

INFRASTRUCTURE DEVELOPMENT BY USING PUBLIC -
PRIVATE PARTNERSHIP (PPP) POLICY:
A CASE STUDY OF YANGON INTERNATIONAL AIRPORT EXPANSION,
MYANMAR

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การพัฒนาโครงสร้างพื้นฐานมีความสำคัญเป็นอย่างมากต่อการพัฒนาเศรษฐกิจของประเทศกำลังพัฒนา และเนื่องด้วยความขาดแคลนทั้งในด้านการเงิน ด้านเทคนิค รวมถึงด้านการบริหารจัดการ หลายประเทศจึงดำเนินการพัฒนาโครงสร้างพื้นฐานผ่านการสร้างพันธมิตรกับต่างประเทศหรือองค์กรเอกชน พันธมิตรในลักษณะดังกล่าวเรียกว่าความร่วมมือภาครัฐ-ภาคเอกชน (Public- Private Partnership: PPP) รัฐบาลพลเรือนชุดใหม่ของเมียนมาร์ได้เริ่มดำเนินการตามแนวทางนี้เพื่อใช้พัฒนาโครงสร้างพื้นฐานในท้องถิ่นและขับเคลื่อนการขยายตัวของเศรษฐกิจ โครงการขยายท่าอากาศยานนานาชาติย่างกุ้ง (Yangon International Airport: YIA) ซึ่งเป็นโครงสร้างด้านการขนส่งที่สำคัญของเมียนมาร์ ก็เป็นหนึ่งในโครงการที่ดำเนินการตามแนวนโยบายดังกล่าว

งานวิจัยชิ้นนี้ให้ความสนใจกับความโปร่งใสและตรวจสอบได้ของกระบวนการทำงานภาครัฐต่อกรณีศึกษา โดยมีวัตถุประสงค์ของการศึกษาเพื่อวิเคราะห์การพัฒนาท่าอากาศยานนานาชาติย่างกุ้ง และเพื่อประเมินความเสี่ยงของการดำเนินโครงการภายใต้แนวนโยบายนี้ งานวิจัยชิ้นนี้ใช้ระเบียบวิธีวิจัยเชิงคุณภาพในการเก็บข้อมูลร่วมกับการวิเคราะห์เอกสาร รวมถึงการสัมภาษณ์ผู้มีส่วนได้เสีย เช่น ผู้เชี่ยวชาญด้านเทคนิคจากหน่วยการบิน หน่วยงานภาครัฐ ผู้ใช้สนามบิน และบริษัทผู้ร่วมทุน

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CONTENTS

	Page
THAI ABSTRACT	iv
ENGLISH ABSTRACT.....	v
ACKNOWLEDGEMENTS.....	vi
CONTENTS.....	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS.....	xii
CHAPTER I INTRODUCTION.....	1
1.1 Statement of Research Problem.....	1
1.2 Conceptual Framework.....	4
1.3 Research Objectives.....	6
1.4 Research Questions.....	7
1.5 Scope and Limitations of the Study.....	7
1.6 Research Methodology	8
1.7 Structure of the Study	10
CHAPTER II LITERATURE REVIEW	12
2.1 Impact of Airport Infrastructure	12
2.2 Myanmar Economic Strategy	13
2.3 Basic Policies in Airport Development	15
2.4 State Owned and Managed Policy	16
2.5 Public- Private Partnership (PPP) Policy.....	17
2.6 Good Governance for PPP	18
2.7 Reasons to Develop Policy and Procedures in PPP Projects.....	19
2.8 Role of Regulators in PPP	20
2.9 Types of PPP models	21
2.9.1 Concessions	22
2.9.2 Build – Operate- Transfer (BOT).....	23
2.9.3 Full Privatization or Divestiture	23

