

SHALAMAR GARDEN: REAPPRAISAL OF TAKEN MEASURES IN THE WAKE OF ORANGE LINE TRAIN AND SOCIO- ECONOMIC IMPLICATIONS

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ABSTRACT

This research paper is attempted to adjudge the effectiveness of all measures taken in the wake of Orange Line Train with special reference to Shalamar Gardens. Shalamar Garden, recognized as World Heritage Site, has historic association which represents a rare example of garden traditions of the past times. In the introduction and background, we have discussed the evolution of circumstances which paved the ways towards genesis of the issue. Then in legal framework section, light is put forth on all national and international legal formalities dealing with the development around the historic site. The next portion is about all the reservations and apprehensions voiced by UNESCO and SC. The second last portion is about all the practical steps taken by Govt. as an effort to mitigate the concerns. Then there comes findings and recommendations section which provides an insight analysis of the problem and highlights the loopholes. This portion gives us suggestions and vulnerabilities which might affect the site in near future. The renowned firms were consulted in order to investigate the issues. We have the official stance but don't have the stance of common people who has been living and have business affiliation with the site. How the development of OLMT and creation of buffer zone affect them and their livelihood? Are they satisfied with the measures adopted by Government for the safety of the historic site called Shalamar Gardens? The common people view point has been missing till now. No one bother to look the issue through the lenses of those people who themselves and their ancestors have been living there since ages. What will be the socio-economic repercussions of this development on the people living in the vicinity of Shalamar Garden? We tried to cover these research gaps in this paper and attempted to collect data by applying various qualitative and quantitative techniques. But most of the people selected for sampling were from poor educational background. So the interviews, surveys and discussions were considered to be the best means to collect data. This research paper will reassess the taken measures and

highlight the socio-economic implications on the community residing in the surroundings.

Keywords: Shalamar Gardens, Orange Line Metro Train, UNESCO, Reactive Monitoring Mission, Honourable Supreme Court, Protective Measures.

INTRODUCTION

Lahore is located on the left bank of river Ravi in Punjab, Pakistan. Malik Ayaz, a slave of Mehmud of Ghazni, introduced organised settlement to bring order in this city around 1000 ACE. Though, it provides a gateway to Central Asia therefore remained a pathway for visitors, traders and invaders since ages. It secured its status as Royal city during Mughal Rule especially when Akbar shifted his capital in Lahore. At Mughal times, many gardens and monuments were constructed in the city to make it more exquisite and beautiful. Shalamar Garden is one the remained epitome of Mughal period which reflects architectural and artistic zeal of that time.



Fig: 1 (World Heritage Site of Shalamar Gardens, Lahore)

Presently, Lahore is the second largest city of Pakistan and having population above eleven million, according to 2017 census. The change of growth in population, in last nineteen years, is 53.77% which is one of the highest in the region (Pakistan Bureau of Statistics, 2017). With the mammoth increase in population and urban migration, the city is engulfed into a number of traffic problems. In the wake of those problems, the project of Metro Orange Line Train was initiated by the Government of Punjab. It is a rapid transit system which will enhance the effectiveness of public transport facilities in the city and will help to address traffic congestion (Punjab Mass transit Authority, 2015). It passes nearby many historic sites including GPO, Chaburji, High Court Building,

Lakshmi Building, Shalamar Gardens and etc. But its track is placed within the distance of 200 feet on southern front of Shalamar Gardens. It is speculated that putting the OLMT track within 200 feet distance is against the law and very mean to endanger the existence of the site.

