BPLN0039- Muna Al-Sharari_Dissertation (1) by Muna Al-Sharari

Submission date: 05-Sep-2020 05:03PM (UTC+0100) Submission ID: 133071681 File name: 693333_Muna_Al-Sharari_BPLN0039-_Muna_Al-Sharari_Dissertation_1_1064835_894954577.pdf (7.11M) Word count: 21049 Character count: 120881

UNIVERSITY COLLEGE LONDON FACULTY OF THE BUILT ENVIRONMENT BARTLETT SCHOOL OF PLANNING

Public Participation and Urban Transport Planning in Developing Countries.

The Case of the Amman Bus Rapid Transit (BRT).

By Muna Al-Sharari, BCD (Hons.) Student No. 19132044

Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Infrastructure Planning, Appraisal and Development at University College London. I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

Signature: Www.

September 5, 2020

Word Count: 10,714 words.

Appendices: 4,267 words.

ACKNOWLEDGMENTS

Firstly, I would like to express my sincere gratitude to my dissertation supervisor Dr Marco Dean for his continuous guidance throughout this research process. I have been lucky to have such a supportive and encouraging supervisor. I would also like to thank the interviewees for generously offering me their time. Without your insights, this research would not have been possible. I must also give thanks to all those who took the time to fill out the online survey.

Last but not least thank you to my family, and in particular my wonderful mother. Your consistent support during this research period and throughout my academic endeavours is invaluable. I will forever be grateful.

ABSTRACT

Public infrastructure developments are designed to improve the well-being of society. As they affect the public, the processes of planning and delivering large-scale infrastructure projects are now expected to enable public participation. Due to pressures by international and development bodies, expanding opportunities for public participation is now also being encouraged in developing countries - although, there is little research available on how to effectively implement such participatory strategies. This dissertation aims to fill in those gaps by developing a practical framework that evaluates the implementation of public participation strategies in developing countries. Specifically, the framework is used to assess the appropriateness of the strategy employed in the planning, appraisal, and delivery of the Amman Bus Rapid Transit (BRT) project in Amman, Jordan. The research methods used consist of a wide review of relevant literature and current policies, coupled with the collection of empirical data. The latter is based on semi-structured interviews with key stakeholders who are directly involved in the projects, and an online questionnaire - which aimed to assess the public's perceptions on the strategy implemented. Based on these methods, research concludes that the public participation strategy implemented for Amman BRT is rudimentary and fails to address the public's concerns with regards to the project. This dissertation provides recommendations to strengthen public participation policies and practices in Jordan in order to improve trusting relationships between the public and governments allowing for the future delivery of further public transport projects in Jordan.

Keywords: public participation, major infrastructure, public transport, developing countries.

TABLE OF CONTENTS

ACKNOWLEDGMENTSii
ABSTRACTiii
TABLE OF CONTENTSiv
LIST OF TABLES
LIST OF FIGURES
LIST OF ABBREVIATIONS
LIST OF APPENDICES
CHAPTER 1: INTRODUCTION1
1.1 Context
1.2 Research Aim and Objectives
1.3 Structure of this Dissertation
CHAPTER 2: LITERATURE REVIEW
2.1 Importance of public participation in planning and delivering transport projects4
2.2 Participation and consultation in MDBs and DAs6
2.3 Barriers to public participation in developing countries
2.4 Evaluating public participation policies and strategies8
CHAPTER 3: RESEARCH METHODS12
3.1 Research approach: case study selection and design12
3.2 A three-staged investigation
3.3 Data analysis
3.4 Ethics statement
CHAPTER 4: CASE STUDY ANALYSIS
4.1 Case study introduction: Amman BRT19
4.2 A brief and partial history of PT administration in Amman21
4.3 Public participation requirements for the ABRT23
4.4 Brief overview of public participation strategy implemented for the ABRT23
CHAPTER 5: CASE STUDY FINDINGS. DESCRIPTION, ANALYSIS AND SYNTHESIS26

iv

5.1 Findings: description and analysis of results	26
5.2 Discussion	38
CHAPTER 6: CONCLUSIONS	42
6.1 Research aim and objectives	42
6.2 Summary of findings	42
6.3 Recommendations and policy implications	43
6.4 Study limitations and future research	45
CHAPTER 7: REFERENCES	47
APPENDICES	54

v

LIST OF TABLES

Table 1 Framework for Evaluating PP Strategies in Developing Countries	. 9
Table 2 Individuals Interviewed	14
Table 3 Source of Data Applied to the Framework to Evaluate ABRT's PP Strategy	16

LIST OF FIGURES

Figure 1 Flow Diagram of Data Collection and Analysis Process	. 15
Figure 2 Proposed Public Transit Network for Amman (GAM, 2010)	. 20
Figure 3 ABRT Route (Steer Davies Gleave, 2010b)	. 21
Figure 4 Map of Amman's 22 Districts (Cavoli, 2017)	. 22
Figure 5 Example of Information Sharing via Social Media	. 24
Figure 6 Participation throughout the Project Lifecycle	. 29
Figure 7 Results of 'Consulting with the Public Prior to Approval of ABRT'	. 30
Figure 8 Results of 'Provision of Information During Construction'	. 31
Figure 9 Results of 'Provision of Opportunities for Deliberation'	. 32
Figure 10 Results of 'Influence in the Decision-making Process'	. 34
Figure 11 Results of 'Provision of Sufficient Amount of Information about the Project'	. 36
Figure 12 Results of 'Access to Information'	. 36
Figure 13 Overview of Public's Perception on their Right to Participate	. 38
Figure 14 Placement of the ABRT in Arnstein (1969) Ladder of Citizen Participation	. 40
Figure 15 Who and When Should Participate in PT Projects	. 44

vi

LIST OF ABBREVIATIONS

ABRT	Amman Bus Rapid Transit	
BRT	Bus Rapid Transit	
DA	Development Agency	
ESIA	Environmental and Social Impact Assessment	
PP	Public Participation	
РТ	Public Transportation	
MDB	Multilateral Development Bank	

vii

LIST OF APPENDICES

Appendix A	Overview of Some of the Major MDBs and DAs' Policies and Guidelines	54
	Regarding Public Participation	
Appendix B	List of Interview Questions	56
Appendix C	Online Survey Questions	58
Appendix D	Amman BRT - Project Timeline	60
Appendix E	Overview of Empirical Results	61
Appendix F	Analysis of Quantitative Data	71
	Figure 1 - Categories of Survey Respondents.	71
	Figure 2 - Overall response to "I was provided with an appropriate amount of information and details about the project."	72
	Figure 3 - Categorised responses to "I was provided with an appropriate amount of information and details about the project."	72
	Figure 4 - Overall response to "I was consulted about the project prior to its approval."	73
	Figure 5 - Categorised responses to "I was consulted about the project prior to its approval."	73
	Figure 6 - Overall response to "I was able to access to information that I was seeking about the project."	74
	Figure 7 - Categorised responses to "I was able to access to information that I was seeking about the project."	74
	Figure 8 - Overall response to "I was provided with sufficient information about the decision-making process."	75
	Figure 9 - Categorised responses to "I was provided with sufficient information about the decision-making process."	75
	Figure 10 - Overall response to "I have been provided with an opportunity to share my opinions and concerns about the project."	76
	Figure 11 - Categorised responses to "I have been provided with an opportunity to share my opinions and concerns about the project."	76
	Figure 12 - Overall response to "My input and/or opinions were considered in the decision-making process."	77
	Figure 13 - Categorised responses to "My input and/or opinions were considered in the decision-making process."	77
	Figure 14 - Overall response to "I was provided with information regarding any disruptions that will occur during the construction of the route."	78
	Figure 15 - Categorised responses to "I was provided with information regarding any disruptions that will occur during the construction of the route."	78
	Figure 16 - Overall response to "It is my right as a citizen to participate in the decision- making processes."	79
	Figure 17 - Categorised responses (by age and gender) to "It is my right as a citizen to participate in the decision-making processes."	79
	Figure 18 – Overall responses to "should the public always be consulted when planning and delivering public transport projects?"	80
Appendix G	Approval of Risk Assessment and Ethical Clearance Forms	81
Appendix H	Ethical Clearance Form	82
Appendix I	Risk Assessment Form	84

viii

CHAPTER 1: INTRODUCTION

1

1.1 Context

Mobility can provide or impede access to education, jobs, health, and recreational facilities, thus greatly affecting society and the economy (Vasconcellos, 2001; Geurs et al., 2008). In developing countries, the mobility of people in urban areas has become a source of concern as the transport system is often automobile dependent (Dimitriou, 2011), creating congested, inaccessible and polluted urban centres (Newman and Kenworthy, 1999; Shbeeb, 2018). These problems are being exacerbated with population increase and rapid urbanisation (UN-Habitat, 2009). In an effort to solve these issues, developing countries are investing in sustainable and affordable rapid transit services.

As public transport (PT) systems aim to serve the needs of society, planning processes for PT are now expected to enable public participation (PP) (Bickerstaff et al., 2002; Colomb, 2009) where policy or decision-makers convey their plans to the general public, and solicit opinions from a cross-section of the community before any decisions are reached (Rowe and Frewer, 2000, 2005). Involving the public in the planning and delivery of PT projects will facilitate the exchange of perceptions, attitudes, values, and knowledge (Mikkelsen, 1995), leading to the development of a transit network that better meets the livelihood and aspirations of the urban community (Sohail et al, 2003; Woltjer, 2009).

Numerous researchers and practitioners find that there are various benefits to including public participation in decision-making (see Bickerstaff et al., 2002; Innes and Booher, 2004 Colomb, 2009; ADB, 2017; Natarajan et al, 2019; World Bank Group, 2020). As such, PP is widely being implemented throughout the world today. The importance of the concept is also being enforced by many international organisations and development bodies such as the United Nations and the World Bank Group (Anon, 1992; World Bank Group, 2020) thus promoting the implementation of participatory practices in developing countries.

Public participation is a concept that everybody agrees on the principle, but the apparent embracing of 'involving the community' is not unproblematic (Renn et al., 1995; Walker, 1999; Rydin and Pennington, 2000). When it comes to implementation and practice, it is evident that meaningful

engagement is challenging (Webler *et al.*, 2001; Natarajan *et a*l., 2019), particularly in developing countries (Ng *et al.*, 2012).

Currently, the involvement of the public in developing countries is yet to mature; it is rudimentary and challenging (Potter, 1985; Ng et al., 2012; Lee et al., 2013; Khirfan and Momani, 2017), despite encouragement or enforcement from the global development community (CCSG, 2007). Authorities in developing countries can be cynical about the value of involving the public in decision-making as they can be doubtful of its benefits. As such, decision-makers often try to avoid or fast track the participatory processes (Ng et al., 2012). This is also the case in the Middle East where there is very limited involvement of the public in the decision-making process (Rault and Jeffery, 2008; Khirfan and Momani, 2017). Decisions regarding infrastructure projects are dominated by the decide, announce, defend approach (Rault and Jeffery, 2008).

While there is a growing demand of including participatory strategies when planning and delivering projects in developing countries, there is little research available on how to effectively implement them. This study aims to fill the gaps by examining the public participation strategy implemented in the planning, appraisal, and delivery of Jordan's¹ first ever rapid transport project.

This dissertation focuses on Amman, the capital city of Jordan. Like many other cities in developing countries, the city grew up with the car. Amman's primary mode of transport and its infrastructure systems are adapted to it. Like other car-oriented cities, they face major congestion, accessibility, and pollution issues (Shbeeb, 2018). To solve the problems, the Greater Amman Municipality (GAM), with assistance from the French Development Agency (Agence Française de Développement) (AFD), is currently implementing the first Bus Rapid Transit (BRT) project in Jordan - the Amman BRT (ABRT). This dissertation investigates and evaluates the public participation approach that is implemented in planning and delivering the ABRT.

¹ The World Bank Group (2017) classifies Jordan as a lower-middle income developing country.

1.2 Research Aim and Objectives

The overall aim of this research is to assess and evaluate public participation strategies when planning, appraising, and delivering urban transport projects in developing countries. Within the context of the ABRT, the specific objectives of the research are to:

- Identify Jordan and AFD's current public participation policies and critically evaluate their appropriateness.
- Assess the effectiveness of the implementation of policies in the planning and delivery of the ABRT and identify any deficiencies that may exist.
- 3. Explore the key stakeholders' attitudes towards implementing public participation strategies.
- Explore the local population's experiences in the planning and implementation of the urban transport project and their perception of whether their input was considered and included in the decision-making.

This dissertation reviews the scope of the public participation practice and reflects on the effectiveness of policy guidelines and the conceptualisation of public participation that were implemented in the ABRT. The analysis provided contributes to improving the potential for public involvement in the practice of transport planning in developing countries.

1.3 Structure of this Dissertation

This dissertation is structured as follows. Chapter 2 examines the concept of public participation, its perceived benefits, and barriers to implementing participatory practices in developing countries. A framework for evaluating PP strategies is developed based on findings from the pertinent literature. Chapter 3 presents and discusses the methodology used in conducting empirical research. Chapters 4 and 5 provide a critical analysis of the findings illustrated by the Amman BRT project. Finally, Chapter 6 outlines the conclusions of the study and provides policy implications and recommendations.

CHAPTER 2: LITERATURE REVIEW

The embracing of involving the community in planning and policymaking is not new; research, and increasingly policy, tend to argue that more involvement is a 'good thing' and should be fitted into all stages of the project lifecycle (Bickerstaff *et al.*, 2002). This Chapter examines pertinent literature to provide an overview of the importance and perceived benefits of PP, the requirements of MDBs and DAs with regards to participation, and barriers to implementing participatory strategies in developing countries. The final section of this chapter synthesises the literature and proposes a theoretical framework to evaluate PP strategies in developing countries.