	Page
CHAPTER III RESEARCH FINDINGS	24
3.1 Impact of PPP in Airports Development	24
3.2 Full Privatization Model (Divesture) and Developing Countries	26
3.3 Policy Implementation for Myanmar Airports Development.....	27
3.3.1 Nay Pyi Taw International Airport (NIA)	27
3.3.2 Airports Development Master Plan and Implementing Processes	28
3.4 Yangon International Airport (YIA) Expansion Project	32
3.4.1 Tender Evaluation Process	34
3.4.2 The Agreements in Contract.....	38
3.4.3 The Overall Consequences of PPP Implementation in YIA	39
3.5 Conclusion	41
CHAPTER IV DISSCUSSION AND ANALYSIS	43
4.1 PPP Airports and Economic Development	43
4.2 Advantages and Disadvantages of PPP Airports	44
4.3 Negative Impact of State Owned and Managed Policy in Myanmar Airports ..	47
4.4 Situations to Change Policy in YIA and Other Airports in Myanmar.....	48
4.5 Analysis of PPP Assessment in YIA Expansion Project	50
4.5.1 Proper PPP Model Type and Standard Agreements in Contract.....	51
4.6. Risks and Challenges of PPP Implementation in YIA Project	53
4.6.1 Comparison with Former PPP Practices	53
4.6.2 Project Implementation Procedures.....	54
4.6.3 Tender Selection.....	56
4.6.4 Myanmar Regulations and Regulatory Body in Airport Development....	58
4.7 Conclusion	60
CHAPTER V CONCLUSION.....	61
REFERENCES	64
APPENDICES	67
APPENDIX 1 YIA Expansion Project Plan	68
APPENDIX 2 List of Interviews	69

VITA.....	Page 72
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LIST OF TABLES

Table 1 Models of PPP by ADB' Research.....	21
Table 2 Worldwide PPP airports data by World Bank PPI in July 2008.....	25



LIST OF FIGURES

Figure 1 Conceptual Framework to identify PPP airport infrastructure development support to State's economic growth.....	6
Figure 2 Prioritization of PPP airport projects in Myanmar (Source DCA).....	30
Figure 3 Status of YIA passenger increased rate in each year (Source DCA)	33
Figure 4 Procedure model of airport development project under PPP policy	34
Figure 5 Increase percentage of tourists travel through Myanmar airports	48



LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ASEAN	Association of South East Asian Nations
BLO	Build- Lease- Own
BOO	Build- Own –Operate
BOOT	Build- Own- Operate- Transfer
BOT	Build – Operate- Transfer
DCA	Department of Civil Aviation
DME	Distance Measuring Equipment
FESR	Framework for Economic and Social Reform
FIL	Foreign Investment Law
FSP	Flexibility in Strategic Planning
GDP	Gross Domestic Product
HF	High Frequency
HIA	Hanthawaddy International Airport
ICAO	International Civil Aviation Organization
IMF	International Mandatory Fund
ILS	Instrument Landing System
JICA	Japan International Cooperation Agency
MIC	Myanmar Investment Commission
MNPED	Ministry of National Planning and Economic Development
MOT	Ministry of Transport
MOU	Memorandum of Understanding
NCDP	National Comprehensive Development Plan
NDB	Non Directional Radio Beacon
NIA	Nay Pyi Taw International Airport
PAS	Pioneer Aerodrome Services
PPP	Public- Private Partnership
RFP	Request for Proposal

RLT	Rehabilitate- Lease- Transfer
ROT	Rehabilitate Operate and Transfer
VHF	Very High Frequency
VOR	VHF Omni Range Navigation System
WB	World Bank
YIA	Yangon International Airport



CHAPTER I

INTRODUCTION

1.1 Statement of Research Problem

Infrastructure can be defined as one of the basic foundations for the productive activities of a state or country. The lack of adequate infrastructure impairs both development as well as economic growth not able a country to spur growth or reduce poverty in its citizens. Thus it is crucial for any country to engage in implementing policies that spur growth such as development of infrastructure. The importance of good policies in driving the engine of infrastructure development cannot be understated. To give an example, if a country can be likened to a tree, then its policies are like the roots which anchor the tree to the ground and keep it upright as well as nourish it from the ground while growing new stems which can be actually a metaphor for infrastructure. Good strong roots or policies will allow the growth of more stems i.e develop better infrastructure, which in turn allows the growth of abundant leaves and fruits which are the products of development and prosperity which can be enjoyed by the population. So, infrastructure and its related policies are important as critical parts of the development of a country especially for its economic and social sectors. Today implementation of infrastructure development has become one of the crucial strategies in the economic development process of developing countries. However it is not an easy task as in these countries implementation processes are difficult in these undeveloped countries because of the lack of the states' financial, knowledge and technical skill requirements. To facilitate these processes, many of these countries have engaged in policy making favoring private sector participation or foreign investment.