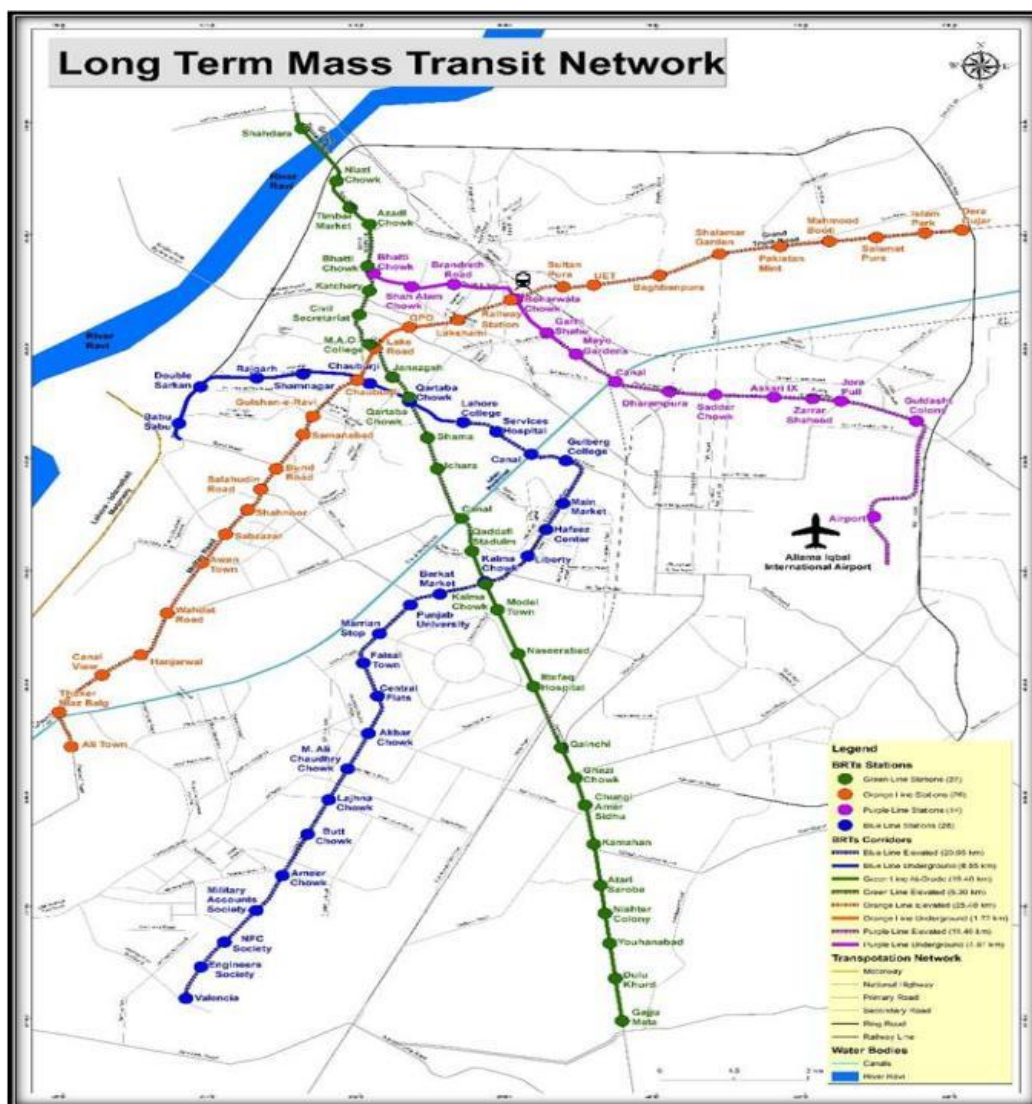


Fig: 2 (Mass Transit Network for Lahore)

The Metro Line Project brindled into controversy when Honourable High Court granted stay which resulted in complete suspension of all work. A joint team from the World Heritage Centre and ICOMOS Reactive Monitoring Mission visited the Shalamar Gardens. The mission considered the Metro Line Project a threat to Outstanding Universal Value (OUV) of the property, notably its integrity and authenticity. A number of recommendations and directions were given by both Honourable Supreme Court and RMM and ordered the compliance to prevent any adversity.

The Government and the Department conducted many studies in order to check the feasibility to implement those proposals and directions. A special study, titled PC-II,

was conducted by The Directorate of Archaeology in order to assess the cost and feasibility of all the recommendations proposed by RMM and ICOMOS. Other various studies and researches has been undertaken regarding vibration issues, environmental concerns, conservation problems and traffic plan to understand the true picture and proportionality of danger.

EVOLUTION AND BACKGROUND:

The Orange Line Train, a mass transit system, was introduced in 2015 in order to address the traffic problems and congestion in the city of Lahore. It was aim to resolve public transport issues and cater future transport demands. It runs 27.1 km from Ali Town to Dera Gujran via GT Road and Multan Road, with a total of 26 stations. From Dera Gujran to Lakshmi Station, the alignment is elevated; it then goes underground by cut and cover construction for two stations and resumes at elevation from Chuburji southwards to Ali town.