2.1 Importance of public participation in planning and delivering transport projects

The traditional approach to transport planning focused on understanding trip journey patterns and travel demands-in terms of distance and time (Goodwin, 2019). This provided an atomistic overview of transport needs as it provides a historic and static picture of transport supply (Fouracre et *al.*, 2006) and largely ignores the complex contextual forces that affect and are affected by transport projects, leading to inaccurate projections (Goodwin, 2019). Furthermore, it considers urban transport projects as 'closed systems' when in reality they are open systems that interact with various social, economic, environmental, urban and regional systems in which they are placed (OMEGA Centre, 2010). As their implementation affects the interest of many people in society, it is important to understand and consider their needs and concerns through public participation².

When it comes to public participation nowadays, many researchers tend to argue or consider it an unalloyed good (Rydin and Pennington, 2000; Bickerstaff *et al.*, 2002) and is encouraged in almost all fields of the planning and policymaking - including transport planning (Bickerstaff *et al.*, 2002). The

 $^{^2}$ In this dissertation the terms 'participation' and 'deliberation' are used synonymously. Some scholars and practitioners differentiate between the two terms (refer to Cass, 2006; Kahane *et al.*, 2013), while others argue that participation debate and communications between participations is an essential feature of participation (Arnstein, 1969; Bloomfield *et al.*, 1998; Roberts, 2004).

increased demand for PP in transport projects is advocated by researchers based on the belief that it provides benefits as described below.

Provide insight on the needs of society and local knowledge

Consulting with the stakeholder and citizens³ when planning and appraising infrastructure project can provide a thorough understanding of the needs and grievances of society. It provides local knowledge and perspectives that may not be available to experts (Lee *et al.*, 2013; Natarajan *et al.*, 2019), leading to the planning, designing, and operating PT systems that serve the well-being of various parties in a complex society (Woltjer, 2009; Ng *et al.*, 2012).

Helps build trusting relationships between governments and society

Participatory approaches to planning can help built trusting relationships between governments and society (Innes and Booher, 2004; Fouracre *et al.*, 2006). How projects address social and environmental impacts often captures the attention of the public - particularly affected groups (Legacy, 2017). Effective public engagement can ensure to citizens that governments are serious about addressing their concerns thus possibly leading to a smoother delivery of projects (Batheram *et al.*, 2005; Song *et al.*, 2011). Building trust can also encourage future investment in infrastructure projects that can achieve further social benefits.

Contributes to delivering more successful projects

Through participation, the chances of project success would increase as the various needs of society would have been thoroughly considered, and consensus on possible conflicts would have been addressed before a finalised plan is selected (Landge *et al.*, 2005; Woltjer, 2009; Giddings *et al.*, 2010). Furthermore, by taking fuller account for potential for conflict, risks, delays, and breakdowns of the project can be better predicted (Khirfan and Momani, 2017) thereby assisting in producing more effective policy outcomes (Rydin and Pennington, 2000).

³ In planning, citizens are considered stakeholders as decisions have an impact on them and vice versa (McElroy and Mills, 2000; OMEGA Centre, 2010). However, some literatures differentiate between stakeholder and the citizen (MacLean and Burgess, 2008). The terms are used to distinguish between organized groups and those individuals who participate in a deliberative forum without formal affiliation using the terms 'stakeholder' and 'citizen'(Kahane *et al.*, 2013). This mirrors the distinction between these terms in this dissertation.

2.2 Participation and consultation in MDBs and DAs

In developing countries, MDBs and DAs assume a large role in funding infrastructure projects as well as providing advisory services and technical assistance to ensure the effective implementation of development projects (Kawai, 2006; Estache, 2010; Basilio, 2014; Ansar *et al.*, 2016). As such, it is important to consider their requirements when it comes to public participation. MDBs and DAs believe that effective engagement enhances the effectiveness, efficacy and accountability of projects (World Bank Group, 2015a; AFD, 2016; USAID, 2016; ADB, 2017; EIB, 2018). The recognition of the benefits of PP is reflected in a host of policies and guidelines, internal documents, and resource handbooks as illustrated in Appendix A.

It has recently become a common practice for MDBs or DAs to require stakeholder participation in the decision-making. Some organisations (*viz.* the World Bank Group) mandate public consultation for all projects, while others (*viz.* AFD) only require it for projects that will have a significant impact on people or the environment (AFD, 2016; World Bank Group, 2020). One of the reasons that might explain why it is not compulsory to include PP for all projects could be due to the challenges in adequately implementing PP in developing countries.

2.3 Barriers to public participation in developing countries

To improve civic engagement and provide meaningful participation strategies for developing countries, it is imperative to first identify any barriers that may exist. In spite of their variations in contexts, developing countries can face similar challenges when it comes to implementing PP strategies (Denhardt *et al.*, 2009) as outlined below.

Lack of Democratic Culture and Civic Society

Participatory processes are often justified based on belief that in democratic societies everyone has the right to be informed and should be provided with the opportunity to express their views on matters that affect them (Sewell and Coppock, 1977; Rydin and Pennington, 2000). To encourage participation, it is important to empower citizens and create a society where people are interested in public causes and actively engage in political system. This is done by:

6

- Providing opportunities to give opinions (including criticism) and make political choices (Denhardt et al., 2009); and,
- Instilling the idea that it is your right as a citizen to participate. Decisions should not be bypassed by technocratic means (Rydin and Pennington, 2000).

In developing countries, citizens are not always provided with similar opportunities particularly if they live under authoritarian regimes. They may be reluctant to freely speak up about issues. In some developing countries effective engagement will require empowerment of citizens and establishing trusting relationships between citizens and governments.

Equal Representation of All

Effective PP is difficult to achieve if all citizens are not equally represented as part of the whole group of stakeholders (Marzuki, 2015). Ensuring equal representation of all can be challenging in developing countries. The following groups can be excluded:

- Those living under poverty. They may not have the time or energy to participate as they
 struggle to meet basic need (Abers, 2000). They are also deterred from participating as they
 may feel that they lack education or knowledge particularly when it comes to complex
 infrastructure projects (Natarajan et al., 2019), albeit their local knowledge can provide critical
 information.
- Ethnic minorities and women. They suffer from the similar aforementioned barriers in addition to impediments placed by family, community norms, and cultural or religious beliefs.

Intentionally or unintentionally excluding some from participating bequeaths unequal powers among stakeholders which negates the purpose and goal of participation and could create resentment among non-consulted groups. More importantly, exclusion of certain groups will fail to provide a comprehensive understanding of the views of the public. The most actively involved citizens might represent their private interests that do not align with the broader public interest.

Weak Institutional and Legal Frameworks

To implement effective PP strategies for infrastructure projects, it is essential for institutional and legal frameworks to enforce and support transparency and participatory approaches in decision-making. Institutions in developing countries can lack capacity in designing and implementing appropriate participatory frameworks which can result in establishing quasi-democratic models of participation where tyranny would prevail over transformation (Hickey and Mohan, 2008), thus hindering participation (Harbers, 2007).

It is imperative for any reforms to consider the context. Often in developing countries technocrats implement western ideologies which may not result in appropriate changes for developing countries.

Time and Costs

PP is known to be time-consuming and costly process which can significantly slow down decisionmaking (Marzuki, 2015). In developing countries, the process of creating meaningful participation can often take longer as it can also involves capacity building; including training of planners and decisionmakers as well as educating the public (Bickerstaff *et al.*, 2002). The time period needed to design PP strategies, educate and mobilize participants may be too long for developing countries as they may have limited time and costs for the project, which they believe that the funds can be utilised in other ways that may be more effective. They can also be exposed to pressures from the financiers to expeditiously display results, causing them to overlook the importance of participation (Denhardt *et al.*, 2009).

2.4 Evaluating public participation policies and strategies

With the growing popularity of encouraging public participation, it is critical to ensure that the exercises implemented can in fact deliver the myriad of the claimed benefits (refer to Section 2.1). This section proposes a framework (Table 1) for conducting a robust scrutiny of participatory policies and exercises implemented in developing countries.

The framework has been developed based on the findings from the literature review. The selected criteria aim to ensure that the benefits of PP are captured and that the barriers that have been identified by researchers are addressed. The framework aims to transform the role of stakeholders

8

and citizens from simple spectators (when it comes to planning and delivering PT projects) to actors who can claim ownership over projects. The framework provides a comprehensive overview of critical considerations that project planners must incorporate when designing participatory strategies.

Criteria	Design Considerations		
1. Meet legal	Participation process should clarify and meet the legal requirements		
requirements.	(Bryson <i>et al.</i> , 2013).		
	For a wider reach, alternatives to traditional public notices and hearing		
	should be considered (ex. Use of social media or online comment		
	boards (Wang and Bryer, 2012).		
2. Provide	Participants should be comprised of a broadly represented sample of		
diverse	the affected population (Rowe and Frewer, 2000).		
representation.			
	A comprehensive stakeholder analysis is required (Burton, 2009).		
	Employing mixed approaches to gather stakeholder and citizens.		
	Use inclusive process to engage with marginalised groups (Abers, 2000		
	Burton, 2009; Marzuki, 2015).		
	Power dynamics within the groups should be managed (Flyvbjerg,		
	1998).		
3. Clear	Participatory task should be clearly defined (Rowe and Frewer, 2000).		
identification			
of task and	The process must fit the context in which it is taking place (Bryson et al.,		
consideration	2013).		

Table 1 Framework for Evaluating PP Strategies in Developing Countries

	of context and	
	problems.	
4.	Independence.	The process should be conducted in an independent and unbiased way
		(Rowe and Frewer, 2000).
5.	Early and	Participants to be involved at the earliest possible stage, and
	continuous	throughout the whole process (Rowe and Frewer, 2000; Bryson et al.,
	Involvement.	2013). They should always be informed.
		Relationships and connections between decision-makers and
		participants to be established to foster trust, collaboration and
		communication (Innes and Booher, 2004).
6.	Deliberative	Discussions should be promoted and encouraged (Healey, 1997; Chess,
	process with a	2000).
	clear decision	
	structure.	The decision-process should be clearly structured and capable of being
		displayed and discussed (Bryson et al., 2013).
7.	Influence.	The outcome of the exercise should have a genuine impact on the
		policy/ programme (Rowe and Frewer, 2000).
8.	Transparency.	The process should be sufficiently transparent so that decision process
		is clear to all (Rowe and Frewer, 2000).
		Participants should have access to sufficient resources to enable to fulfil
		their brief as participants (ibid).
9.	Evaluate and	Develop and use evaluation measures. Design and redesign the process
	continuously	(Bryson <i>et al.</i> , 2013).
	redesign.	

10. Cost and timeThe process should in some-sense be cost effective (Rowe and Frewer,
2000; Burton, 2009).

Chapter Summary

The study of relevant PP literature reveals that participation in PT projects is a complex issue. It is expected to make the planning processes more transparent, democratic, and inclusive to improve the quality of decisions and strengthen their legitimacy. However, for something that is held to be so important and expected to deliver a myriad of benefits, there are not enough studies done to provide empirical data to outline the practical challenges that are experienced when implementing PP and whether the benefits justify the costs associated. Furthermore, the existing literature does not provide sufficient evidence or data on developing countries' abilities to implement the suggested participatory practices.

A crucial issue for the development and implementation of PP is that the recommendations on future directions ought to be based on research and lessons learned. To arrive at a deeper understanding of how developing countries are meeting the challenges of public participation, empirical research is implemented as part of this dissertation.

The research attempts to find out the approach PP in Jordan and identify from a wider perspective, the driver and barriers that are faced in implementing participatory strategies in the context of urban transport projects. The next chapter of this dissertation details the Research Methods employed to capture empirical data - including details on the research strategy adopted, data collection and analysis techniques, and sample selection.

11

CHAPTER 3: RESEARCH METHODS

This chapter is divided into four sections. After firstly readdressing the research aim and objectives, the research design is summarised - exploring the single case study approach as a way of investigating the topic, followed by a discussion of the methods used to collect and analyse data. The final section of this chapter outlines the ethical considerations.

3.1 Research approach: case study selection and design

The study aims to gain a deep understanding of the public consultations employed in urban-transport projects in developing countries. Foremost, it aims to focus on key stakeholder's and the public's perceptions and opinions on the PP strategy implemented in the planning and delivery of the ABRT project. The specific research objectives are:

- Identify Jordan and AFD's current public participation policies and critically evaluate their appropriateness.
- Assess the effectiveness of the implementation of policies in the planning and delivery of the ABRT and identify any deficiencies that may exist.
- 3. Explore the key stakeholders' attitudes towards implementing public participation strategies.
- Explore the local population's experiences in the planning and implementation of the urban transport project and their perception of whether their input was considered and included in the decision-making.

An in-depth, single, embedded case study approach is considered the best fit as it allows a deep, contextualised understanding of barriers to effective participation in developing countries. Selecting a case study provides an opportunity to shed empirical light on some theoretical concepts (Yin, 2014).

To select the case study, a list of infrastructure projects that were being implemented in developing countries were identified⁴. To devise the list and select one project, the following criteria was considered: the funding source of the project, its scale, and availability and accessibility to data collection (this included responsiveness of stakeholders, their willingness to be interviewed and reachability to the public for the survey). Further in-depth research was conducted to gain a greater understanding of each of the project and to determine whether it meets the criteria. The ABRT was selected as a case study as it best met the criteria. Additionally, as a Jordanian citizen, I am able to gain a greater understanding of the local context which will be beneficial for this research.

As a catalyst rapid-transit project in Jordan, I believe that the findings and analysis can provide valuable lessons for future PT projects.

3.2 A three-staged investigation

To have a comprehensive understanding of the topic, a three-step mixed-methods research strategy is adopted. The first step in this research is conducting a literary analysis. Generic lessons and emerging themes are identified by reviewing pertinent literature and policies. This provides a detailed understanding of the relevant research with regards to PP in developing countries (Werkmeister and Klein, 2010), and a baseline of the current PP requirements of AFD and Jordan (objective 1). Based on the findings, a framework for evaluating PP strategies is developed.