Myanmar is one of the ASEAN member countries but was administered by a military junta government for over 22 years (1988-2010). During this period, the government was under many economic sanctions from many nations and international organizations, with only small investments in infrastructure development by

neighboring countries such as China, Thailand and India. Private sector participation was developed, although under strong restrictions at that time. Most of the projects were implemented via aid grants or soft loans initiated from those neighboring countries who still maintained economic ties with Myanmar.

But after the year 2010, following the governmental reform, the new civilian government changed their policies in the economic sector, accepting international cooperation and foreign direct investment in infrastructure development. As a consequence of this 'open' economic policy, there has been a tremendous amount of growth in the state economy. "Spurred by unprecedented openness in the government and a sweeping reform process, Myanmar is entering a period of accelerated development. There is much demand for infrastructure development in Myanmar, including both renovation of existing infrastructure and new projects"(Myanmar Infrastructure Summit 2014). "The International Monetary Fund (IMF) is also projecting a stable rise in GDP this year to 7.5 percent, substantially higher than the 6.9 percent projected just a few months ago"(Inside Counsel, 2014). Accordingly with the willingness and availability of foreign and private investment, the government announced intended plans to construct power plants, telecommunications towers and communication stations, new roads, highways, airports, railway upgrades and deep sea ports. This is the tremendous situational change in terms of infrastructure for Myanmar. Among the list of necessary infrastructure is the need for an airport. In such a large country with poor land transportation, an airport can be deemed to be almost critical to enable a quick and efficient means of transportation by both state and private officials in pursuing the overall economic development strategy throughout the country. Airport development can directly or indirectly affect State economic growth due to the dependence of sectors such as tourism, business, trade and social modernization on it. In the past, government has tried to stimulate growth by building many airports and even upgraded their facilities for a time. But because of the policy model in reality there had been no significant improvement for them. The government used a 'state owned and managed policy' in all these airports located throughout the country and there had been many weak points of this policy which was reflected via

its poor capabilities such as insufficient finances, corruption, poor services, absence of technical capabilities and un modernized.

After the government transformation in 2010, the change in economic strategy and the subsequent liberalization of the aviation market, demand for increased flight operations in terms of air passengers who wanted to come to Myanmar increased by leaps and bounds. Observing this the government was encouraged to change the policy in terms of development of airport infrastructure. The government had also learnt from the experience of other neighboring countries and how they had successfully implemented infrastructure development models in terms of airport development. With this knowledge and the right economic climate in place, the government decided to implement a 'Public-Private Partnership (PPP)' policy for airport development. In 2012, the upgrading of two currently operating international airports 'Yangon', 'Mandalay' as well as the construction of a new green field airport 'Hanthawaddy' were started as the first phases of PPP projects by tender basis. At the time of writing of this thesis, negotiations are ongoing between government and the companies who had been awarded the tenders to conclude the contracts for these airports with invitations for tenders already opened for similar PPP projects for 30 further domestic airports. Among the airports in Myanmar, 'Yangon International Airport (YIA)' is the prevalent and most prestigious, being the business hub for state revenue and tourist destinations. It is a major gateway of Myanmar and the highest number of flight operations into the country is to and from this facility. It was built in 1947 and is being operated as a state owned airport, albeit with insufficient facilities, like in other airports. In 2007, the last airport expansion project was done via government budget and enabled the airport to handle 2.7 million passengers annually. However new statistical data has shown that the rate of passenger demand continues to increase yearly with the change of the Myanmar political situation. In 2013, it was already up to 3.8 million passengers (a 22% increase compared to 2012), which was already beyond the limits of the airport's capability. So, it becomes a priority project for expansion even among other airports related under the PPP programme. Thus it can be said that the PPP project for YIA is the pilot project for the PPP programme

with internationally driven strategies and practices hitherto unseen in airport development in Myanmar.

Hence the subject of this research is quite imperative because it examines and analyses the positive and negative points of the Myanmar PPP policy, comparing it to existing international standards using the case study of the Yangon International Airport Expansion Project. This study affirms that Myanmar's PPP policy implementation is good and beneficial to the development of Yangon International Airport as well as to other airports. But there have been some findings of weakness in terms of regulations, procedures and enforcement for the implementation of this PPP policy. So, this research aims to fill the knowledge gap pertaining to Myanmar PPP policy in terms of airport development in the hope that this knowledge will be important in contributing to the success of future PPP projects.