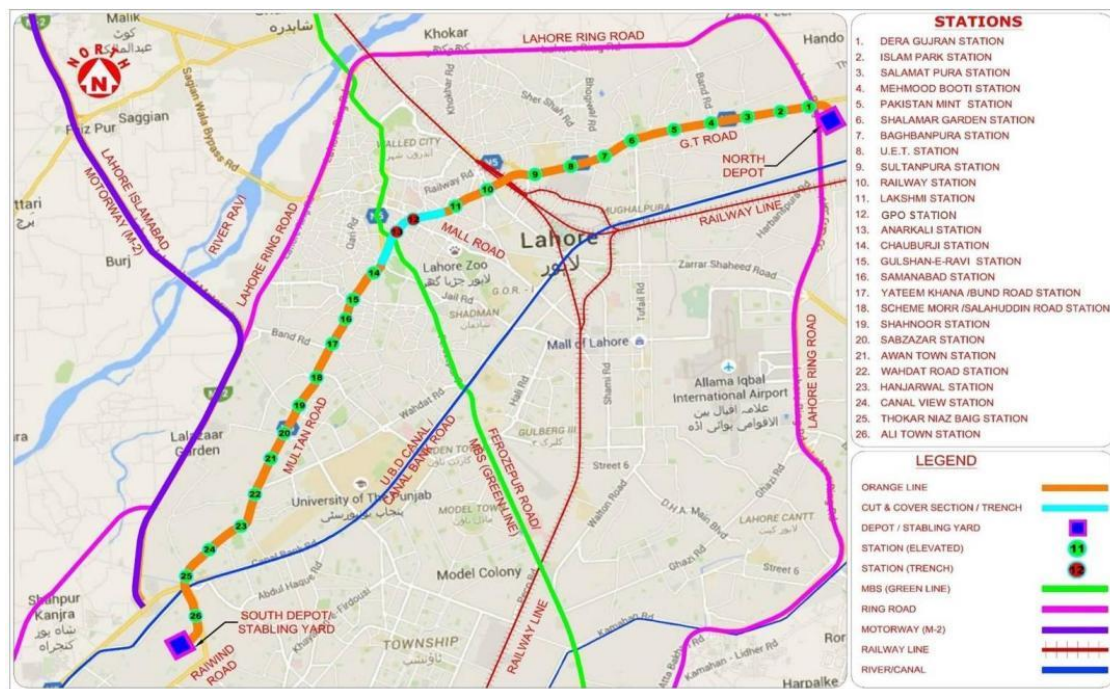


Fig: 4 (Route of Orange Line Metro Train)

It was proposed after conducting the Lahore Rapid Mass Transit System Feasibility Study (Aug 2006) and Orange Line Feasibility Study (Sep 2007) by M/s MVA-Asia. In 2014, NESPAK reviewed the Feasibility Study and Cost on directions of PMA and prepared an addendum to the Feasibility Study. It was proposed that: a length of 25.4 km of the metro train should be elevated. The cut & cover was recommended for an area of 1.7 km consisted of heritage resources as sensitive receivers. A focused Heritage Impact Assessment was conducted to ensure that the proposed alignment would not result in negative implications on heritage building during construction or operation of the rail system. It was found that there will be environmental impacts including noise,

dust, air pollution and traffic vibration which can negatively affect the site (Rogers Kolachi Khan Associates, 2016).

The Civil Society voiced her concerns that heritages sites especially Shalamar Gardens would be damaged. The Civil society filed a petition in Lahore High Court which issued a stay order in January 2016 and stopped the execution of work within 200 feet of protected monuments. The Punjab Government went to Supreme Court for review against the judgement of Lahore High Court. The Honourable Supreme Court after due verification of studies, allowed construction work within 200 feet of the heritage sites on December 2017. The Honourable Supreme Court imposed 31 conditions/directions to resume construction work of OLMTP and constituted a Special Advisory Committee of experts to ensure the implementation of the verdict (Ijaz Ahmad, 2018).



Fig.5 (Protest of Civil Society to change the route of OLMTP)

In 40th and 41th sessions, World Heritage Committee (WHC) had certain concerns about OLMTP and possible impacts on Shalamar Gardens. On the invitation of Punjab Government, Reactive Monitoring Mission visited Lahore world heritage property from 23rd to 28th April, 2018 and submitted their report to World Heritage Centre. The report of RMM was discussed in 42th session of WHC and directed the State Party to ensure its implementation (Khan Associates, 2015).

STATEMENT OF PROBLEM:

The Shalamar Garden is one among the sites of Lahore which are inscribed on World Heritage List and having immense cultural and historic value for the public. The

term cultural significance is defined in Burra Charter as, “.... meant the aesthetic, historic, scientific, social or spiritual value for past, present or future generations Embodied in the place itself, its setting, use, associations, meanings, records, related places and related objects” (Australian ICOMOS, 1999).

Shalamar Garden is known to be as one of the finest gardens of Mughal period and having huge aesthetic and cultural worth. The Orange Line Metro Train, a rapid transit system, has jeopardized the site in number of ways. A joint team from World Heritage Centre (WHC) and ICOMOS Reactive Monitoring Mission considered the Metro Orange Line Project a direct threat to Outstanding Universal Value of the property. With reference to decision 42 COM 7B.72 Para 5, “..... It is responsibility of state party to ensure that development or management plan will not affect the Outstanding Universal Value of the property....” (World Heritage Committee UNESCO, 2018)

UNESCO and ICOMOS Reactive Monitoring Mission proposed number of recommendations in the wake of threats posed by Orange Line Metro Train after thorough investigation. The Government of Punjab took number of initiatives to mitigate the concerns of RMM and policies were formulated in compliance with RMM's recommendations and Supreme Court's directions. Many practical steps were taken in order to satisfy the both institutions.