The primary data (i.e. empirical data) is collected through a case study (ABRT) allowing an in-depth exploratory research (Yin, 2014). The means of collecting primary data is through semi-structured interviews with identified key stakeholders that were involved in the project (Table 2 below). Semi-structured questions (Appendix B) are asked to allow the interviewees to reflect and elaborate on their experiences. Interviewing different stakeholders allows for a cross-comparison of responses (Biggam, 2017), providing a wider perspective on PP (objectives 2 and 3).

13

⁴ Projects identified: Amman BRT; Grand Ethiopian Renaissance Dam; and, Mombasa - Nairobi Standard Gauge Railway.

Table 2 Individuals Interviewed

Stakeholder Group	Number of Individuals Interviewed
Project Sponsors	2
Project Team	2
Contractors	1
Civic Society Groups	5

Based on initial findings from the interviews, a web-based questionnaire is developed to gain insight on the public's perception of the implemented PP strategies (objective 4). The survey consists of fixed-response questions and a survey scale that allows the public to evaluate the consultation strategies that were implemented for the ABRT. The survey (Appendix C) targets local residents and business owners, current and future PT users and the general public. To ensure that the survey was accessible to everyone in Jordan, the survey was bilingual (questions were in English and Arabic). A total of 223 responses were received.

A second round of follow-up interviews to review some of the results of the surveys are conducted with key stakeholders to discuss the barriers to participation that are perceived by the public. The discussions provided useful suggestions for improving PP and policy recommendations in Jordan.

3.3 Data analysis

This research approach uses qualitative and quantitative data to confirm the findings within the case study (Creswell *et al.*, 2003). Figure 1 below provides and overview of the data collection and analysis process. The qualitative data through content and discourse analysis is extracted from the literature review and interviews; and the quantitative data was from the survey; the triangulation of data provides an opportunity to compare theory in praxis.



Figure 1 Flow Diagram of Data Collection and Analysis Process

Main themes through the literature/ policy review, interviews, and survey responses emerged and reflected on the overall aim and objectives of the research. Organising and synthesising the data by the criteria outlined in the framework (Table 3) allows for an in-depth evaluation of the PP strategies employed in the case study. The combination of qualitative research from the policy review and interviews, and quantitative data from the web-based questionnaire provides a comprehensive analysis and understanding with regards to implementing PP strategies when delivering transport infrastructure in Jordan. The findings provide an overview of key lessons and recommendations to improving participation in Jordan.

Once empirical data is analysed, it is applied to the framework to evaluate the PP approach that was implemented in the ABRT. Table 3 below outlines the source of the date used in the framework.

15

Criteria		Design Considerations	Data Source
1.	Meet legal	Clarify and meet the legal	Review of Jordan's
	requirements	requirements.	legislations and policies.
		Consideration of alternatives to	Interviews.
		traditional public notices and hearings.	
2.	Provide diverse	Broad representation sample of	Interviews
	representation.	affected population.	
			Survey
		Comprehensive stakeholder analysis.	
		Engagement with marginalised groups.	
		Management of power dynamics	
3.	Clear	Clear definition of participatory task and	Review of relevant project
	identification of	consideration of context.	documents.
	task and		
	consideration		Interviews
	of context and		
	problems.		
4.	Independence	The process should be conducted by an	Review of relevant project
		independent body	documents.
			Interviews

Table 3 Source of Data Applied to the Framework to Evaluate ABRT's PP Strategy

~			
5.	Early and	Early and continuous involvement of	Interviews
	continuous	participants. They should always be	
	Involvement	informed.	Survey
6.	Deliberative	Platform for deliberation should be	Review of relevant project
	process with a	provided.	documents.
	clear decision		
	structure.	Decision-process should be clearly	Interviews
		structured and discussed.	
			Survey
7.	Influence	Outcome of the exercise should have a	Survey
		genuine impact on the policy/	
		programme.	
8.	Transparency	Processes should be transparent, and	Interviews
		access to resources and reports should	
		be provided.	Surveys
			Desk research
9.	Evaluate and	Evaluation measures should be used to	Interviews
	continuously	design and redesign the process (if	
	redesign	required).	Review of relevant project
	-		documents.
4.5			
10.	Cost and time	The process should in some-sense be	Interviews
	effectiveness	cost effective.	

3.4 Ethics statement

This research project was conducted with full compliance of research ethics established by UCL Research Ethics Committee.

17

The stakeholders interviewed for this research were formally invited by email which included a project information sheet that explained the research goals, the focus of the interview, and included contact information should they have an inquiries, wished to retract information or withdraw from participation at any point. Furthermore, participants remained anonymous with no identifying data used. To ensure complete anonymity, the quotes from the interviews used in this dissertation are all cited as **Interviewee Z**.

This research was registered with the UCL Data Protection Office (reference no. Z6364106/2020/07/44). The Ethical Clearance Form and Risk Assessment Forms are found in Appendix H and I respectively.

Chapter Summary

This chapter discusses and justifies the research strategy and data collection techniques (centred around a policy review, semi-structured interviews, and a survey questionnaire) adopted in the empirical collection of data for this study and applied to the framework for analysis. The chapter also provides an overview of the ethical considerations for this research.

CHAPTER 4: CASE STUDY ANALYSIS

This chapter provides a clear background on the selected case study (the ABRT). The first section provides an overview of the current PT system in Amman, justifying the need for the project. The second section provides an overview of the institutional framework governing PT in Amman. Lastly, the final two sections outline the PP requirements and the strategy employed for the ABRT project.

4.1 Case study introduction: Amman BRT

Amman's citizens currently lack access to an integrated and efficient PT system. The current routes were developed in an ad-hoc manner creating convoluted journeys for the users (Shbeeb, 2018). The services include large and medium sized passenger buses 'coaster busses' and 'minibus/ serfees (service)'- which are shared taxis. The dysfunctional and poor-quality system has led to a very low usage of PT, only 5% of the daily trips in Amman are taken by buses (Shbeeb, 2018), and 85% the users are forced to use PT as they do not have access to car. The current PT network fails to address traffic congestion, accessibility and affordability issues. The crisis is also being exacerbated by urbanisation and the large influx of Syrian refugees (Al-Tal and Ghanem, 2019). With a population of 4 million (Deparment of Statistics, 2016) an affordable rapid-transit system is of dire need.

In an effort to provide long-term transport solution to congestion, GAM developed a Transport and Mobility Master Plan for Amman which proposed the development of an expansive BRT network (Figure 2) leading to the inception of the ABRT project.



Figure 2 Proposed Public Transit Network for Amman (GAM, 2010)

The first phase of the ABRT includes a 32km route that runs along the three main corridors, with a total of 39 stops (Figure 3) (Steer Davies Gleave, 2010b). The project was approved in 2010 with a total budget of JD 173million (approx. US\$ 231 million) in 2009 prices (Steer Davies Gleave, 2010b). It is currently under construction and is expected to be operational in late 2020, but delays are expected due to the COVID-19 pandemic. A more detailed overview of the project timeline is provided in Appendix D.



Figure 3 ABRT Route (Steer Davies Gleave, 2010b)

The project is funded by AFD, which is public development financial institution with a mandate to help France's partners. The agency currently operates in 108 countries and is supporting over 2,500 projects (AFD, 2019). The institution offers a range of financial and non-financial services and prioritises projects that address climate change, poverty, and assists in stabilizing countries post-crisis (AFD, 2019).

4.2 A brief and partial history of PT administration in Amman

Similar to the PT network, its administrative regulating bodies were also chaotic.

From 1964 until 2007 there were various governing bodies that were given authority to regulate, plan routes and grant operational licenses (Abbasi *et al.*, 2020). Because various governmental institutions had an impact on PT, a fragmented system was created across all of Jordan. In an effort to organise and coordinate PT in Amman and to give the citizens of Amman a 'larger role' in building their future, in 2006, the Mayor of Amman advocated for a decentralised approach that would transfer all PT

responsibilities to GAM. In 2007, pursuant to Law No. 51/2007, GAM gained sole responsibility with regards to PT across its 22 districts (Figure 4 below).



Figure 4 Map of Amman's 22 Districts (Cavoli, 2017)

Within GAM, the Public Transport and Transport Infrastructure Construction Directorate manages all PT related operations. The directorate is divided into four departments, two of which are responsible for the ABRT:

- Department of Construction Management of Infrastructure of the BRT, and
- Operations Department of the BRT (GAM, 2019).

While decision-making and budget allocation authorities with regards to PT was given to GAM, when it comes to large scale-projects and major changes in legislation, central government (comprised of the cabinet, and Upper and Lower Houses of Parliament) need to authorize them. Given the scale and significance of the ABRT to Jordan, it required approval by central government. It is worth noting that subsequent to obtaining approval from Parliament, they still have the ability to influence the project. For example, in 2011, Parliament halted the project amid concerns of feasibility.

As evident, central government still has a great influence on transport decisions in Amman. As such, any new policies that would enforce the implementation of PP strategies when planning and delivering transport projects in Amman will require their support and approval.

4.3 Public participation requirements for the ABRT

Prior to approval, all new development projects in Jordan (including the ABRT), must conduct an Environmental and Social Impact Assessment (ESIA)⁵. The assessment requires the project promoter to conduct PP strategies that ensure that all stakeholder, affected people, and the general community (citizens) understand the project and its impacts, and are able to provide feedback and participate in discussions. While no formal public hearings are required, the promoters are required to conduct deliberative sessions.

Furthermore, as the project is funded by the AFD, the PP strategies implemented must meet the requirements of the agency (a more comprehensive overview of their policies is outlined in Appendix E). It is worth noting that their policies only became a requirement in 2017, after the ABRT project had already received funding.

While legislations, policies, and loan requirements enforce the implementation of PP in Jordan, they are often not adequately executed. Five of the interviewees for this research highlighted that the existing policies are sophisticated and comparable to those of international standards, but they are not implemented. This is discussed in greater details in Chapter 5.

4.4 Brief overview of public participation strategy implemented for the ABRT

The PP strategy implemented for the ABRT focused on obtaining insights on user needs, travel patterns, typical day-to-day experiences of passengers, and keeping the general public informed about progress (Steer Davies Gleave, 2010a). Participation took form through 5 focus groups and included a total of 62 participants:

⁵ Pursuant to the Environmental Protection Law No. 52/2006.

- 1. GAM employees who own and use their own cars;
- 2. GAM employees who use PT
- 3. School students between the ages of 13-16;
- 4. University of Jordan students; and,
- 5. Youth from the Children's Municipal Committee.

Transparency

Under the Freedom of Information Act 47/2007 article 9A, anyone can request access to all the project documents. However, people will need to know what specific documentations to request. In an effort to provide information about the project to the public, GAM organised an 'Open Day' at the Municipality where all the project reports and drawings were put on display. This activity was the only time where all the project documents were compiled in one place and could be accessed by the public.

Keeping the public informed

GAM's strategy to keep the public informed on progress is through media platforms, including television and radio adverts, as well as through social media. Figure 5 provides an example of how updates through social media were provided.



Figure 5 Example of Information Sharing via Social

Media

Chapter Summary

The ABRT project will be the first rapid-transit network to be implemented in Jordan. As a catalyst project, its success and support from citizens and stakeholders can pave the way for the expansion of the network - which is something of a dire need for Jordan.

While GAM is leading the project, as it is funded by AFD, their policies and requirements will also have to fulfilled. This chapter provides an overview of the PP requirements for the ABRT and the strategy that was employed, which is comprehensively evaluated in Chapter 5.

CHAPTER 5: CASE STUDY FINDINGS. DESCRIPTION, ANALYSIS AND SYNTHESIS

In this chapter, the Amman BRT will be at the centre of the discussion. It provides an analysis of the data collected through desktop research, semi-structured interviews and survey questionnaire which support the research questions and objectives. The first section describes and analyses the results using the framework developed to evaluate the PP approach that was implemented in the ABRT. The second part of this chapter draws on key findings from the results and discusses some of the shortfalls of the implemented strategy.

5.1 Findings: description and analysis of results

To evaluate the PP strategy employed for the ABRT, the data collected is applied to the framework developed in Chapter 2. Each subsection below provides an overview of the findings in relation to each of the 10-criterion outlined in the framework. A more detailed overview of the results inputted into the framework is provided in Appendix E. Additionally, Appendix F contains all the graphs outlining the statistical analysis of quantitative data.

Criterion 1: Meeting Legal Requirements

Public consultations for all new development projects in Jordan are required as part of the ESIA. While some researchers find that weak legal frameworks hinder PP in developing countries (Harbers, 2007; Hickey and Mohan, 2008), interviewees highlighted that this is not the case in Jordan; *"the legal framework [for public participation] is there, but the implementation is not."*

AFD's policy⁶ indicates that consultations should be organised at various stages of the project lifecycle and in line with the national regulations. Since Jordan's regulations were deemed sufficient, the participatory strategies were to be designed and implemented in accordance with their requirements (as outlined in the ESIA).

⁶ Environmental and Social Management Policy (AFD, 2016).

To fulfil the legal requirements, consultations were conducted. However, they did not ensure that all those affected, and the public are provided with an opportunity to understand the project nor with a platform for deliberation. Participation took place in the form of focus groups with a total of only 62 participants (Steer Davies Gleave, 2010a).

Criterion 2: Providing a diverse representation

To provide a PT system that meets the needs of all citizens, it is important to structure participation around the conceptions of difference to ensure that various voices are represented within the public (Barnes *et al.*, 2003). Consultations for the ABRT consisted of only 5 focus groups, two of which were comprised of GAM employees. The strategy employed failed to acknowledge differences that exist within each group (in terms of gender, sexuality, disability, and income levels). There was also no indication of whether lower income populations or people with disabilities participated in the processes.

Additionally, while 48.3% of the participants were women (Steer Davies Gleave, 2010a), interviewees explained that for the context of Jordan, it was necessary to have a focus groups comprised of only females (attended by women and led by women). This would allow females to give greater insights on what may deter or encourage them from using PT.

The PP strategy employed failed to provide a true representative of the public.

