CHAPTER I
INTRODUCTION

This chapter contains the research background, problem formulation, research objectives, research scopes, and outline of the final project report.

1.1 Background

The construction industry is very important in development of a country because it can increase economic development. A construction project is a series of interrelated activities to achieve goals (building or construction) within certain time, cost and quality limits. Dipohusodo (1995) stated that construction project involves many parties, various processes, phases, different stages of work and advice from two sectors, there are government and private sector with the same goals which is the success of the construction project. The series of activities in a construction project begins with the presence of an idea that arises from a need and followed by feasibility study, detailed engineering design, procurement of resources, the construction in the location that has been provided, and maintenance of buildings that have been erected until the handover of the building to the project owner. Therefore, a construction project has a complex system because of the involvement of many parties and stages, started from pre-contract to the post-contract stage in construction process.

Construction projects increase along with the development of human life and technological progress. The increasingly diverse field of human life requires the construction service industry to build construction projects that are compatible with the diversity of these fields. One of the government services related to construction project is Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan
The type of construction project in this institution only focuses on building and residential construction.

According to Padang City’s regulation number 06 year 2016 concerning the formation and arrangement of the regional apparatus, the position of Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) is an element of the Padang’s City government of public housing, settlement and land areas. The main task of Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) in accordance with regulation of mayor number 69 year 2016, is to carry out the affairs of the city administration in the division of housing and settlement areas and the assistance task. The mission of Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) are to realize and improve the sustainable development of public housing, residential area, government buildings, public facilities and infrastructure.

DPRKPP consists of Housing, Cipta Karya, Administration of Land Acquisition Facilities, and Land Settlement Services Division. There are two division related to project construction, namely the Housing and Cipta Karya division. Housing is a division that carries out services that cover environmental road services in good condition, repair of uninhabitable houses and environmental drainage in good condition. The following are service activities in housing division in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) as shown in Tabel 1.1.

**Tabel 1.1. Service Activities in Housing Division**

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improvement and rehabilitation of housing roads</td>
<td>19 Unit</td>
<td>27 Unit</td>
</tr>
<tr>
<td>2</td>
<td>Improper home repairs</td>
<td>13 unit</td>
<td>14 unit</td>
</tr>
</tbody>
</table>

(Source: Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan)
Ciptakarya is a division that carries out service task related planning construction of public infrastructure and government buildings. The following are service activities in Cipta Karya division in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) as shown in Tabel 1.2.

**Tabel 1.2. Service Activities in Cipta Karya Division**

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apparatus facility and infrastructure improvement program</td>
<td>5 Unit</td>
<td>9 unit</td>
<td>18 unit</td>
</tr>
<tr>
<td>2</td>
<td>Housing development program</td>
<td>2 Unit</td>
<td>10 Unit</td>
<td>12 unit</td>
</tr>
<tr>
<td>3</td>
<td>Tourism destination development program</td>
<td>7 Unit</td>
<td>9 unit</td>
<td>11 unit</td>
</tr>
</tbody>
</table>

(Source: Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan)

According to the data above, it can be seen that every year there is an increased number in development in Housing Division and Cipta Karya Division. The increasing number of construction projects in Padang’s City certainly requires the contractor and project owner to improve the quality of construction projects in order to get the best results in accordance with the objectives of the construction project.

Based on the data of project construction in DPRKPP, there were problems related to project performance in construction projects especially regarding costs and schedules. **Table 1.3** below is project activity data at Cipta Karya and Housing division in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP).
Table 1.3 Project Activity Data in Ciptakarya and Housing Division

<table>
<thead>
<tr>
<th>No.</th>
<th>Program/Activity</th>
<th>Source of Funds</th>
<th>Name of Contractor's Company</th>
<th>Contract Number</th>
<th>Start</th>
<th>Finish</th>
<th>Finance</th>
<th>%</th>
<th>Physical Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kantor Lurah Mata Air’s Building</td>
<td>APBD</td>
<td>CV. A</td>
<td>06/Kont-CK/APBD/PRKPP/2017</td>
<td>14-Sep-17</td>
<td>27-May-18</td>
<td>151,696,020</td>
<td>27.31</td>
<td>100.00 Pending Disbursement</td>
</tr>
<tr>
<td>2</td>
<td>Lurah balai gadang’s Buildings</td>
<td>APBD</td>
<td>CV. B</td>
<td>08/Kont-CK/APBD/PRKPP/2017</td>
<td>14-Sep-17</td>
<td>27-Feb-18</td>
<td>399,397,163</td>
<td>78.75</td>
<td>100.00 Pending Disbursement</td>
</tr>
</tbody>
</table>