It is still a suspicion that all those steps taken in the wake of recommendations are they enough? Isn't it too early to say that all those studies and steps will provide proof protection to keep intact the authenticity and integrity of the site? Are there no other alternative choices for Government in this regard? Is it possible to assess the conditions correctly without permanent operation of the train? What are the economic implications of this project on common resident and vendors around the site? What are the more serious threats to integrity and authenticity of the site? These are the questions whose answers we are seeking in this research paper. The main objective of this research is to recheck the reliability and effectiveness of taken measures.

The developmental process and enlargement of buffer zone affected the nearby residing community. This development badly affected the livelihood of many vendors who somehow has been involved in small commercial activities there. I have attempted to explore socio-economic impacts on people residing there who affected most in result of this development around the Shalamar Gardens.

COMPLEMENTARY LEGAL FRAMEWORK:

A plenty of international and national laws exist which provide guidelines legal formalities and restrictions about conservation and developmental work around any historic site. (Fig: 6) These legal requirements must be adhered strictly while undertaking any development scheme which might have potential to affect the site.

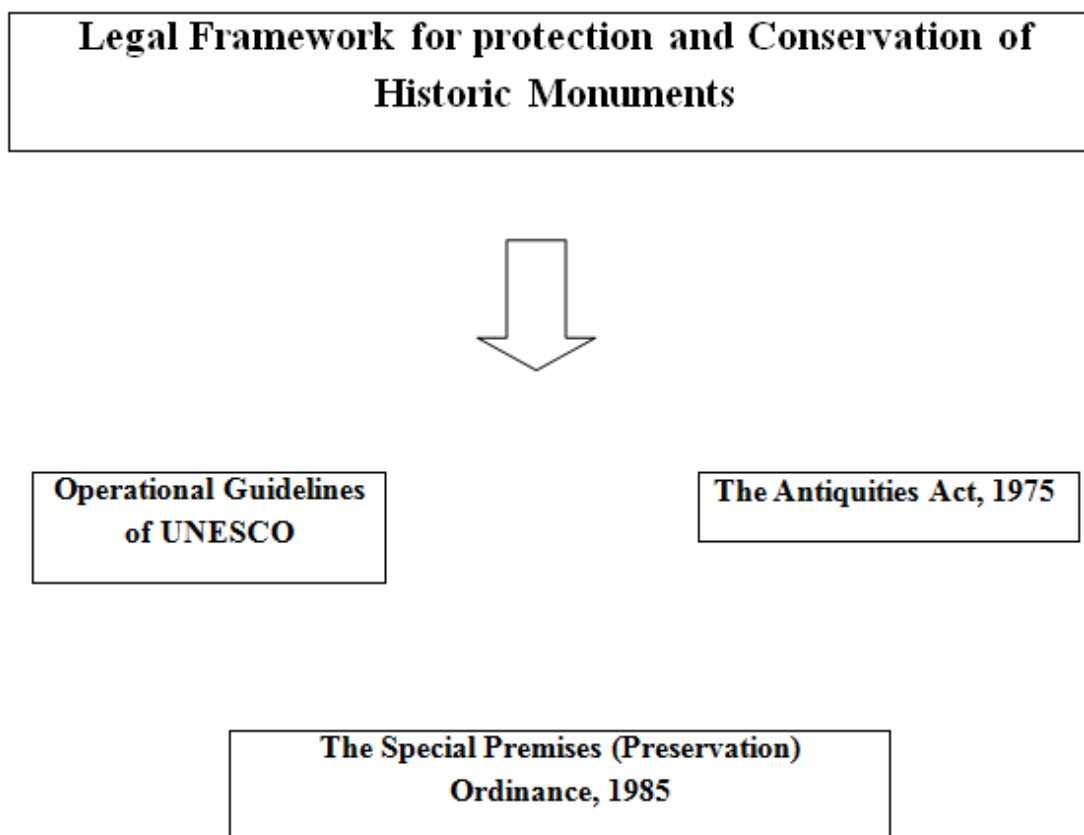


Fig: 6 (Legal Framework)

Following are the relevant laws which specifically deal with the subject of conservation and development:

The Antiquities Act, 1975 provides protection to all cultural heritage sites in Punjab. It is provided in clause 22 that: “Notwithstanding anything contained in any other law for the time being in force, no development plan or scheme or new construction on, or within a distance of two hundred feet of, a protected immovable antiquity shall be undertaken or executed except with the approval of the Director General.” (The Antiquities Act, 1975)

The Special Premises (Preservation) Ordinance, 1985 says that no new construction can be undertaken within 200 ft of heritage site. It is clearly stated in the section that no construction will be allowed within 200 feet of the premises except with the permission of Director General of Archaeology, Punjab. It is compulsory to obtain NOC from DG Archaeology in order to overrule the above mentioned limit.