1.2 Conceptual Framework

The conceptual framework for this study includes three parts (Figure 1).First, after the political situation changed in Myanmar, projections and operational intentions of the various airlines and air services at all airports increased based on the projected passenger demands. So, smoother air transportation was needed in airport operations, especially since the numbers of airlines using the airport as well as the frequency of services were expected to increase in YIA. The use of bigger aircraft also necessitated improvements to the runway, navigation systems and the control tower in terms of operational changes while design and interior layout modifications such as increased shop spaces, check-in-counters, and baggage handling equipment, car parking and passenger lounges also needed to be done to facilitate the higher load and the increased number of customer care services. These are all currently basic necessary functions for a modern operating airport and YIA requires these improvements to be able to not only handle its increased load but also for it to be able to function efficiently. The development of the air transport hub via YIA and its sister airports would support the influx of trade and tourism throughout the country, bringing in tax revenue which is of critical concern for the government. Thus airport

infrastructure development both directly and indirectly influences state economic growth.

Second, to implement the programme of airport infrastructure development, the policy model should be adjusted to be in part with national economic policy and the country's situation. One of Myanmar's economic strategies post-democratization was the acceptance of foreign investment and private sector participations in infrastructure development. As mentioned before, this was a great change compared to the 'state owned and managed' policies which the government had adhered to thus far, leading to these huge problems as even seen in terms of the local airports. Thus it was justifiable for the government's policy to engage in a PPP policy model in order to both modernize existing airports as well as in building new ones.

Third, policy means the outlining of guidelines and principles for organization and contributors that elaborate on how to carry out the procedures. So, in order to be a perfect policy, procedures should be clear and accurately spelt out. For instance, who will perform the functions? What are steps they have to undertake? Which regulations and documents are relevant to be applied? Are the scopes of these guidelines adequate to carry out these functions? In the PPP, both the public sector and the private sector have to cooperate in order to complete the intended work. In the case of PPP, public should be represented as general public where related people participation included in government planning. So in a PPP airport, if the procedures were structurally-strong under the PPP policy, there will be more sustainable output. Sustainable means beneficial in terms of economic and social outcomes such as 'gratifying to users', 'suitable share of profits to public and private investors' and 'standardized infrastructure products'. Therefore adequate PPP policy with strong procedures should be in Yangon International Airport to make this development project achieve reach final goal of facilitating the government's economic development plans.

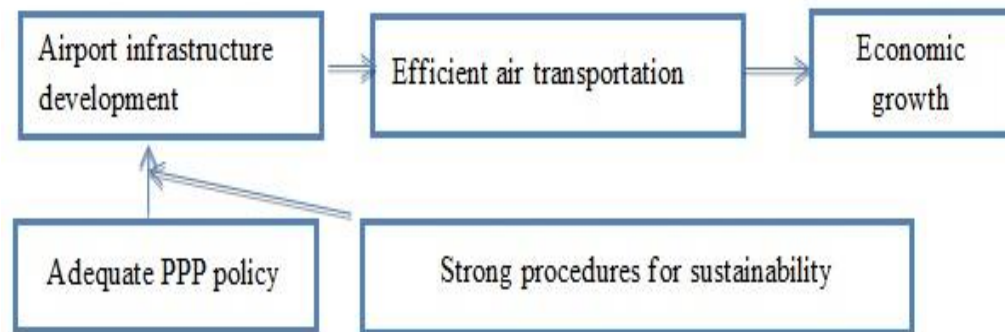


Figure 1 Conceptual Framework to identify PPP airport infrastructure development support to State's economic growth

1.3 Research Objectives

Each country has implemented its own PPP policy for their airport infrastructures depending on their political and economic backgrounds. But generally, most of their formulated PPP policies do not totally diverge from international practices and standards. The reason for this is that they want to persuade local and international investors by showing their policy's accountability as one of the persuading factors. So, they continuously modify their current PPP policy in order to become as close as possible to the ideal standards of how it should be. So, the overall objective of this study is to focus on the transparency and accountability of the Myanmar government's current status of regulations and procedures under the implementation of PPP policy by using the case-study of the YIA expansion project. The sub-objectives are (1) to study the impact of PPP practices in international experience in relation to YIA, (2) to analyze the basis for the government to change its policy from 'state-owned and managed' to PPP and to criticize whether these reasons are valid especially in the case of YIA and, (3) to assess the risks of the YIA expansion project by comparing it to current procedures of PPP implementation which will later be implemented in other Myanmar airports.