"Those who were invited to participate were pre-selected. The process was not open, therefore not representative of the public." (Interviewee Z).

Criterion 3: Clear identification of tasks and consideration of context and problems

Before inviting people to participate, it is essential to provide a comprehensive overview of the project, clearly identify the objectives of the sessions, and outline how decisions will be made. This will foster a constructive discussion that will capture insight and feedback that benefit the project (Rowe and Frewer, 2000). For the focus groups, the objectives of the consultations were clearly
outlined⁷. However, there was no opportunity provided to question the merit of the project and whether it is the most appropriate solution for Amman. The public was simply asked to provide input on their needs, and it was up to experts to find the appropriate solution. Interviewees highlighted that this inherently assumes that the public lacks the required knowledge to collaborate. While this may be true for some developing countries (Bickerstaff, Tolley and Walker, 2002), that is not the case in Jordan.

"The people of Jordan have an appetite to participate and I can assure you that most people are more than capable of understanding the technical aspects of the project." (Interviewee Z)

Undermining the capability of the public to participate illustrates the lack of consideration of the context of the project.

Criterion 4: Independence

To eliminate any perceptions of bias and to have a participatory process that is objective, consultations should be conducted by an independent consultant (who are still highly knowledgeable about the project). Interviewee Z highlighted that one of the most important reasons as to why the promoter should not conduct consultations is because "the objective of public participation is not to convince people that the project is good, it is to understand what the perceptions of the people are in order to make improvements."

Consultations for the ABRT were organised and conducted by the project team with GAM's Transportation Directorate overlooking the processes. While GAM's involvement is necessary (as they will know all the details about the project), having an external consultant lead the participation would have strengthened the legitimacy of the process.

⁷ Objectives included: obtaining insights on the user needs, travel patterns, and typical day-to-day experiences; and, identifying deterrents to using PT and how they can be addressed(Steer Davies Gleave, 2010a).

Criterion 5: Early and continuous involvement

Involving stakeholders and citizens at an early stage and continuously can foster trusting relationships between decision-makers and the public (Innes and Booher, 2004). However, not everyone needs to be involved at all stages of the project lifecycle. Figure 6 below provides an overview of who and when stakeholders and citizens should be invited to participate in the ABRT project vs. when consultations actually occurred and who participated. As displayed below, consultations only occurred in the planning and appraisal stages with pre-selected individuals. Furthermore, there is no mention in any of the project documents about conducting consultations subsequent to the implementation stage.



The absence of consulting with the public was evident in the results of the survey questionnaire, when asked if they were consulted in the project prior to its approval only 12.6% of all respondents strongly agreed or agreed. Additionally, Figure 7 below illustrates that key stakeholders (local business owners and residents, current PT users) lacked representation in the consultations.





Figure 7 Results of 'Consulting with the Public Prior to Approval of ABRT'

Furthermore, 56.9% of respondents indicated that they did not receive enough information regarding any disruptions during construction (Step 4 Implementation). One respondent commented, "All that is apparent to me is they dug up parts of the city with no wide enough information for the people."



Figure 8 Results of 'Provision of Information During Construction'

Figure 8 illustrates that even for those who will be severely impacted (including local business owners and residents) were not kept informed during the construction. In the questionnaire several business owners with shops that are located along the route indicated that they incurred financial losses due to construction.

The lack of involvement of the general public at an early stage and throughout the implementation of the ABRT was highlighted as a weakness of the project by Interviewee Z.

"Involving the public early on and throughout the whole process would have made the public feel that they are an actor rather than a spectator in the project, and maybe they would have safeguarded the project rather than oppose it."

Criterion 6: Deliberative process with a clear decision structure

As previously outlined, there is a myriad of benefits in fostering discussions during consultations. This allows the exchanging of views and idea that will provide experts with practical and local knowledge that would otherwise be missed (Healey, 1997). The PP strategy employed for the ABRT only provided a platform for deliberation with those who were preselected to participate in the focus groups, which was reflected in the responses to the survey (Figure 9).



Figure 9 Results of 'Provision of Opportunities for Deliberation'

Providing a platform for discussion is important to ensure that people are able to provide true reflections of their opinions and concerns. An interviewee highlighted "as part of democracy you need to provide a platform for discussion and the influence of the public's opinion should be considered. Simply informing them isn't a true democracy." While public hearings can provide formal platforms for deliberations, alternatives methodologies can also be employed. In Jordan, people are very active on social media platforms and this can be a good way to provide opportunities for deliberation. An interviewee stated, "Deliberation nowadays does not have to be through traditional hearings, they can conduct live sessions on social media, where the public can ask questions and they

will be answered either during the allocated time or after the session." This approach can also be used in implementing deliberative practices in a post COVID-19 era.

Criterion 7: Influence

Ensuring to people who participate that their input will be considered and can influence the decisionmaking with regards to projects is a critical component of PP (Rowe and Frewer, 2000). The outcomes of the exercises should have a genuine impact on the programme otherwise people may be discouraged from getting involved. In the ABRT, only stakeholders with ownership roles had a part to play in approving deciding on various aspects about the project (Steer Davies Gleave, 2010a). An interviewee stated, *"I felt that we were listening to those with the loudest voices, and not those who would really benefit or lose from not having a decent PT system."*

The lack of influence of the citizen and general public is seen as a deterrent to participate. "If nothing you said was considered, you feel discouraged from participating again because your involvement did not yield any outcomes of value." (Interviewee Z)

It was emphasised that citizens are willing to participate as long as they are informed why there are invited and how their input will be considered. The lack of influence in the decision-making by members of the public is evident in their responses to whether their inputs or opinions were considered in the decision-making process (Figure 10).



MY INPUT AND/ OR OPINIONS WERE CONSIDERED IN THE DECISION-MAKING PROCESS

Figure 10 Results of 'Influence in the Decision-making Process'

Criterion 8: Transparency

In consultations, for participants to fulfil their brief and provide useful input, they should have a comprehensive understanding of the proposed project, its objectives and expected outcomes (Rowe and Frewer, 2000). By sharing information, project promoters can also strengthen their trusting relationships with citizens (Innes and Booher, 2004).

AFD have policy requirements that encourage transparency throughout the project cycle (refer to Appendix E). As a best practice, all project documents should be made available. However, as PT projects are complex, it can sometimes be difficult for the public to understand all the technical components of the project. As such, it is also important to provide easily understandable information for the general public and have representatives who can answer any questions raised.

For the ABRT, all the project documents were made available online albeit they were scattered and difficult to locate. An interviewee highlighted that GAM endeavoured to increase transparency by conducting an 'Open Day' where all the project documents and drawings were consolidated, put on

display, and the project team were available to answer any questions. However, for large scale infrastructure projects there are usually thousands of pages of technical documents. Providing one opportunity for people to review the documents does not give sufficient time. Furthermore, some people may have not been able to attend on that particular day.

If citizens were interested in retrieving information about the project, they were able to submit a request and all the relevant information would be provided⁸. However, citizens must know exactly what information they are seeking, and they might miss important information that will might provide them with a more comprehensive overview of the project. Additionally, since the majority of interviewees and respondents indicated that their opinion is not considered when making decisions (Figure 10), they may be reluctant to review the documents as they may see it as a waste of their time.

Overall, the ABRT project is seen as untransparent by all the interviewees who participated in this research. This was highlighted as a critical issue that contributed to public opposition. The following statements were made:

"People who were not directly involved did not have any access to any technical reports, the public only saw the construction of the project." (Interview Z)

"The public's unawareness created animosity towards the project, they were saying 'what is GAM doing, they are taking part of the road and its left without any function [as its not yet operational], meanwhile traffic is only getting worse and we can't see tangible benefits." (Interview Z)

The interviewees comments aligned with the public's perception on transparency. Figure 11 below provides an overview of the whether enough information was shared, and figure 12 displays the public's response to whether they were able to access information that they were seeking.

⁸ In accordance with Article 9A of the Freedom of Information Act 47/2007.



Figure 11 Results of 'Provision of Sufficient Amount of Information about the Project'



I WAS ABLE TO ACCESS INFORMATION THAT I WAS SEEKING ABOUT THE PROJECT

Figure 12 Results of 'Access to Information'

*Note: high proportion of local business owners (34.1%) and residents (46.9%) strongly disagree

Criterion 9: Evaluate and continuously redesign

Conducting public consultations that fulfil the objectives of the participatory strategy requires the continuous monitoring and evaluation of the approach. The strategy should be reconsidered if the input received does not provide an accurate representation of the public. For the ABRT, consultations with the public ended after the project appraisal stage, and the project documents do not outline any plans for further consultations. This was emphasised as a weakness in the strategy implemented.

"You have to be open to whatever feedback you receive; you may have to repeat consultations if not enough people participated. Design and re-design the process until you reach the participation that you are satisfied with and you feel that you have provided a more accurate representation of people." (Interviewee Z).

Criterion 10: Cost and time effectiveness

While conducting participatory approaches in PT projects has a myriad of benefits, it is important to ensure that the benefits of the strategy justify the associated costs. For the ABRT, one interviewee mentioned that the costs of PP were not fully considered by GAM in their tendering process, "they sometimes ask for extra funding to have the public consultations as it was not considered in the initial budget. This is a shortfall of the government body promoting the project".

However, through this research limited information was available with regards to costs - as highlighted in Sections 5.1.8 and will be discussed further in Section 5.2 below.

5.2 Discussion

This section of this chapter provides an analysis of the key findings from this research and provides an overview of the some of the shortfalls of the PP strategy that was implemented in the ABRT project.

Public Participation: a new concept in Jordan

While the Jordanian legislation has required PP to be conducted for new projects as part of the ESIA since 2006⁹, its policies are very underdeveloped. Stakeholder and public engagement are only required in the scoping phase and only affected parties are invited to comment on the project¹⁰. This research has revealed that public consultation is a relatively newly implemented concept in Jordan. Interviewees highlighted that consulting with the public is not perceived an essential component in the planning and delivery infrastructure projects by promoters. Furthermore, while the majority (61.0%) of respondents indicated that it is their right as a citizen to participate in the decision-making process (with regards to the ABRT), it is not seen as an overwhelming majority (Figure 13).



IT IS MY RIGHT AS A CITIZEN TO PARTICIPATE IN THE DECISION-MAKING PROCESS

Figure 13 Overview of Public's Perception on their Right to Participate

As PP is a relatively new concept in Jordan, MDBs and DAs can play a larger role in ensuring that adequate practices are implemented. According to an interviewee, their expertise and lessons learned from working in many different countries can be of great benefit for Jordan. However, simply

⁹ Pursuant to the Environmental Protection Law No. 52/2006.

¹⁰ According to Article 9 of the ESIA regulations no. 37, 2005.

making participation a statutory or procedural requirement will not necessarily ensure the provision of an adequate participatory process (Songsore *et al.*, 2018). As such, it is important to ensure a paradigm shift from implementing participatory approaches to simply satisfy the requirements of the lending agency, to an essential component in planning and delivering projects.

Technocratic approach to planning and delivering the ABRT

The planning and delivery of the ABRT project was led by technocrats. There were limited opportunities for the public to participate throughout the processes and little influence in the decision-making.

Consultations in the form of focus groups with preselected individuals were conducted in the appraisal stage of the project lifecycle. The objectives were to gain a greater understanding of the travel patterns and needs rather than debating whether the proposed BRT is indeed the best solution. The project was approved without conducting any public hearings where citizens can formally share their views - there was no opportunity provided to question the merit of the project.

Overall, an informative approach to PP was implemented. The process lacked a platform for deliberation (where the public's input on technical and design elements can be considered), and the power to influence decision-making. The absences of these elements can deter some citizens from wanting to participate in future consultations, a respondent to the survey questionnaire stated: "You are just asking us here as a formality, but you never actually take our opinion and concerns into consideration. You always go back and do whatever it is you were planning on doing." This quotation clearly outlines that the project was heavily influenced and led by technocrats.

According to Arnstein (1969), the consultation strategy that was implemented for the ABRT falls under the *"tokenism"* step (Figure 14). Citizens were informed about the project and some were provided with an opportunity to voice their opinions. However, citizens lacked the power to ensure that their views were heard and considered.



Figure 14 Placement of the ABRT in Arnstein (1969) Ladder of Citizen Participation

Interviewees highlighted that implementing a PP strategy that creates a partnership between the project promoters and citizens is essential for the development of future infrastructure projects in Jordan. By keeping the public informed and providing them with an opportunity to collaboratively come up with projects that meet their needs they feel a sense of ownership, and they will safeguard the project it rather than oppose it. The approach implemented in the ABRT missed an opportunity to promote relationship building and social learning through collaboration (Innes and Booher, 2004; Holden, 2008; Wenger, 2010)

Lack of Transparency: a cause of lack of trust

In the early stages of the ABRT there was little information shared with the general public which led to the decline of citizens' trust in the project. In 2011, the lack of transparency caused controversy with regards to the financial viability of the project and allegations of corruption erupted.

"If they have nothing to hide, then why are they trying to hide information? Secrecy makes people sceptical". (Interviewee Z).

The former Mayor of Amman was accused (later acquitted) from charges of financial corruption and embezzlement related to the project. The allegations paired with the lack of public trust led to the interference of Parliament who decided to suspend the project in 2011 despite the ongoing construction work (Shami, 2014). The project was halted for 2 years to conduct additional feasibility studies¹¹. The delays in the delivery of the ABRT has led to even further public distrust, creating a cycle that it is difficult to break.

The lack of transparency is not only caused by Jordan's polices, but also due to AFD's restrictions in the sharing of information. While AFD's policies encourage beneficiary countries to be as transparent as possible, their legal agreements can restrict their ability to disclose financial information. This was experienced when conducting this research as several involved parties were unable to participate.

Establishing trusting relationships between the citizen and government bodies is essential as it can encourage further future investments in infrastructure projects, allowing for the provision of more public services, thereby contributing to more growth in developing countries.