It is required in Operational Guideline that all the conservation or development project, to be carried out at the property or along with Buffer Zone, must be submitted to the WHC for review by Advisory Bodies (UNESCO World Heritage Centre, 2017). Therefore, it is compulsory to obtain consent from Advisory Bodies of WHC before undertaking any development or conservation of this nature.

A property is called World Heritage because of its Outstanding Universal Value. For the protection of this value, it is directed in WHC decision that State Party must ensure that development or Management Plan will not impact on the Outstanding Universal Value of the Property (World Heritage Committee UNESCO, 2018). In case of failure, there would be serious repercussions. The article 11(4) of the World Heritage Convention intimates that the property may be inscribed on the list of World Heritage in danger as consequence if its Outstanding Universal Value is threatened. (World Heritage Centre UNESCO, 1972)

RESERVATIONS AND PROPOSED RECOMMENDATIONS:

A number of investigations and studies were undertaken in order to remove the controversy. The Metro Orange Line Project posed serious threats to Outstanding Universal Value of the property. With reference to decision 42 COM 7B.72 Para 5, it is responsibility of state party to ensure that development or management plan will not affect the Outstanding Universal Value of the property. In the light of the investigations, numbers of recommendations were proposed by RMM and Supreme Court.

SUPREME COURT'S DIRECTIONS:

The Honourable Supreme Court in its final verdict has given several specific directions. A Special Advisory Committee of experts was made under the supervision of retired Judge to ensure compliance with the given directions. The main objective of the given direction is to protect the site from any damage and ensure its stability. Following are major given directions:

Vibration monitoring shall be undertaken as a part of the monitoring plan using the crack measures devices such as Avongard Standard Tell-Tale. Technical experts shall be present at the sites during the construction phase in the vicinity of the antiquities and special premises with all necessary equipment for monitoring vibration levels. He shall submit monthly reports to the Advisory Committee. The speed of the Train shall be reduced while passing near the monuments. The vibration measuring equipment's shall permanently be installed and regularly checked by a responsible officer. No change shall be made in the alignment of the track which brings any part of it nearer to the monuments. No building material or equipment shall be stored/ stockpiled within protected area of the monuments (The Supreme Court of Pakistan, 2016).

Where excavation is necessary it shall be carried out in a way that it would not affect any structure or foundation of the antiquities or special premises. Any adverse impact to the antiquities or special premises during excavation, construction or execution, the appellant and all other related agencies shall immediately and forthwith stop and discontinue further work, take all possible actions to protect and conserve the antiquities and special premises. The Hydraulic Tank of Shalamar Garden shall be restored, as far as possible, to its original position and the surrounding area will be converted into a green area. All practicable efforts shall be made to create a Buffer Zone around Shalamar Garden (The Supreme Court of Pakistan, 2016).

On completion of the project, the train shall be operated on experimental basis for at least 2 weeks on the entire length of the route and the vibration levels shall be monitored to ensure that the same are within the acceptable limits. For all future projects NOCs, licenses, approvals and permissions as required by law shall be obtained before work on the project site is commenced (The Supreme Court of Pakistan, 2016).

RMM’S RECOMMENDATIONS:

In the wake of threats, RMM demanded the compliance with number of proposed recommendations, to intact integrity and authenticity of the site, as given below:



Fig: 7 (Road Map around Shalamar Garden)

The traffic scheme, inaugurated to facilitate the ongoing project of Metro Orange Line, would affect the infrastructure of Shalamar Gardens and meliorate the environment. It is recommended that: the Grand Trunk road should be pushed further to south in order to enlarge the space between road and the site. The southern carriageway should be relocated further to south. RMM also felt the need to lower the peripheral roads which will enhance gateway of Gardens and help to overcome drainage issues. It is also in the recommendation that all peripheral roads should be limited to pedestrians only. The cutting back the traffic will help to reduce noise pollution and increase openness. (Fig: 7) It must be made sure that the works on the peripheral roads will not undermine the foundations of the boundary wall of the Gardens. (Directorate General of Archaeology, 2019)