1.4 Research Questions

Myanmar is one of the developing countries and now is in the initial stage of implementing PPP policy. In this situation, this study's research questions are thus to measure the level of Myanmar PPP policy in airport infrastructure

“How does the public- private partnership (PPP) policy in Myanmar affect YIA airport expansion project in terms of infrastructure development?”

The sub-questions of this study are based on the issues as follows;

- (1) Before analyzing the Myanmar PPP policy, firstly one has to know about the international experiences of PPP in airports. So, the first question can then be; “What are the advantages and disadvantages of PPP in infrastructure development projects especially in world's countries airports?”
- (2) To analyze the changing policy in Myanmar, one should need to know the strong reasons especially in the case study project of YIA. So, the second question is then “Based on the requirements, what kind of policy implementation is needed especially in terms of the expansion project in YIA?”
- (3) The last question is intended to analyze the process of implementation of YIA expansion project under Myanmar's PPP policy procedures. So, the researches question it comes to “If PPP is reasonable and can be implemented, what kind of risks and challenges will be faced during the implementation of this project?”

1.5 Scope and Limitations of the Study

This study covers a period from 2010 to early 2014 during which the implementation period of the airport expansion project in terms of PPP policy implementation was begun step by step. The following areas will be covered.

- National level activities to improve and develop the area of airports, and reasons and basis for changes in policy.
- International PPP airports infrastructure development programmes in terms of implementation growth and development in real-life situations.

- Comparison between Myanmar PPP policy development in airports and international practices in PPP policy development.

Limitations of this study were the lack of access to surveys of other international airports and surveys to similar local PPP projects because the YIA expansion project is a pilot PPP project with tender basis for other Myanmar airports and also has not been completed yet. Most of the data collected used documentary evidence and was based on the project master plan. Some data were confidential government material especially their financial reports and thus only indirect references had to be made via media news (or) other independent surveys to fill the gaps. For international practices and standards, the research was only referenced based on terms of the data of some organizations' reports and guidelines.

1.6 Research Methodology

The research methodology for this study was based on qualitative in nature. First data was extracted from the documentary analysis of governmental and nongovernmental reports from the Myanmar Department of Civil Aviation, Ministry of National Planning and Economic Development, tourism associations, and airport service groups. These reports included Myanmar airports master development plan, Yangon Airport project contract agreements, statistical data, tender issues, financial reports, aviation rules and regulations, Myanmar Foreign Investment Law, Myanmar Companies Act and relevant procedures, and also some news and media articles. To analyze the international practices on PPP and airports, the study used relevant guidelines, theories, research papers and data from international organizations (ICAO, ADB, World Bank, World Economic Forum etc.).

The second part of the study was to obtain more specific information and estimations for the YIA project by doing interviews with total number of (28) stakeholders as purposive sampling from aviation industries such as government authorities, organizations and airport users as follows;

a) To get detailed information for the future plans of Myanmar airports and also YIA tender selection process, some questions were posed to (6) officials from Department

of Civil Aviation, Myanmar. Some of them are responsible for PPP Policy implementation, some are members of YIA tender committee, and some are currently working for YIA Airport Administration Office.

b) In order to obtain knowledge to compare with other countries' airport PPP experiences, there were interview questions posed to (2) technical consultants or advisors of Myanmar airport PPP projects who were hired from the government side. The Ministry of Transport hired the Japanese expertise consultant group "Nippon Koei Co. Ltd" from Japan and others Myanmar aviation experts groups for all PPP projects. They had enough experiences to be able to share their point of view on the situation of Myanmar PPP airport implementation process as well as in other international projects.

c) In conjunction with this study then, (6) responsible persons from different airlines that were currently operating in YIA both as domestic and international flight service providers were also interviewed. Questions were posed relating to their opinions on differences between 'before and after' conditions of private sector operation in YIA because that they knew the current YIA's facilities as well as having experiences of market operations at other countries' PPP airports.

d) For the YIA project detailed plan and design proposals, there was an interview section with (2) representatives from Pioneer Aerodrome Services (PAS) company, the leading company awarded the tender. They explained their design and future plans pertaining to this YIA expansion project.

e) To investigate the status of fair competition in the tender process, some questions were posed to (2) representatives from others tender applicants of consortia in the YIA project. According to the prequalification requirements, all applicant companies were filtered by submission of profile of prior experience in other airports. So, they were already experienced in other airport projects all over the world and they provided answers to questions related to international tender experiences compared with YIA's tender process.

f) In Myanmar, air traffic control services are controlled by government as this is considered to be a part of national security. Thus this is a job division under DCA. The area control center for lower Myanmar and YIA aerodrome control functions are located in the YIA control tower building. For information of the current situation of air traffic control and future plans of increased rates in aircraft movement, I interviewed (2) air traffic controllers pertaining to with their navigation facilities and flight safety controls at YIA.

g) Finally, some questions were posed about the extent of private participation in YIA for their satisfaction and opinions to (3) passengers who frequently take the international flight and (5) other airport users (representatives from duty free shops, food counter, cargo handling, ground handling services, freight forwarding services).