Chapter Summary

This chapter evaluates the PP strategy implemented for the ABRT project using evidence collected through this research. The results illustrate that the strategy employed provided very limited opportunities for key stakeholders and the public (citizens) to interact and participate in the planning and delivery of the project. Consultations were conducted to simply satisfy requirements outlined by Jordanian legislations and AFD's policies. The lack of commitment to engage with the public by decision-makers, paired with lack of transparency caused public distrust in the project, which contributed to delays in the delivery of the ABRT.

¹¹ The stopping of the project for 2-years is considered a severe delay in its delivery since the whole timeframe for construction was set for 2 years (Steer Davies Gleave, 2010a).

CHAPTER 6: CONCLUSIONS

This chapter reiterates the research aim and objectives and provides a summary of the findings. Subsequently, recommendations and policy implications are proposed, and finally, the limitations of the study and suggestions for future research are outlined.

6.1 Research aim and objectives

This dissertation has sought to review and evaluate the PP strategies implemented in the planning, appraising, and delivery of urban transport projects in developing countries, focusing on the ABRT project. Existing research portrays participation as an unalloyed good and a critical component of planning and delivering PT projects. However, there is limited research available on the practical implementation of participatory strategies in developing countries. This research focused on the ABRT as a case study to critically evaluate the PP approach employed using the developed framework (as described in chapter 2) in order to identify any weaknesses that hinder the successful delivery of participatory practices in Jordan.

Focusing on the case study, this dissertation assessed the adequacy of the current PP policies and requirements and their implementation, captured key stakeholder's attitudes towards participation, and explored local population's experience in the planning and delivery of the ABRT.

6.2 Summary of findings

This research has reflected that in Jordan, the concept of including the public in planning and delivering infrastructure projects is still in its infancy. While legislations and policies that encourage participation exist, they are not adequately implemented. Consultation seem to occur when they are mandated by the lending MDB or DA and are implemented in a 'check-box' exercise manner. This is despite the wide acknowledgement of the benefits of participation by planners and project promoters in Jordan.

This research has also demonstrated that the complexity of urban transport projects has somewhat problematised the willingness of project promoters in consulting with the public. There is an inherit assumption that the people may lack the knowledge to be able to provide valuable insights regarding technical elements. This is reflected in the PP strategy employed - as it only sought to understand people's transport needs. Citizens were not consulted about the details of the ABRT, or even provided with all the project information. The lack of deliberation, transparency, and power to influence decisions has led the public to feel that they are simply spectators in the process. Instilling a sense of ownership over the ABRT through participation may have ensured that they safeguard the project rather than oppose it.

To promote participatory practices when planning, appraising, and delivering PT projects in Jordan, and to contribute to strengthening the relationship between decision-makers and the public, I give the following recommendations:

Provide complete transparency to ensure accountability and provide the public with opportunities to adequately engage.

It is essential to ensure that all the project documents are consolidated and easily accessible to all citizens. If essential information is contained in technical documents, it is imperative to ensure that the information is relayed in an easily understandable way. Furthermore, assigning a community liaison officer(s) can ensure the efficient and effective communication with stakeholders and citizens.

Establish overarching principles and procedures for implementing PP strategies. Amendments to the Law of Environmental Protection (No. 52/2006) are required to ensure that public hearings are made a statutory requirement.

Public hearings provide citizens with a formal opportunity to raise and discuss their issues or concerns about projects. This can ensure that those who may be negatively impacted (such as business owners with shops located adjacent to the route) have an opportunity to formally raise issues which will be kept part of the public record. Doing so can ensure that they are adequately compensated of any

losses that they may incur. While public hearings may not provide all citizens with the best opportunity to discuss the project, the keeping of permanent records can preserve people's rights as citizens.

Develop a comprehensive PP handbook for project planners and promoters.

As PP is a relatively new concept in Jordan, drafting a handbook that clearly outlines the procedural requirements and possible tools for implementation can be helpful. The framework developed for evaluating PP strategies as part of this research can be used as a baseline for the handbook (refer to Sections 2.4 and 3.3). Ensuring that the handbook considers the criteria outlines in the framework can lead to the development and implementation of an effective PP strategy. Furthermore, figure 15 below can be used to determine when (in terms of the project lifecycle) should stakeholders and the public be involved.



Figure 15 Who and When Should Participate in PT Projects

Finally, it is important to develop this handbook while considering the context of Jordan. For example, whilst conducting this study, it was highlighted that it is important to conduct consultation sessions for females only (led by women and attended only by women). Doing so can encourage more females to participate in the process. Additionally, it was highlighted that people in Jordan are very active on social media. As such, it could be helpful to conduct interactive sessions online at times when people are available to participate. These sessions can attract a wider audience, thereby gaining even greater insights on people's needs, concerns, and opinions.

This handbook can also be used in conjunction with any documents or technical assistance that may be provided by the lending development agency or bank.

6.4 Study limitations and future research

This research focused on one case study and its findings should not be regarded as exhaustive or universally reflective of all infrastructure projects in developing countries. The results are limited to the scope of this dissertation. Additionally, the research provided an overview of the situation as it is in this point of time. Since the research includes a policy review, the findings reflect the current policies which can be amended in the future. A follow-up study would be needed to check the evolution of polices and regulations.

Additionally, the research took place in a relatively limited time frame with data collection occurring in the midst of a global pandemic (COVID-19). This has restricted the ability to conduct more interviews thus limiting the scope of the project. Furthermore, some interviewees faced legal limitations which prohibited them from taking part in the research, this has restricted some access to information (specifically with regards to costs) that could have provided a clearer understanding of the case.

The complexity of delivering urban transport projects in developing countries means that this research has merely scratched the surface on how effective PP can be achieved. Given the project's area of study limited to Jordan and urban transport projects, further research into international

contexts has vast potential to offer valuable contributions to the field both academically and practically.

CHAPTER 7: REFERENCES

- Abbasi, Q., Shoubaki, H., Mansour, I., Abbadi, I., and Emad, E. (2020) Policy Paper: Public Transportation Issues and their Impact on the Economic Participation of Women in Amman. Amman.
- Abers, R. (2000). Inventing local democracy: grassroots politics in Brazil. London: Lynne Rienner Publishers.
- Anon. (1992). Agenda 21. In: United Nations Sustainable Development, United Nations Conference on Environment & Development. 1992 United Nations. p. 343.
- Asian Development Banks (ADB). (2017). Strengthening participation for development results: an Asian Development Bank guide to participation, European Scientific Journal. Manila: Asian Development Bank.
- Agence Fraçaise de Dévelopmmenet (AFD). (2016). Environmental and Social Risk Management Policy for AFD-funded Operations. Paris. Available at: https://www.afd.fr/sites/afd/files/2017-10/Environmental-social-risk-management-policy-afd_0.pdf. (Accessed: 23 August 2020).

Agence Fraçaise de Dévelopmmenet (AFD). (2019). A World in Common- AFD Overview. Paris.

- Al-Tal, R. and Ghanem, H. (2019). 'Impact of the Syrian crisis on the socio-spatial transformation of Eastern Amman, Jordan', *Frontiers of Architectural Research*, 8(4), pp. 591–603.
- Ansar, A., Flyvbjer, B., Budzier, A., and Lunn, D. (2016). 'Does infrastructure investment lead to economic growth or economic fragility? Evidence from China', *Economic Policy*, 32(2), pp. 360– 390.
- Arnstein, S. R. (1969) 'A Ladder Of Citizen Participation', Journal of the American Planning Association, 35(4), pp. 216–224.
- Barnes, M., Newman, J., Knops, A., and Sullivan., H. (2003). 'Constituting "the public" in public participation', *Public Administration Review*, 81(2), pp. 379–399.
- Basilio, M. (2014). 'The Determinants of Multilateral Development Banks' Participation in Infrastructure Projects', *Journal of Infrastructure Development*, 6(2), pp. 83–110.
- Batheram, M., Hardin, J. and Whitfield, S. (2005). 'Successful participation methods for local transport planning', *Proceedings of the Institution of Civil Engineers*, 158(1), pp. 9–16.

- Bickerstaff, K., Tolley, R. and Walker, G. (2002). 'Transport planning and participation: the rhetoric and realities of public involvement', *Journal of Transport Geography*, 10(1), pp. 61–73.
- Biggam, J. (2017). Succeeding with your master's dissertation: a step by step handbook. 4th edn. London: Open University Press; McGraw-Hill Education.
- Bloomfield, D., Collins, K., Fry, C., and Munton, R. (1998). 'Deliberative and inclusionary processes: their contribution to environmental governance. Paper: Environmental Governance: Responding to the Challenge of Deliberative Democracy', in. London: University College London.
- Bryson, J. M. Quick., K.S., Slotterback, C.S., and Crosby, B.C. (2013). 'Designing Public Participation Processes', Public Administration Review, 73(1), pp. 23–34.
- Burton, P. (2009). 'Conceptual, Theoretical and Practical Issues in Measuring the Benefits of Public Participation', Evaluation, 15(3), pp. 263–284.
- Cass, N. (2006). Participatory-Deliberative Engagement : a literature review. Renewable Energy Working Paper No.1.2, Department of Geography, Lancaster University, Lancaster.
- Cavoli, C. (2017). CREATE City report. Amman, Jordan. Past, present and future mobility challenges and oppertunities in Amman. London: UCL Centre for Transport Studies. Available at: http://nws.eurocities.eu/MediaShell/media/CITY_REPORT_Amman_21_12_2017.pdf. (Accessed: September 5, 2020).
- Centre for Civil Society and Governance (CCSG).(2007). From Consultation to Civic Engagement: The Road to Better Policy-making and Governance in Hong Kong. Hong Kong.
- Chess, C. (2000). 'Evaluating Environmental Participation: Methodological Questions', Journal of Environmental Planning and Management, 43(6), pp. 769–784.
- Colomb, C. (2009) RAMP Study- Social and community planning insights into the appraisal of Mega Urban Transport Projects (MUTPs). OMEGA Centre Working Paper No. 6. London.
- Creswell, J. Plano Clark, V., Gutmann, M., and Hanson, W. (2003). 'Advances in mixed methoods research design', in Tashakkori, A. and Teddlie, C. (eds) *Handbook of mixed methods in social and behavioural research*. Thousand Oaks, CA: SAGE, pp. 209–240.
- Denhardt, J., Terry, L., Delacruz, E.R., and Andonoska, L. (2009). 'Barriers to citizen engagement in developing countries', International Journal of Public Administration, 32(14), pp. 1268–1288.
- Jordan Deparment of Statistics. (2016). *Population and Housing Census- 2015 Main Results*. Amman.
- Dimitriou, H. (2011) 'Transport and city development: understanding the fundamentals', in Dimitriou, H. T. and Gakenheimer, R. (eds) Urban Transport in the Developing World: A

Handbook of Policy and Practice. Cheltenham, UK: Edward Elgar, p. 8-39.

- *Environmental Protection Law 2006,* No.52. Available at: http://www.pm.gov.jo (Accessed: August 24, 2020).
- European Investment Bank (EIB). (2018) *European Investment Bank Environmental and Social Standards*. Luxembourg. Available at: https://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en. pdf. (Accessed : 23 August 2020).
- Estache, A. (2010). 'Infrastructure finance in developing countries: an overview', *EIB Papers*, 15(2), pp. 60–88.
- Flyvbjerg, B. (1998). *Rationality and Power: Democracy in Practice*. Chicago: University Chicago Press.
- Fouracre, P. R., Sohail, M. and Cavill, S. (2006) 'A participatory approach to urban transport planning in developing countries', *Transportation Planning and Technology*, 29(4), pp. 313–330.
- *Freedom of Information Act 2007,* No. 42, 9A. Available at: http://www.pm.gov.jo (Accessed: August 24, 2020).

Freeman, R. . (1984) *Strategic Management: A Stakeholder Approach*. Boston: Pitman. Greater Amman Municipality (GAM). (2010). *Transport and Mobility Master Plan for Amman*. Amman.

- Greater Amman Municipality (GAM). (2019). GAM Structure. Available at: https://www.ammancity.gov.jo/ar/gam/gamstructure.aspx (Accessed: 23 July 2020).
- Geurs, K., Boon, W. and Van Wee, B. (2008)'Social impacts of transport: literature review and the state of practice of transport appraisal in the Netherlands and United Kingdom.', *Transport Reviews*, 29(1), pp. 69–90.
- Giddings, B. Porter, G., Paterson, E., and Theobald, K. (2010) 'Participation in sustainability appraisal planning policy', *Proceedings of the Institution of Civil Engineers*, 163(2), pp. 115–123.
- Goodwin, P. (2019) 'Forecasring road traffic and its significance for transport policy', in Docherty, I. and Shaw, J. (eds) *Transport Matter*. 1st edn. Bristol: Policy Press, pp. 153–176.
- Harbers, I.(2007). 'Democratic deepening in third wave democracies: Experiments with participation in Mexico City', *Political Studies*, 55(1), pp. 38–58.
- Healey, P. (1997). *Collaborative Planning: Shaping Places in Fragmented Societies*. Vancouver: University of British Columbia Press.
- !