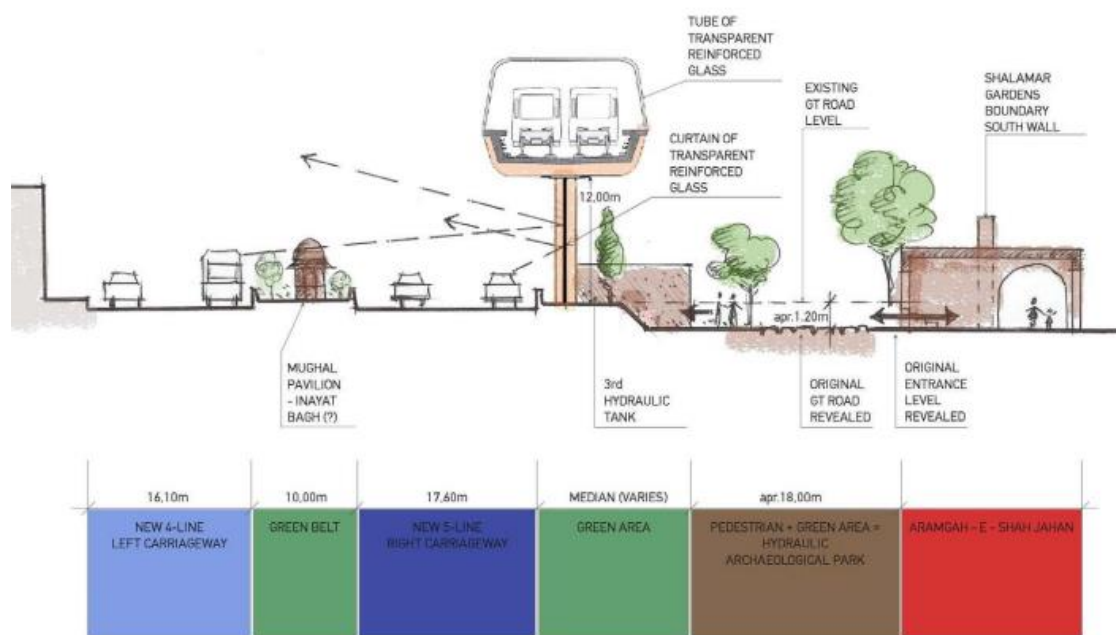


Fig: 8 (Recommendation of Reactive Monitoring Mission)

The RMM considered that the environmental and infrastructural conditions could endanger the preservation and integrity of the Shalamar Garden. Parks Canada defines integrity as, *“A resource can say to possess integrity when the value for which it was designed are not impaired or under threat; they are effectively communicated to the public; and are respected in all decisions and actions affecting the site”* (The Getty Foundation, 2006).

It is apprehended that the construction of Orange Line Metro would have irreversible impacts on the environment and attributes of the site. (Fig: 8) The property would suffer from visual and noise problems. In concern of environment and infrastructure issues, it is recommended that environmental protection instruments should be planted in the buffer zone. The protection of environment is most needed to ensure the preservation of non-structural part of Shalamar Gardens which is consisted of plants,

flower bed, water cascades and grassy plots. An area with tall trees, provide a natural mask to the site, should be developed in order to create natural barrier from Orange line Metro Train and its adverse impacts. The pollution caused by vehicle emissions has a long-term bad effect on the buildings and ornaments. Appropriate measures should be taken to deal with this issue. All the inappropriate structures violating the standard height should be removed to establish visual integrity of the site (Directorate General of Archaeology, 2019).

The RMM envisaged a radical transformation of Buffer zone around Shalamar Gardens and proposed the expansion of the Buffer zone as given in Operational Guideline Para 103 that, *“Wherever necessary for the proper protection of the property, an adequate buffer zone should be provided”* (UNESCO World Heritage Centre, 2017). The area outside of World Heritage site should be updated and work should be undertaken to alleviate poverty. A comprehensive management mechanism, to control and monitor encroachment in the vicinity, should be introduced. It is legal requirement that if revising property’s boundaries or expanding Buffer area caused displacement of people as result of acquisition of property, social measures must be taken to ensure immediate settlement (World Heritage Committee UNESCO, 2018).

Orange Line Metro Train aggravated the issues of conservation in Shalamar Gardens. RMM made the recommendation that the Hydraulic system outside the site boundary must be restored immediately. The restoration of bricks pavements, wooden ceiling and stone or marble covering should be expedited at the earliest. The Mughal Hydraulic Tank’s remain should be conserved and restored. (UNESCO – ICOMOS Joint Reactive Monitoring Mission, 2018) It was warned by WHC that failure to compliance may cause to enlist the name of the property on World Heritage in danger list as per the article 11(4) of World Heritage Convention.

