of the mean RII s the riskiest & the least risky factors are point out which has a great/less impact on the quality in construction industry of Peshawar and has to be handle by applying the recommendations.

IV. Conclusion

The participants (contractors, project managers, buyer, client and movement counterparts) are certain by their experience that the counterfeit material is increased and have been pierced in the local market and supply chain channel where as general public or individual are not aware. Availability of counterfeiting civil products in the market, its production and supply are very huge and very systematic. Whatever items comes in demand, its counterfeit item prevail the market in no time. The main factors in work for the presence of these counterfeiting items in the market;

a) Unawareness of the user  
b) High demand of original product with scarcity  
c) Low cost of counterfeit items  
d) QC/QA System not advanced

As the quality control aspect are yet to be advance, the general public is more likely to be purchasing and using counterfeiting items from the market due to above mentioned factors resulting the potential danger of losing resources, life’s and other long-term damage.

If we make following steps as common day to day business dealings the chances are high to avoid the counterfeiting material as much as possible:

- Always go through the documents (invoices, delivery challah, receipts of the shipped material to confirm the suppliers/distributor/manufacture’s identity status.
- To compare the price with the standard cost of such material.
- Genuine product usually have code no, marks, barcode, or if not any they are always shows the manufactory’s identity which is very helpful to defining if the product is genuine or counterfeit.
- Quality of packaging, delivery, finishing of product does vary from the genuine one.
- Detect the other irregularities in labels, codes, colors etc.
- Making sure the country of origin is same as of genuine product is being manufactured
- Never accept a product with noncompliance design, structure or standard formation
- Rechecking the product thoroughly even from the trusted suppliers to make sure the product is not level B counterfeited product.
- Always kept the potential supplier database available and update , an
continues management is required for this practice, for better supply chain management always keep the supporting information such as origin, material specifications and their approved and excluded manufacturer.

- Ban manufacturer & distribution of counterfeit goods
- Prevent counterfeit product import & export;
- Strick supervision;
- Prevent establishment of companies that provide the product
- Take steps in international fight against counterfeiting
- Provide proper specs of the item to the client & supervisor.
- Educate people about the impact of counterfeiting.
- Enforce a law against counterfeiter.
- Establishment of Anti counterfeit Department provincially.
- Direct access to the main company producer of the product.
- Higher pay to the procurement officer
- Check and balance in the departments should be ensure

Although these are some basic steps but practicing them prevents huge chance of using the counterfeiting material in civil work industry and gives user effective control over accidently or unconsciously using the fake products.

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