ļ

- Hickey, S. and Mohan, G. (2008). Participation, from tyranny to transformation? Exploring new approaches to participation in development. London: Zeb Books.
- Holden, M. (2008). 'Social learning in planning: Seattle's sustainable development codebooks', Progress in Planning, 69, pp. 1–40.
- Innes, J. E. and Booher, D. E. (2004). 'Reframing public participation: strategies for the 21st century', *Planning Theory & Practice*, 5(4), pp. 419–436.
- International Finance Corporation (IFC). (2007). Stakeholder engagement: a good practive handbook for companies doing business in emerging markets. Washington, DC.
- Kahane, D., Lopstone, K., Herriman, J., and Hardy, M. (2013) 'Stakeholder and Citizen Roles in Public Deliberation', *Journal of Deliberative Democracy*, 9(2), pp.1-37.
- Kawai, M. (2006). 'Globalization and economic development- the role of multilateral development banks', in Nakagawa, J. (ed.) Managing Development: Globalization, Economic Restructuring and Social Policy. London, New York: Routledge, pp. 414–430.
- Khirfan, L. and Momani, B. (2017). 'Tracing Participatory Planning in Amman', in Khirfan, L. (ed.) Order and Disorder: Urban Governance and the Making of Middle Eastern Cities. McGill-Queen's University, pp. 79–102.
- Landge, V., Jain, S. S. and Parida, M. (2005). 'Community participation for road safety in India', *Proceedings of the Institution of Civil Engineers*, 158(1), pp. 45–51.
- Lee, M., Armeni, C., De Cendra, J., Chaytor, S., Lock, S., Maslin, M., Redgell, C., and Rydin, Y. (2013). 'Public participation and climate change infrastructure', *Journal of Environmental Law*, 25(1), pp. 33–62.
- Legacy, C. (2017). 'Is there a crisis of participatory planning?', *Planning Theory*, 16(4), pp. 425–442. MacLean, S. and Burgess, M.(2008). 'Biobanks: Informing the public through expert and stakeholder presentations', *Health Law Review*, 16(4), pp. 6–8.
- Marzuki, A. (2015). 'Challenges in the public participation and the decision making process', Sociologija i Prostor, 53 (2015) 201 (1), pp. 21–39.
- McElroy, B. and Mills, C. (2000). 'Managing stakeholders', in Turner, R. . (ed.) Gower Handbook of Project Management. Aldershot: Gower, pp. 757–778.
- Mikkelsen, B. (1995). Methods for development work and research: a guide for practitioners. New Delhi: SAGE Publications.
- Natarajan, L., Lock, S., Rydin, Y., and Lee, M. (2019). 'Participatory planning and major infrastructure: Experiences in REI NSIP regulation', *Town Planning Review*, 90(2), pp. 117–138.

Newman, P. and Kenworthy, J. (1999). Sustainability and cities: overcoming automobile dependence. Washington, DC.: Island Press.

- OMEGA Centre.(2010). Incorporating Principles of Sustainable Development within the Design and Delivery of Major Projects: An International Study with Particular Reference to Mega Urban Transport Projects for the Institution of Civil Engineers and the Actuarial Profession, OMEGA Centre, London.
- Potter, R. (1985). Urbanisation and Planning in the 3rd World. Spatial Perceptions and Public Participation. Abingdon: Routledge.
- Putnam, R., Leonardi, R. and Nanetti, R. (1994). Making Democracy Work: Civic Traditions in Modern Italy. Princeton, New Jersey: Princeton University Press.
- Renn, O., Webler, T. and Wiedemann, P. (1995). Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. London: Klewer Academic Publishers.
- Roberts, N. (2004). 'Public deliberation in an age of direct citizen participation', American Review of Public Administration, 34, pp. 315–353.
- Rault, P.K., and Jeffery, P. (2008). 'On the appropriatness of public participation in Integrated Water Resource Management: some grounded insights from the Levent', *The Integrated Assessment Journal*, 8(2), pp.69-106.
- Rowe, G. and Frewer, L.(2000) 'Public Participation Methods: A Framework for Evaluation', Science, Technology and Human Value, 25(1), pp. 3–29.
- Rowe, G. and Frewer, L.(2005). 'A typology of public engagement mechanisms', *Science*, *Technology and Human Value*, 30(2), pp. 251–290.
- Rydin, Y. and Pennington, M. (2000). 'Public participation and local environmental planning: The collective action problem and the potential of social capital', *Local Environment*, 5(2), pp. 153– 169.

Sewell, D. W. and Coppock, J.(1977). 'A Perspective on Public Participation in Planning', in Sewell, D. W.and Coppock, J.(eds) Public Participation in Planning. London: Wiley, pp. 1–14.

- Shami, S. (2014) Amman's Public Transport Project: Mismanagement of Epic Proportions. Available at: https://en.arij.net/investigation/ammans-public-transport-project-%0Amismanagement-ofepic-proportions/ (Accessed: 23 August 2020).
- Shbeeb, L. (2018). 'A Review of Public Transport Service in Jordan : Challenges and Opportunitiex', *Al-Balqa for Reseach and Studies*, 21(1), pp. 9–28.

- Sohail, M., Mitlin, D. and Maunder, D. (2003). *Guidelines: partnership to improve access and quality of public transport.* Loughborough: Loughborough University.
- Song, X., Mulder, K., Frostell, B., Ravesteijn, W., and Wennersten, R. (2011). 'Transition in public participation in Chinese water management', *Engineering Sustainability*, 164(1), pp. 71–83.
- Songsore, E., Bruzzelli, M. and Baxter, J. (2018) 'Understanding developer perspectives and experiences of wind energy development in Ontario', *Environment and Planning C: Politics and Space*, 36(4).

Steer Davies Gleave (2010a) Amman BRT- Project Appraisal Document. London.

- Steer Davies Gleave (2010b) Consultancy services to undertake the design of infrastructure operations planning and contract preparation for a bus rapid (BRT) system in Amman. London.
- Thomas Ng, S., Li, T. H. Y. and Wong, J. M. W. (2012) 'Rethinking public participation in infrastructure projects', Proceedings of the Institution of Civil Engineers: Municipal Engineer, 165(2), pp. 101–113.

UN-Habitat. (2009). State of the world's cities report- 2008- 2009: harmonious cities. Nairobi.

- United States Agency for International Development (USAID). (2016). Environmental Compliance Factsheet Stakeholder Engagement in the Environmental and Social Impact Assessment (ESIA) Process. Washington, DC.
- Vasconcellos, E. (2001). Urban Transport, Environment and Equity: The case for developing countries. Routledge.
- Walker, G. (1999). 'Polluters, victims, citizens, consumers, obstacles, outsiders and experts', *Local Environment*, 4(3), pp. 253–256.
- Wang, X. H. and Bryer, T. A. (2012). 'Assessing the Costs of Public Participation: A Case Study of Two Online Participation Mechanisms', American Review of Public Administration, 43(2), pp. 179–199.
- Webler, J., Tuler, S., and Kruger, R. (2001). 'What is good public participation process? five perspectives from the public.', *Environmental Management*, 27(3), pp. 435–450.
- Wenger, E. (2010). 'Communities of practice and social learning systems: the career of a concept', in Blackmore, C. (ed.) Social Learning Systems and Communities of Practice. London: Springer-Verlag, pp. 179–198.
- Werkmeister, R. and Klein, W. (2010). 'The value and purpose of the traditional qualitative literature review', *Journal of Evidence-Based Social Work*, 7(5), pp. 387–399.

- Woltjer, J. (2009) 'Concepts of participatory decision-making in Dutch infrastructure planning.', in Coenen, F. H. J. . (ed.) Public Participation and Better Environmental Decisions: The Promise and Limits of Participatory Processes for the Quality of Environmentally Related Decision-making, pp. 153–163.
- World Bank Group.(2015a). Strategic Framework for Mainstreaming Citizen Engagement in World Bank Group Operations. Washington, DC.
- World Bank Group. (2015b). World Bank Group Statement on Policies , Accountability Mechanisms and Stakeholder Participation in WBG Projects.
- World Bank Group. (2017). Jordan Country Reclassification Questions and Answers. Available at: https://www.worldbank.org/en/country/jordan/brief/qa-jordan-country-reclassification (Accessed: 27 August 2020).

World Bank Group (2020) *Citizen engagement*. Available at: https://www.worldbank.org/en/about/what-we-do/brief/citizen-engagement (Accessed: August 27, 2020).

Yin, R. K. (2014). Case study research: design and methods. 5th edn. Edited by R. K. Yin. Los Angeles; London: SAGE.

APPENDICES

Appendix A: Overview of Some of the Major MDBs and DAs' Policies and Guidelines Regarding Public Participation

MDB/ DA	Policies Mandating Public Participation	Relevant Policies and/ or Guidance Documents	Mandate for Participation.	Tools Provided?	Mandated for projects to show participation?
Asian Development Bank	The Safeguard Policy Statement (2009)	Handbook on Social Analysis; Guidelines for Preparing a Design and Monitoring Framework; Civil Society Organization Sourcebook; Strengthening Participation for Development Results.	Yes	Yes	Yes, The Safeguard Policy Statement (2009).
European Investment Bank	EIB Transparency Policy (Policy 7.5); EU Directive (2011/92/EY amended by 2014/52/ EU).	EIB Transparency Policy; EIB's Environmental and Social Handbook	Yes	No	Yes, EIB Transparency Policy (Policy 7.5); EU Directive (2011/92/EY amended by 2014/52/ EU); Environmental and Social Handbook

The World Bank	Participation Sourcebook in 1996; 2004 World Development Report: Making Services Work for Poor People;	Strategic Framework for Mainstreaming Citizen Engagement in World Bank Group Operations	Yes	Yes. And lessons learned from previous projects.	Yes. Consultations are mandatory in the preparation of Systematic Country Diagnostics, Country Partnership Frameworks, Program-for- Results operations, and investment project financing (IPF) operations that trigger certain safeguards
United Stated Agency for International Development (USAID)	Environmental Procedures (22 CFR 216).	Environmental Compliance Factsheet. Stakeholder Engagement in the Environmental and Social Impact Assessment Process.	No, up to the discretion of project lead.	Yes	If requested by the project lead.
French Development Agency	EU Directive (2011/92/EY amended by 2014/52/ EU).	Article: Citizen Participation: leverage for better public services? Policy: Environmental and Social Risk Management Policy for AFD- funded Operations. Policy: provides an overview of required PP policies to be incorporated.	Yes: Environmental and Social Risk Management Policy for AFD-funded Operations (Applicable from July 2017 to the next 3 years, after approval of the ABRT project).	Yes, based on IFC PS1and IFC Stakeholder Engagement Handbook.	Yes - for high risk projects only though

Appendix B: List of Interview Questions

In answering the following questions please, wherever possible, relate your responses to your personal experience in practice.

- 1. Briefly outline the nature of your role and involvement in the Amman BRT Project.
- 2. Please describe, in your own words, the objectives of the Amman BRT.
- 3. Where you involved in the public consultations that were conducted for the Amman BRT? If so, to what capacity?

Theme: Attitudes towards public participation

- 1. How would you define public participation, and who do you think should be invited to participate?
- 2. What are your views on including public participation strategies in urban transport projects?
- 3. In your opinion, when should public participation take place?
 - Prompt: what stage of the project lifecycle and types of project.
- 4. What do you think of the benefits, if any, in consulting with the public when planning and delivering urban transit projects?
- 5. What barriers to public participation do you think exist in Jordan?
 - Prompts: Lack of democratic culture and civic society; providing equal representation of all; weak institutional and legal frameworks; time and costs. Freedom of speech
 - How can they be overcome?
- 6. Do you think that there is an appetite by the public to be more involved in decision-making in Jordan?
- 7. What are your thoughts about making it a policy requirement to include pubic participation when planning and delivering infrastructure projects in Jordan?
- 8. How do you think that improving public engagement in decision-making would affect the relationship between citizens and the government in Jordan?
 - Probe: strengthening trusting relationships (Innes and Booher, 2004).

Theme: Public Participation in the Amman BRT

- 1. To your best ability, please describe the public participation strategy that has been implemented in planning and delivering the Amman BRT.
 - Who designed and led the implementation of the strategy?
 - Who was invited to participate?
 - Probe: is there a level of expertise needed for effective participation?
 - Where and when were the consultations held?
 - How did the planners communicate with the public?
 - Probe: community liaison officer.
- 2. What barriers to public participation did you perceive in the planning and delivery of the Amman BRT?
- 3. When do you think it was the most critical time (in the context of the project lifecycle- based on the 8 steps outlined in Figures 6 and 15) is it to conduct public participation?
- 4. To what extent do you think the public's input was considered in the Amman BRT project?

- 5. To what extent would you consider the process of planning and delivering the Amman BRT to be transparent?
 - a. Probes: Publication of project documents online.
 - b. Do you think it is important to publish all the documents related to the project?
- 6. How do you think we can ensure that citizen engagement reflects the common good and thoughtful, deliberative democracy rather than simply serving as a mechanism for measuring public opinion?

The following questions will only be asked to participants who were involved in the negotiations/ or have worked with the French Development Agency such as members of Upper and/or Lower Houses of Parliament and representatives from Greater Amman Municipality.

Theme: French Development Agency and Public Participation

- Many Multilateral Development Banks and Agencies have made it a requirement for beneficiary countries to implement public participation strategies when planning and delivering infrastructure projects (World Bank Group, 2015b; AFD, 2016; USAID, 2016; ADB, 2017; EIB, 2018).Please discuss the impact this has had on current and future urban transport projects in Jordan.
- 2. In the case of the French Development Agency, they require informed consultation with the people who are potentially affected by the project. The consultation process is to be organised and financed by the beneficiary country/ client and may be conducted at various stages of the assessment process. The conclusions of the consultations must also be submitted for AFD's approval (AFD, 2016). However, consultation is only required for High and Substantial risk projects and this policy only came into effect in July of 2017. Where there any requirements that were outlined for the Amman BRT by the agency?
- 3. The Agency itself does not provide any guiding documents or tools for public participation; they instead refer to the Stakeholder Engagement Handbook that has been prepared by the International Finance Corporation (IFC). Do you think that the tools are helpful?
- 4. Do you think the advice and recommended tools provided by the French Development Agency are sufficient and can successfully be implemented in Jordan? If not, why?
 - a. Probes: capacity building, policy reform; restricting of institutions

Lastly, is there anything that we have not discussed that you think is important?

Appendix C: Online Survey Questions

- 1. Which gender best describes you?
 - Male
 - Female
 - Prefer not to say
 - Other [specify]

2. What is your age group?

- 18-24
- 25-40
- 41-60
- 61-80
- 81+
- 3. Which of the following best describes you (in relation to the Amman BRT)?
 - A resident living along the route
 - An owner of a business located along the route
 - A current public transit user
 - A future public transit user
 - Other [specify]
- 4. Below is a list of statements in relation to the Amman BRT. To what extent do you agree or disagree with the following statements?