ADOPTED MEASURES IN COMPLIANCE AND MITIGATION:

In compliance with proposed recommendations of RMM and directions of Supreme Court, Government took many theoretically and practically initiatives. These initiatives helped the Government to assess the feasibility, cost and required implementation tools in the execution of plan. In theoretical approach, number of studies was conducted in order to assess the practical possibility of the recommendations. In practical approach, we will discuss the actual steps taken by Government in compliance with recommendations.



Fig: 09 (Vibration Detecting Gadgets)

The Punjab Government is quite vigilant about the importance of the heritage and its safety. A number of studies proved very helpful in understanding the rightful situation and correct assessment of impacts on the property. The vibration remained the utmost concern for both Supreme Court and UNESCO. For that particular matter, the vibration impacts were assessed as per German standards. NESPAK and Chinese Engineer confirmed in a study that the vibration would be much less than the permissible limit of 3 mm/sec approved by the German standard DIN 4150-3. (Ijaz Ahmad, 2018).

Orange Line Project would pass south of Shalamar Gardens from a safe distance. The Visual Impact Assessment study reached to this finding that there are minor visual impacts on the Shalamar Gardens during construction, but will disappear on completion of the project and also proposed plantation of long tree mask to mitigate the visual impacts during operation phase. So, the visual integrity will not be disturbed by the Metro Orange Line Project (Rogers Kolachi Khan Associates, 2016).

The Outstanding Universal Value of the property is fully acknowledged by the State Party. A property is said to possess Outstanding Universal Value if, “.... *represents a masterpiece of human creative genius, exhibits an important interchange of human values, be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates significant stage in human history....*” (UNESCO World Heritage Centre, 2017) The research and study proved the fact that Orange Metro Line Project would neither have any adverse impact on Shalamar Gardens nor threaten its Outstanding Universal Value.



Fig: 10 (Restored Hydraulic Tank)

As far as practical approach is concerned, the Government took many practical steps in the implementation of the theoretical findings in compliance with RMM's recommendations and directions of Supreme Court. Train was run on ad hoc basis, under strict monitoring, to test the vibration level which was well within permissible limit. The noise and vibration detecting gadgets are installed at monument and regularly being monitored in order to avoid any calamity in future (Fig.09). The external waterways and hydraulic tank, which are part of Mughal Hydraulic system, have been fully restored. (Fig.10) To curtail visual impacts, an extended tall tree area has started to develop in order to create nature buffer between site and Train (Fig.11). As per the RMM's recommendations, a tube of triplex transparent glass, with a PVB soundproofing membrane, covering the Metro line viaduct between Shalamar Gardens is yet to be installed. (Directorate General of Archaeology, 2019)



Fig: 12 (External Water Channel)

It is also ensured that the speed of Orange Line Train will remain low while passing in front of Shalamar Gardens. Steps are also taken in order to discourage encroachment and development around the monument and strict surveillance mechanism is introduced. A drain along the roadway, on southern side of perimeter wall, has been constructed to catch rain water. It will help to overcome drainage issues which have been damaging the building and structures in Shalamar Gardens. (Fig: 12) The ceiling of Summer Pavilion, external water channels and walkways has been restored in compliance with RMM recommendations (Directorate General of Archaeology, 2018). (Fig: 13)



Fig: 13 (Restored Ceiling of Summer Pavilion)

ANALYSIS AND FINDINGS:

It is a fact that data collected, through various studies, is scientifically tested. The measures adopted, to mitigate the concerns, are as per international standards. The issues and problems are analyzed through different angles to understand the ground root realities. The best consultancies and firms were hired to analyze the situations and the possible solutions. A document, with the help of a renowned firm, was prepared in order to check the feasibilities of all those recommendations and directions put forth by RMM and SC. The Government and Department tried their level best to adopt every possible recommendation which has been proposed till now.

The vibration is one of the burning issues in this project. Both UNESCO and Supreme Court have shown serious apprehensions about seismic waves produced while deep drilling which may result in soil slippage and could damage the adjacent historic properties. Through Heritage Impact Assessment and NESPAK studies, it is established truth that vibration level is much lower than permissible limits set by German standards and has no adverse effects on the site.

Visual Impact Studies have proven that there will be minor visual impacts will be minimum and are limited to construction phase. There will be no adverse impact after the operation of the train. The Government and Department are satisfied with the taken measures for preservation and protection of the site in order to mitigate the side effects of Orange Line Train. They say that the studies undertaken by experts and reputed firms shows that Orange Line Train has no adverse impact. All the measures taken are enough to keep intact the authenticity of the site beyond doubt. There is little like hood that the site may receive any adverse effect or damage due to these construction activities.