Project performance is closely related to many things and factors such as time, cost, quality, and client satisfaction (Abushaban, 2008). The Table 1.3 above show the project activity data at Housing and Ciptakarya division especially regarding cost and schedule. Based on the table above, the project schedule is not in accordance with the initial agreement. For the example is lurah mata air’s building, the execution time is 205 days, but in reality there was a delay of 2 months in project completion. So, the construction project is not in accordance with initial contract or agreement. Delays in construction project also have an impact on construction cost such as additional cost or delayed payments in construction project.

There are many factors that affect the project performance in construction project. Previous study by Li, Huimin et al. (2012) stated that problems regarding uncertainty and transaction cost can affect the project performance in construction project. This research stated that higher project performance can be achieved if transaction cost kept low and the uncertainty in construction are minimized. Li, Huimin et al. (2013) said that uncertainty in construction project can affect the transaction cost. Based on the findings in this paper, the transaction cost can be minimize if the owner can minimize the uncertainty, understand well the behavior of the contractors and pay attention to the uncertainty that occurs in transaction environment.
Another research from Lei (2016) also revealed that the uncertainty of construction projects is found to moderately affect transaction costs through the owner behavior, contractor behavior and transaction environment. The types of construction projects that discussed in previous studies are building construction, residential construction, heavy engineering construction and industrial construction. But, in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) the project construction only focussed on building construction and residential construction. So, the experience related of uncertainty and transaction costs will certainly be different. Another study by Agsari, Irma (2015) describe there were renewal indicators that were not discussed in previous research on variable costs, schedules, quality and client satisfaction in construction project that located in South Kalimantan.

Therefore, based on the background above, there is relationship between the uncertainty and transaction cost on project performance. Therefore, it is a need to measure and analyze the effect of uncertainty and transaction costs on project performance in construction project. The data in this research was conducted by giving a questionnaire to the project owner which is the employee of Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP) and the contractors of the projects. Structural equation modeling (SEM) is used to test the validity and evaluate relationships in the model.

1.2 Problem Formulation

Based on the background that has been described previously, then the problem formulation is how the effects of uncertainty and transaction costs on project performance in construction project at Housing and Ciptakarya Division.
1.3 Research Objectives

The objectives of this research are as follows:
1. To measure and analyze the effect of uncertainty and transaction cost on project performance at Housing and Ciptakarya Division.
2. Develop recommendation to improve the project performance at Housing and Ciptakarya Division.

1.4 Research Scopes

The limitations of this research problem are as follows:
1. This research was only carried out on construction project in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP).
2. This research was only conducted with respondents from the employees and contractors of Housing and Cipta Karya division in Dinas Perumahan Rakyat Kawasan Permukiman dan Pertanahan (DPRKPP).

1.5 Outline of the Final Project Report

Outline of the final project report consist of the contents of each chapter that is arranged systematically. The outline is useful to facilitate understanding in final project report. The outline of the report that used in this final project are as follows:

CHAPTER 1 INTRODUCTION

This chapter introducing the subject to be discussed that contains research background, problem boundaries, problem formulation, research objectives, scope and outline of the final project report.
CHAPTER II  LITERATURE REVIEW

The literature review provides an overview of all the theoretical basis that related to the final project report. Theoretical basis is the statement of the experts in the theory books. The theory used in this study includes the uncertainty of the owner and contractor behavior, uncertainty in transaction environment, transaction costs and project performance in construction projects and SEM-PLS method.

CHAPTER III  RESEARCH METHODOLOGY

This chapter contains the steps that will be carried out in research to solve the problems. The steps start with preliminary study, literature study, research framework, research hypotheses, research method selection, research variable identification, data collection, data processing, analysis, conclusion and suggestion.

CHAPTER IV  RESULT AND DISCUSSION

This chapter contains the data collecting, data processing, result and recommendation for improvement.

CHAPTER V  CONCLUSION AND SUGGESTION

This chapter contains the conclusion of the research and the suggestion for the next research.