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know	Please Explain Why (Optional)
I was provided with an appropriate amount of information and details about the project.							
l was consulted about the project prior to its approval.							
I was able to access information that I was seeking about the project.							

I was provided with			1	1
sufficient information				
about the decision-				
making process.				
I have been provided				
with an opportunity				
to share my opinions				
and concerns about				
the project.				
My input and/ or				
opinions were				
considered in the				
decision-making				
process.	 			
I was provided with				
information				
regarding any disruptions that will				
occur during the				
construction of the				
route.				
It is my right as a				
in the decision-				
making process.				
citizen to participate in the decision- making process.				

- 5. Do you think the public should always be consulted when planning and delivering transportation projects?
 - Yes
 - No
 - Why or why not? [provide space for answers]

Appendix D: Amman BRT - Project Timeline

2008	Publication of the Amman Transport Mobility Master Plan which proposed the development of a BRT network.
2009 (July)	The inception of the ABRT project.
2010 (April)	Feasibility studies for the ABRT completed. *consultations with focus groups were conducted during this time.
2010 (October)	Funding for the project provided by AFD. Construction began.
2011 (May)	Parliament stopped the project and requested for additional feasibility studies - to be reviewed by a government appointed committee.
2013 (February)	Feasibility studies completed.
2015	Project was re-approved. Construction recommenced.
2020 (September)	Project under construction. To be operational by 2021. However, delays are to be expected due to COVID-19.

Appendix E: Overview of Empirical Results

Table 1: Analysis of the public participation strategy employed for the ABRT using the proposed evaluation framework.

Legend

Findings from review of project document and desk research. Findings from interviews. Findings from survey questionnaire.

Criteria and Design Consideration	Relevant/ Applicable Policies and Legislations ¹²	Results and Findings ¹³	
 Meet legal requirements: Participation process should clarify and meet the legal requirements (Bryson et al., 2013). For a wider reach, alternatives to traditional public notices and hearing should be considered (ex. Use of social media or online comment boards (Wang and Bryer, 2012). 	AFD Consultation to be organised at various stages of the project lifecycle (in line with national regulations). Where country regulations are underdeveloped, good practices of international organisations should be used.	An ESIA was prepared in accordance to the requirements. Participation took place in the form of focus groups only.	
	Jordan All new projects to undergo an Environmental and Social Impact Assessment (ESIA). Project promoters must ensure that all stakeholders, affected people and the general community understand	8/10 interviewees highlighted that while Jordan's policies and laws require participation, they lack adequate implementation. "The legal framework is there, but the implementation is not." Another interviewee indicated that AFD only got involved when the lack of participation caused delays	

¹² AFD: Environmental and Social Management Policy; Environmental and Social Framework; and, Stakeholder engagement: a good practice handbook for companies doing business in emerging markets. Jordan: Law of Environmental Protection (No.52/2006) and Freedom of Information Act (No.47/2007).

¹³ Project documents citations (Steer Davies and Gleave, 2010a; 2010b).

 Provide diverse representation: Participants should be comprised of a broadly represented sample of the affected population (Rowe and Frewer, 2000). A comprehensive stakeholder analysis is required (Burton, 2009). Employing mixed approaches to gather stakeholder and citizens. Use inclusive process to engage with marginalised groups (Abers, 2000; Burton, 2009; Marzuki, 2015). Power dynamics within the groups should be managed (Flyvbjerg, 1998). 	the project and its impacts, and they must be able to provide feedback and participate in discussions. AFD Consultations to include all those involved and affected: governmental and non- governmental organisations; representatives of the private sector, civil society, and financial institutions; local communities; and, local individuals and their representatives). Particular attention should be given to vulnerable populations. Practicality of involvement of all individuals is considered. It is not necessary to engage with all stakeholder groups with the same level of intensity all of the time. A stakeholder analysis should assist in prioritisation by assessing the significance of the	 to the project as it delayed the return on their investment. Five focus groups were conducted with a total of 62 participants: Children's Municipal Committee (8 schoolgirls and 2 boys participated). GAM employees who own and use their own cars. GAM employees who use PT. School students between the ages of 13-16; and, University of Jordan students. A stakeholder analysis was also conducted and means of communication was set based on their level of involvement. Participation lacked representation from the following groups: Business owners and residents who will be affected during construction, particularly existing private PT operators. Current users of PT. Women, particularly in the context of Jordan (to ensure they are comfortable in using PT). They should have their own focus groups that is led by women and for women. Lower-income populations.
	with all stakeholder groups with the same level of intensity all of the time. A stakeholder analysis should assist in prioritisation by assessing the significance of the	 existing private PT operators. Current users of PT. Women, particularly in the context of Jordan (to ensure they are comfortable in using PT). They should have their own focus groups that is led by women and for women.
	project to each stakeholder group from their perspective.	"Those who were invited to participate were pre-selected. The process was not open, therefore not representative of the public." Strongly agree/ agree responses to 'I was consulted about the project prior to approval':

Clear identification of task and consideration of context and problems: - Participatory task should be clearly defined(Rowe and Frewer, 2000). - The process must fit the context in which it is taking place (Bryson et al., 2013).	AFD Purpose and goals of the programme should be summarised. Approach and tasks identified should make sense in the particular context. Note: no mention of outlining the purpose of consultations	 16.0% of current PT users; 7.7% of future PT users; 13.6% of local residents; 11.4% of local business owners; and, 0.0% of others. Objectives of focus groups: Obtain insights on user needs, travel patterns, typical day-to- day experiences. Identify deterrents of using PT and how issues can be addressed. Note: focus groups did not consider consulting the public when designing the project. Interviewees indicated that the consultations assumed that the public did not have the required knowledge to participate in technical decisions. However, 4/10 of interviewees highlighted that the people of Jordan are highly educated and can participate. <i>"The people of Jordan have an appetite to participate and I can assure you that most people are more than capable of understanding the technical aspects of the project".</i>
		 Strongly agree/ agree responses to 'I provided with sufficient information about the decision- making process': 15.3% of current PT users; 10.3% of future PT users; 14.8% of local residents; 9.8% of local business owners; and, 0.0% of others.
Independence:	AFD	Public participation was conducted
The process should be	Client is responsible for	by the consultant team consisting
conducted in an independent	conducting	of: Steer Davies Gleave, Sigma
and unbiased way (Rowe and	environmental and	Consulting Engineers, Tuhhan and
------------------------------	--------------------------------	-------------------------------------
Frewer, 2000).	social assessment of its	Bushnaq, and Al-Jiadara.
110W01, 2000).	project. The client may	Basimaq, and Ar stadard.
	hire a consultant/	GAM is responsible for all lines of
	group of independent	communication with stakeholders
	consultants to monitor	and citizens.
	the implementation	Process led by GAM:
	process.	"The focus groups were
	process.	conducted by the company who
		was hired by GAM, which was
		supervised by GAM's Transport
		Directorate."
		"Consultations should have been
		done by an independent body."
Early and continuous	Environmental and	Consultation only conducted in
involvement:	social assessment	the project planning and appraisal
- Participants to be	should apply to all the	stages through focus groups.
involved at the earliest	steps of the project	0 0 1
possible stage, and	cycle, right from	Information and updates were
throughout the whole	identification to ex-	provided by GAM through social
process (Rowe and	poste evaluations.	media, TV and radio adverts. Any
Frewer, 2000; Bryson et	1	grievances or feedback on the
al., 2013). They should	Not all stakeholders	project could be provided to GAM
always be informed.	need to be involved	through social media platforms
- Relationships and	throughout.	(such as Facebook and Twitter).
connections between		Most critical time to participate
decision-makers and		(according to interviewees):
participants to be		- Project conception,
established to foster trust,		planning, appraisal, and
collaboration and		implementation.
communication (Innes		- The ABRT lacked
and Booher, 2004).		participation in the project
		identification
		implementation stages.
		However, when it comes to the
		general public the survey indicates
		that:
		- 12.6% of people said they
		were consulted on the
		project prior to its
		approval; and,
		- 56.9% indicated that they
		did not receive enough
		information regarding any



nfluence:	AFD	Only stakeholders with ownership
- The outcome of the	Consulting people	roles had a part to play in
exercise should have a	entails an implicit	approving and deciding on various
genuine impact on the	promise that, at	aspects of the project.
policy/ programme (Rowe	minimum, their views	Lack of influence as a deterrent to
and Frewer, 2000).	would be considered in	participate:
	the decision-making	- "From my experience,
	process. While not all	citizens are willing to
	views will be	participate as long as you
	considered seriously	inform them why they are
	participants should feel	here, and how their input
	that their input is	will be considered"
	considered and	 "I felt that we were
	changes to project	listening to those with the
	design, proposed	loudest voices, and not
	mitigation measures, or	those who would really
	development benefit	benefit or lose from not
	opportunities should be	hot a decent PT system"
	considered. The	 "They [academics] don't
	consultation process	believe that they have the
	should be documented,	power to influence
	and results should be	decisions and they feel
	made available.	that if they participate the
		opinions won't be on any
		value and nothing would
		change, so they have the
		mentality of 'why
		participate at all'"
		- "If nothing you said was
		considered, you feel
		discouraged from
		participating again
		because your involvement
		did not yield ay outcomes
		of value"
		Strongly agree/ agree responses
		to 'My input and/ or opinion was
		considered in the decision-making
		process:
		- 19.7% of current PT users;
		- 7.7% of future PT users;
		- 13.6% of local residents;
		- 17.0% of local business
		owners; and,

		A member of the public who participated in the consultations highlighted; "You are just asking us here as a formality, but you never actually take our opinion and concerns into consideration.
		You always go back and do whatever it is you were planning on doing"
 Transparency: The process should be sufficiently transparent so that decision process is clear to all (Rowe and Frewer, 2000). Participants should have access to sufficient resources to enable to fulfil their brief as participants (ibid). 	AFD The client will be encouraged to make these documents available to the public in accessible areas in the country or on the internet. Provide meaningful information that is readily understandable and tailored towards the target stakeholder group. Avoid disclosing certain types of information at sensitive stages in the project cycle that might entail risk.	As part of this dissertation, gaining access to information from AFD was difficult. Many civil servants also declined to be interviewed claiming that they have legal restrictions. While the AFD policies advocate for complete transparency, their practices in this particular case proved to be the opposite. While some project documents can be found online, they are very scattered and hard to locate. Furthermore, when requesting information from Freedom of Information Law, you need to know exactly what you are seeking, you could miss some critical elements about the project.
	Jordan Information on the project and supporting reports can be accessed by the public under the Freedom of Information Act 47/2007 article 9A. The government must provide the requested information within 30 days and that is how information/ reports for this dissertation were retrieved.	 All interviewees indicated that the process was not transparent: "People who were not directly involved did not have any access to any technical reports, the public only saw the construction of the project" "The public's unawareness created animosity towards the project, they were saying 'what is GAM doing, they are taking part of the road and its left



		"All that is apparent to me is that they dug up parts of my city with no information provided" "We were not given final versions of the project or a clear idea of its benefits" "I was not provided with an appropriate amount of information about the project and I do not why it's taking this long to complete or what is its current progress."
Evaluate and continuously redesign: - Develop and use evaluation measures. Design and redesign the process (Bryson <i>et al.</i> , 2013).	AFD The client may hire a consultant to check that the commitments have been fulfilled, monitor the implementation of measures.	No consultation was conducted past the appraisal stage. It became simply an informative strategy where GAM releases updated. Note: the project documents do not indicate that subsequent consultations will take place to conduct an ex-poste evaluation of the project. One interviewee highlighted the importance of designing a process that provides an accurate representation for people. "You have to be open to whatever feedback you receive; you may have to repeat consultations if not enough people participated. Design and re-design the process until you reach the participation that you are satisfied with and you feel that you have provided a more accurate representation of
Cost and time effectiveness: - The process should in some-sense be cost effective(Rowe and Frewer, 2000; Burton, 2009).		people". No information on costs or budgets regarding consultation strategies were made available or discussed during interviews - despite posing the questions. Note: ties to lack of transparency.

One interviewee highlighted to the costs of PP were not considered by GAM. "The cost should be considered by the government in their tendering process. They sometimes ask extra funding to have the pub consultations as it was not considered in the initial budge This is a shortfall of the government body promoting project".	for lic

Appendix F: Analysis of Quantitative Data

Figure 1: Categorisation of Survey Respondents

PROPORTION OF PARTICIPANTS



I WAS PRO	DVIDED WITH AN APPROPR ABOU	NATE AMOUNT OF IN	FORMATION AND DET	AILS
Stron	gly Agree 📕 Agree 🔳 Neither Agree or	r Disagree <mark>=</mark> Disagree = Stron	gly Disagree 🔳 Don't Know	
4.90% 9.90%	36.70%	4.90%	33.20%	10.
Figure 3: Catego	rised responses to " information and o			te amount
		details about the	e project"	te amount
Figure 3: Catego	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount
	information and	details about the	e project"	te amount

Figure 4: Overall response to "I was consulted about the project prior to its approval"



I WAS CONSULTED ABOUT THE PROJECT PRIOR TO ITS APPROVAL

Figure 5: Categorised responses to "I was consulted about the project prior to its approval"



I WAS CONSULTED ABOUT THE PROJECT PRIOR TO ITS APPROVAL









I WAS ABLE TO ACCESS INFORMATION THAT I WAS SEEKING ABOUT THE PROJECT



Figure 9: Categorised responses to "I was provided with sufficient information about the decision-making process"



Figure 8: Overall response to "I was provided with sufficient information about the decision-making process"



Figure 10: Overall response to "I have been provided with an opportunity to share my opinions and concerns about the project"





Figure 12: Overall response to "My input and/or opinions were considered in the decision-making process"



MY INPUT AND/ OR OPINIONS WERE CONSIDERED IN THE DECISION-MAKING PROCESS





MY INPUT AND/ OR OPINIONS WERE CONSIDERED IN



Figure 15: Categorised responses to "I was provided with information regarding any disruptions that will occur during the construction of the route"











IT IS MY RIGHT AS A CITIZEN TO PARTICIPATE IN THE DECISION-MAKING PROCESS



Appendix G: Approval of Risk Assessment and Ethical Clearance Forms

 Subject:
 Dissertation in Planning 19/20 - Risk Assessment Form & Ethical Clearance Questionnaire

 Date:
 Friday, June 19, 2020 at 8:16:56 PM British Summer Time

 From:
 Dean, Marco

 To:
 Al-Sharari, Muna

 Dear Muna,

 This email is to confirm that your Risk Assessment Form and Ethical Clearance Questionnaire have been approved. Please include this email as an appendix of your dissertation and bear in mind that if your research involves the collection or use of personal data, you must also register with the Data Protection Office.