After getting in touch with local resident community around Shalamar Gardens and conduction interviews, discussion with few vendors, I have come to know that the buffer zone was a hub of commercial activities. Many vendors have remained involved selling different cultural and eating things to the visitors in a bid to earn livelihood for their families. (Fig: 14) It is a reality that any activity within buffer area is strictly forbidden and unlawful. But it is also a fact that enlarging buffer zone and strict surveillance mechanism put many people livelihood at stake. They are those people who earn day to day money to survive. (Discussion & Interview, 2020)



Fig: 14 (Street Vendors on Buffer Zone)

The second thing is that there are many small commercial shops in the vicinity of the site. Due to such a massive construction activity, the business of those people also badly affected and resulted in financial losses. They are mostly those people who are the resident of that area. They see this development in a very negative perspective and considered it unnecessary. Mostly, these people are not much educated and have little regard for scientific studies. They considered that such huge level construction might change the outlook and surrounding of the site. The outlook and surrounding are considered part of the site and play a role to protect the originality. In a nutshell, the local

residents and vendors showed un-satisfaction and hinted to have adverse impact on surrounding community and the site. (Discussion & Interview, 2020)

CONCLUSION AND RECOMMENDATIONS:

The Government and UNESCO, with collaborative efforts, made number of studies and scientifically analysis the data. In the light of collected data, a number of practical steps took place which proved to be very helpful to satisfy UNESCO and Supreme Court. It also helped to prevent the enlisting of site name in danger list of World Heritage. The authorities both at national and international level condoned the practical steps and gave very positive feedback.

According to a study, undertook by Pancholi et al, about long term impacts arising from transport system in which he found that *“the appropriate vibration limit for a historic building was in the range of 3-12.7 mm/sec, with 3mm/sec considered as safe limit criteria for historic and fragile buildings for continuous traffic vibration point of view”* (Rogers Kolachi Khan Associates, 2016). This assessment is also in conformity with German standard. The site of Shalamar Garden is located at the distance of 22-29m from Orange Line Train. The ground vibration will be at 0.03mm/sec which is far below the recommended standard. It can be deduced that site is free from any danger in concern of vibration issues.

It is also confirmed by study that Orange Line Metro Train will reduce the traffic congestion around the site. Local public transport i.e. Wagon, Rickshaw, Motorbike, are major factors behind noise and air pollution. OLMT will reduce air and noise pollution around the site because of decline in local public transportation. It will have very positive impacts on the site.

The uncontrolled urban development and inadequate care is more lethal threat as compare to OLMT. The small commercial shops, defacing of garden wall with posters and vendors hanging their wavers and encroaching stalls on pathway and alongside the wall of the garden are more severe issues with infinite consequences. It must be ensured that, when Train will become operational, no such small commercial activities and encroachment will be allowed near the vicinity of the property. These are more serious issues which need to be considered in present and future because it has the potential to affect the site's integrity.

It is also observed with grave concern that the loss of knowledge regarding the species planted in the Mughal period garden and their patterning within the landscape is the greater threat to the authenticity of the site as compare to OLMT. Although, number of steps taken to mitigate the OLMT threats but unfortunately nothing is done in regard of patterns and content of plantation. By losing authenticity, it might lose its potential to educate and inform the public about historical and cultural themes. It was reported by Cole in 1883 that, *“..... the garden was leased for the cultivation of fruit trees”*

(The Getty Foundation, 2006). Now, there is huge dearth of any fruit trees in the gardens which was once it's the main characteristic. The original Mughal plantation at Shalamar has been completely lost. Mr. Singh described that, “.... *And green gardens were converted into dry and a dusty land, studded with trenches all over*” (The Getty Foundation, 2006). These are character-defining elements which signify of Shalamar as garden. Although, many steps which are taken in a bid to restore flower beds and plantation in the gardens. But, the problem is that these patterns and content of plantations are not up to the Mughal times. It is actually a major blow to the authenticity of the site.

I reach to this conclusion that the integrity and authenticity of the Shalamar Gardens is not endangered by OLMT. The taken measures, in the wake of Orange Line Metro Train, are more than enough. But it is still not sure that taken measures will be enough if site ever meets with natural calamity i.e., earthquake, in future. The true picture will come to surface when Train will become operational as projected by RMM. The small commercial activities and street vendors met with many adverse economic effects on their businesses and livelihood. It is recommended that socio-economic aspects should be considered before undertaking any such development. It is also mentioned in the operational guidelines of UNESCO that measures should be taken for the displaced person whole undertaking any such development and socio-economic aspects must not be ignored along with the safety of historic sites.

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