Name	UL SABA NOOR
Current workplace	Northern Punjab Circle, Pakistan Post Office
Current position	Assistant Postmaster General-Operations

A. Introduction

1. Could you mention about your responsibilities at current work place?

- Arrangements for Mail collection and transportation within designated areas
- Review of monthly statements of mail volume and revenue
- Visits and Inspections of post offices to know conditions of service delivery
- Inquiries of audit paras and their settlement
- Complaints handling by monitoring the compliance of complaints on all designated channels for complaints solving

2. Could you describe the implementation situation of acquired knowledge from Japan at your work place?

My acquired knowledge from Japan is related to transportation planning. I am using the knowledge while making arrangements for collection and transportation of mail. It enables me to consider the GIS, traffic volume, mail volume and capacity of the vehicle while making arrangements for transportation and delivery of mail.
In addition to this, I am focusing on digitizing the operations to increase the efficiency of service delivery of the department by team building and getting feedback from the staff.

3. Could you explain how your study field in Japan fits with the current development issues in Pakistan?

As the study was very extensive in Japan so, it broaden my knowledge. Among the problems, Pakistan is facing, public transportation crisis, rapid increase in private vehicle ownership and climate change is also important issues. The acquired knowledge from Japan sensitizes me to think and highlight the causes of the mentioned problems and their solutions.

B. Summary of Master Thesis

Field of Study in Japan : Development Technology Course, Transportation Lab

University Name in Japan : Hiroshima University

Title of thesis : Routing Problem for Integrated Transport of Passengers and Goods Considering Heterogeneous Value of Travel Time: A Case Study of Rural Town in Japan

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Please summarize your Thesis <mark>within 20 lines</mark> in maximum.

The manual delivery route planning and handling of public mail by Pakistan post office department results in overlapped delivery routes, misrouting and delay in delivery of mail. Therefore, the department is looking for the solution to improve the existing system of mail delivery in the country. Similarly, the growing depopulated and aged societies in developed countries; including Japan has raised the concerns for governments and policy makers. The situation is more worrying in rural areas of Japan due to the migration of younger population to metropolitan areas, decreasing birth rate and increase in elderly population coupled by voluntary withdrawal of driving licenses from them. The decrease in population is causing difficulty in public transport provision and its maintenance in rural areas. The situation demands the reforms in transport services in the rural areas. Based on the transport problems of the rural areas and possible solution for the mail delivery problems of Pakistan Post office department, this study introduced the integrated transport for passengers and goods. To make the proposed service attractive for the users, the study further incorporated the preference treatment based on value of travel time of passengers and time window for goods as service level for the said transport service based on the Haewon et. al (2019) study, where they proposed the concept of heterogeneity of value of travel time (VoT) among commuters, who are riding the same bus. Therefore, the purpose of study is to know the impact of heterogeneity of value of travel time in routing problem of integrated transport service. The integrated service has three types of users, first group high VoT, and second group is low VoT passenger, and third group is goods with time window. We created different demographic scenarios of users by changing the ratio of high and low VoT passengers' groups with same number of goods. We set the objective function to minimize the travel time of the passengers based on their VoT. The change in travel time is reflected in generalized cost as we set the generalized cost a function of travel time into value of time. We set the hypothesis that travel time will be decreased for the high VoT passenger and vice versa. The results show that route time and distance increased which is due to the detours of vehicle for priority pickup and delivery of the passengers to reduce their travel time as per their VoT. The generalized cost at society level shows same type of reduction trend in all demographic scenarios in our two passenger's cases. The decrease is more prominent in case of 30% and 90% scenarios, due to the presence of larger portion of high VoT passenger in former scenario and already the larger ratio of low VoT passengers in later scenario. However, we found the effect of VoT is larger in small demand passenger case as compared to large passengers'

case which is in accordance with the global demand and cost curve. In small passenger case, we observed the decrease in generalized cost for high and low VoT passengers and goods, which proved the hypothesis that passenger, would travel less as per their VoT. We observed increase in generalized cost only for goods whereas, in large passenger case, we observed increase and decrease in generalized cost for both high and low VoT passengers and goods. Similarly, the results show that integrated transport would require a smaller number of vehicles than separate systems of passengers and goods. The priority pickup and delivery of passengers also resulted in change in route order of a vehicle, which we observed in all demographic scenarios and in both passengers' case. Based on the results, the study recommends the integration of passenger and goods services using their priorities in different demographic scenarios, besides recommending the collaboration with passenger transport, or using the concept of VoT for public mail to improve the delivery system of Pakistan Post department. However, the study further recommends considering traffic congestion, specification of good perspective as future research.

C. Future Plan

How are you planning to utilize your acquired knowledge from Japan at your current job?

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Please summarize your plan within 10 lines in maximum.

Currently, we are reviewing the transportation routes of the postal mail manually. I am planning to incorporate the methods of my research for review of these routes. For which, I need to collect geographic data like networking, building and commercial facilities data. Similarly, other data collection like expenditure, number of staff is also being collected. When, the data will be collected, I would try to apply the model for analysis of my department's data.

In addition to, the knowledge about forecasting the effects of a policy or trends of data is helping me to plan the activities and policies for sustainability of postal operations. Likewise, I am also considering the knowledge on climate change and disaster risk management while planning a project.

D. Photo

Please send your best two pictures on your academic and daily life in Japan (JPG format)