 Kind Regards

 Dr Marco Dean

 Teaching Fellow in Infrastructure Planning

The Bartlett School of Planning, University College London Central House, 14, Upper Woburn Place, London, WC1H 0NN marco.dean.11@ucl.ac.uk

Page 1 of 1

Appendix H: Ethical Clearance Form

Respondent: Muna Al-Sharari Submitted on: Tuesday, 12 May 2020, 3:05 PM Ethical Clearance Pro Forma

It is important for you to include all relevant information about your research in this form, so that your supervisor can give you the best advice on how to proceed with your research.

You are advised to read though the relevant sections of UCL's Research Integrity guidance to learn more about your ethical obligations.

Disser	tation	Details
--------	--------	---------

1 *	Please select your programme of study.
	Infrastructure Planning, Appraisal and Development 🗢 : Infrastructure Planning, Appraisal and Development
2 *	Please provide your current working dissertation title.
	Public Participation and Urban Transport Planning in Developing Countries The role of Multilateral Development Banks and Development Agencies. A case of the Amman BRT.
3 *	Please select your supervisor from the drop-down list.
	Dean, Marco 💠 : Dean, Marco
	Research Details
4 *	Please indicate here which data collection methods you expect to use. Tick all that apply.
5*	 Interviews Focus Groups Questionnaires (including oral questions) Action research Observation / participant observation Documentary analysis (including use of personal records) Audio-visual recordings (including photographs) Collection/use of sensor or locational data Controlled trial Intervention study (including changing environments) Systematic review Secondary data analysis Advisory/consultation groups Please indicate where your research will take place. UK only UK only UK only

	'Participants' means human participants and their data (including sensor/locational data and observational notes/images.)
	• Yes 🔿 No
	Appropriate Safeguard, Data Storage and Security
7 *	Will your research involve the collection and/or use of personal data?
	Personal data is data which relates to a living individual who can be identified from that data or from the data and other information that either currently held, or will be held by the data controller (you, as the researcher).
	This includes:
	 Any expression of opinion about the individual and any intentions of the data controller or any other person toward the individual. Sensor, location or visual data which may reveal information that enables the identification of a face, address etc. (some postcodes cover only one property).
	 Combinations of data which may reveal identifiable data, such as names, email/postal addresses, date of birth, ethnicity, descriptions o health diagnosis or conditions, computer IP address (of relating to a device with a single user).
	• Yes 🔿 No
8 *	Is your research using or collecting:
	 special category data as defined by the General Data Protection Regulation*, and/or data which might be considered sensitive in some countries, cultures or contexts?
	*Examples of special category data are data:
	• which reveals racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership;
	• concerning health (the physical or mental health of a person, including the provision of health care services);
	 concerning sex life or sexual orientation; genetic or biometric data processed to uniquely identify a natural person.
	Yes No
9 *	Do you confirm that all personal data will be stored and processed in compliance with the General Data Protection Regulation (GDPR 2018
	Yes No I will not be working with any personal data
10 *	I confirm that:
	 The information in this form is accurate to the best of my knowledge. I will continue to reflect on, and update these ethical considerations in consultation with my dissertation supervisor.

Appendix I: Risk Assessment Form

RISK ASSESSMENT FORM FIELD / LOCATION WORK



The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

DEPARTMENT/SECTION BARTLETT SCHOOL OF PLANNING LOCATION(S) BLOOMSBURY, LONDON

PERSONS COVERED BY THE RISK ASSESSMENT Muna Al-Sharari

BRIEF DESCRIPTION OF FIELDWORK I will be conducting interviews (via online platfroms such as Skype, Zoom, or Teams) where I will be asking participants about how they perceive public participation in infrastructure projects through semi-structured interviews. In addition, I will be conducting an online survey where I ask the public for input.

Consider, in turn, each hazard (white on black). If NO hazard exists select NO and move to next hazard section. If a hazard does exist select YES and assess the risks that could arise from that hazard in the risk assessment box. Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard Examples of risk: adverse weather, illness, hypothermia, assault, getting lost.

e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals,

ENVIRONMENT

CONTROL MEASURES Indicate which procedures are in place to control the identified risk

work abroad incorporates Foreign Office advice

N/A

- participants have been trained and given all necessary information
- only accredited centres are used for rural field work
- participants will wear appropriate clothing and footwear for the specified environment

Is the risk high / medium / low ?

- trained leaders accompany the trip
- refuge is available
 - work in outside organisations is subject to their having satisfactory H&S procedures in place
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

EMERGENCIES e.g. fire. accidents

Where emergencies may arise use space below to identify and assess any risks Examples of risk: loss of property, loss of life

N/A

CONTROL MEASURES Indicate which procedures are in place to control the identified risk

- participants have registered with LOCATE at http://www.fco.gov.uk/en/travel-and-living-abroad/
- fire fighting equipment is carried on the trip and participants know how to use it
- Ì contact numbers for emergency services are known to all participants
- participants have means of contacting emergency services
- participants have been trained and given all necessary information
 - a plan for rescue has been formulated, all parties understand the procedure
 - the plan for rescue /emergency has a reciprocal element
 - OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

FIELDWORK					
	1			May 20	010
EQUIPMENT e.g. clothing, outboa motors.	and Ex			If 'No' move to next hazard If 'Yes' use space below to identify and assess an risks , failure, insufficient training to use or repair, injury. Is	
motors.		k high / medium / lo	, wc		
CONTROL MEASU	RES In	dicate which proc	edures ar	e in place to control the identified risk	
the departm participants all equipme all users ha special equ	nental writte s have been ent has been ave been ad ipment is or	n Arrangement for provided with any r inspected, before vised of correct use nly issued to person	equipment necessary issue, by a e ns trained in	is followed equipment appropriate for the work	
LONE WORKING		lone working possibility?	Yes	If 'No' move to next hazard If 'Yes' use space below to identify and assess an	
e.g. alone or in isola lone interviews.	tion Ex	amples of risk: diff	ficult to sur	risks nmon help. Is the risk high / medium / low?	ıy
					ıy
Low. The interviews	will be cond	ducted online. As su	uch, there v	vill be no contact with participants.	ч
Low. The interviews				vill be no contact with participants. e in place to control the identified risk	ıу

L HEALTH			ays represents a safety hazard. Use space below to ssociated with this Hazard.
g. accident, illness, ersonal attack, special	Examples of risk: inju	ry, asthma,	allergies. Is the risk high / medium / low?
ersonal considerations vulnerabilities.	N/A		
ONTROL MEASURES	Indicate which proce	edures are	in place to control the identified risk
			st aid kits are present on the field trip / carry appropriate prophylactics
participants have	been advised of the ph	nysical dem	ands of the trip and are deemed to be physically suited
<u> </u>			plants, animals and substances they may encounter ne leader of this and carry sufficient medication for their
needs			,
OTHER CONTR	OL MEASURES: please	e specify an	y other control measures you have implemented:
RANSPORT	Will transport be required	NO YES	Move to next hazard Use space below to identify and assess any risks
g. hired vehicles	Examples of risk: acc	dents arisi	ng from lack of maintenance, suitability or training
	Is the risk high / medi N/A	um / low?	
ONTROL MEASURES	1		
only public trans	port will be used e hired from a reputable	e supplier	in place to control the identified risk
 only public transp the vehicle will bit transport must bit drivers comply will drivers have bee there will be mon sufficient spare p 	poort will be used e hired from a reputable e properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre varts carried to meet for	e supplier n complianc ers http://wv appropriate event driver/ eseeable er	e with relevant national regulations ww.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods
only public transport the vehicle will bit transport must bit drivers comply drivers have bee there will be more sufficient spare p	poort will be used e hired from a reputable e properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre varts carried to meet for	e supplier n complianc ers http://wv appropriate event driver/ eseeable er	e with relevant national regulations w.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods mergencies
only public transport the vehicle will be transport must be drivers comply we drivers have bee there will be more sufficient spare port OTHER CONTR	oort will be used e hired from a reputable e properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre varts carried to meet for OL MEASURES: please Will people be dealing with public	e supplier n complianc ers http://ww appropriate vent driver/ eseeable er e specify an	e with relevant national regulations ww.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods mergencies y other control measures you have implemented: If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
only public transport the vehicle will be transport must be drivers comply w drivers have bee there will be more sufficient spare p OTHER CONTR EALING WITH THE JBLIC g. interviews,	oort will be used e hired from a reputable e properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre varts carried to meet for OL MEASURES: please Will people be dealing with public	e supplier n complianc ers http://ww appropriate vent driver/ eseeable er e specify an	e with relevant national regulations ww.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods mergencies y other control measures you have implemented: If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
only public transport the vehicle will be transport must be drivers comply with drivers have bee there will be more sufficient spare port OTHER CONTR	will be used e hired from a reputable properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre varts carried to meet for OL MEASURES: please Will people be dealing with public Examples of risk: per medium / low? Low.	e supplier n complianc ers http://ww appropriate went driver/ eseeable er e specify an	e with relevant national regulations ww.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods mergencies y other control measures you have implemented: If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
 only public transport the vehicle will be transport must be drivers comply will driver have bee there will be more sufficient spare portHER CONTR EALING WITH THE UBLIC g. interviews, beerving ONTROL MEASURES all participants and interviews are complex and supplicipants do no interviews are complex and supplicipants do no interviews are complex and sparticipants and sparticipants do no interviews are complex and sparticipants and interviews are complex and sparticipants do no interviews are complex and sparticipants and sparticipants do no interviews are complex and sparticipants and sparticipants do no interviews are complex and sparticipants and sparticipants do no interviews are complex and sparticipants and sp	will be used e hired from a reputable e properly maintained in ith UCL Policy on Drive n trained and hold the a e than one driver to pre- warts carried to meet for OL MEASURES: please Will people be dealing with public Examples of risk: per- medium / low? Low. Indicate which proce re trained in interviewing intracted out to a third p ort from local groups ha ot wear clothes that mig inducted at neutral loca	e supplier n complianc ers http://ww appropriate vvent driver/ eseeable er e specify an sonal attack edures are g technique warty us been sou ght cause of tions or whe	e with relevant national regulations ww.ucl.ac.uk/hr/docs/college_drivers.php licence operator fatigue, and there will be adequate rest periods mergencies y other control measures you have implemented: If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks <, causing offence, being misinterpreted. Is the risk high / in place to control the identified risk s

g. rivers, marshland,	Will people work on or near water?	No	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
g, nvers, marsnano, na.	Examples of risk: drown	ning, mala	ria, hepatitis A, parasites. Is the risk high / medium / low?
ONTROL MEASURES	Indicate which procee	dures are	in place to control the identified risk
 coastguard informa all participants are participants always boat is operated by all boats are equip participants have r 	competent swimmers s wear adequate protectiv y a competent person ped with an alternative m received any appropriate	ork takes p ve equipm neans of pr inoculatior	
ANUAL HANDLING AH) g. lifting, carrying, ioving large or heavy juipment, physical	Do MH activities take place? Examples of risk: strain	No n, cuts, bro	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks ken bones. Is the risk high / medium / low?
the supervisor has all tasks are within	vritten Arrangement for M attended a MH risk asse	1H is follov ssment co	
activities	ning MH tasks are adequa	ately train	
all persons perform equipment compor any MH task outsid	de the competence of sta L MEASURES: please sp		one by contractors other control measures you have implemented:

SUBSTANCES	Will participants	No	If 'No' move to next hazard	
_	work with		If 'Yes' use space below to identify and as	sess any
o a planta abamical	substances	aalth nai	risks	high /
e.g. plants, chemical, biohazard, waste Examples of risk: ill health - poisoning, infection, illness, burns, cuts. Is the risk high / medium / low?				
CONTROL MEASURES	Indicate which proce	edures ar	e in place to control the identified risk	
	•	-	ith hazardous substances and waste are followe otective equipment for hazardous substances the	
waste is disposed of suitable containers	of in a responsible man are provided for hazard	ner lous waste	der of this and carry sufficient medication for the e y other control measures you have implemented:	
OTHER HAZARDS	Have you identified	No	If 'No' move to next section	
	any other hazards?		If 'Yes' use space below to identify and as	sess any
			risks	
i.e. any other hazards must be noted and	Hazard:			
assessed here.	Risk: is the risk			
NO NO Move to Declaration adequately controlled? YES Use space below to identify the risk and what action was taken				
Is this project subject to	the UCL requirement	s on the e	ethics of Non-NHS Human Research?	,
If yes, please state your Project ID Number				
For more information, please refer to: <u>http://ethics.grad.ucl.ac.uk/</u>				
DECLARATION Select the appropria	Those participating in		nenever there is a significant change and at least have read the assessment.	annually.
		y and asso	ociated risks and declare that there is no significa	int residual
		y and asso	ociated risks and declare that the risk will be cont	rolled by
NAME OF SUPERVISOR	Dr. Marco Dean			
SIGNATURE OF SUPER	VISOR		DATE	
FIELDWORK 5				May 2010
ILLEDITOR J				1110 2010