1.7 Structure of the Study

This paper is divided into five chapters. Chapter I includes the introduction which contains sections about Statement of the Research Problem, Conceptual Framework, Research Objectives, Research Questions of the Study, Methodology and Structure of the Study.

Chapter II presents some literature reviews about airport infrastructure and its sustainable development. Areas covered in the literature review include the types of policies in airports, overview of PPP policies and also indication as to the statement of Myanmar economic strategy on airport infrastructure.

Chapter III is the findings part where this chapter expresses some statements pertaining to other countries' PPP airports as well as Myanmar's current situations of PPP policy implementation in terms of airports and YIA expansion project's detailed plans and procedures.

Chapter IV details discussions and analyses the study findings utilizing comparisons with literature reviews and basic concepts pertaining to the YIA project's risks and challenges based on the Myanmar PPP policy and its procedures.

Chapter V is the conclusion which contributes suggestions and recommendations for effectiveness of the Myanmar PPP policy while comparing it against international practices in order to become successful sustainable airports which is hoped to support the economic development of Myanmar in the future.



CHAPTER II

LITERATURE REVIEW

This chapter was based on the approach of existing literature on this topic and various international organizations' experience guidelines of policy implementation in airport infrastructure development. It will provide a review of data pertaining to related topics which is relevant for the entire research. The chapter includes four parts; the concept of airport infrastructure development, methods of policies and procedures, basic PPP policy models and descriptions and also the role of regulations in policy implementation and overview of Myanmar airports' development situation.

2.1 Impact of Airport Infrastructure

Today development of infrastructure and its implementation is important for the State's economic growth especially in developing countries. Generally there are three layers of infrastructure; basic infrastructure (water, energy, etc.), partially tangible or physical infrastructure (airports, road, etc.) and mostly tangible infrastructure (Information Technology systems, etc.). Classes of priority are based on the state's requirements. So the priority of infrastructure development implementation might be different according to the country's own priorities. Airport is included in physical infrastructure but sometimes it can be important compared to other layers because logistic are a critical part for the State's economic development (Samli, 2010).

“Airports can affect state economic development by carrying people as cargo because these numbers of passengers and flights are related to financial output, earnings, and incomes. Airports are also closely associated with key appearances of knowledge-based or post-industrial economies. The roles of airports to movement people become even clearer when we study airport action on a per capita basis. Airport activity is significantly linked with regional wealth and productivity and also human capital levels, as the levels of inventive and cultural creative are expressively

connected with regional productivity” (Citylab, 2012). Today worldwide the role, the scale and the meaning of metropolis airports have changed especially over the past decade as they have come to become an expression of the value of corporate and economic renovation. A modern airport is an essential for a country to build a global connection to the social and economic interface of different cities. Modern airports are deemed as sustainable airports due to their ability to maintain this movement of people, goods and services faster and more efficiently than any other transportation service. Many modernized airports consist of three critical and interactive elements (‘hard’ infrastructure, ‘soft’ infrastructures and ‘connectivity’) as are needed in countries for social and economic growth (Keast, Baker, & Brown, 2010). For these reasons airport infrastructure development has become a priority for state economic development.

2.2 Myanmar Economic Strategy

Every country does not have same strategy when they implement their infrastructure growth because of the wide variation in political structures, existing state infrastructure, economic development strategy and government capabilities. Thus, different governments need to create their own roadmaps to integrate implementation strategies according to which of them will be the most relevant or most suitable for them. As the foundation for these programmes a clear roadmap of infrastructure should be developed by the government which also functions as a measure to enhance a market’s attractiveness to potential investors. Besides, prioritizing projects with private-sector financing will most likely to interest investors and achieve value money for the public (World Economic Forum, 2013).

In the case of Myanmar, government has commenced a series of economic reforms by their own roadmap since the time of elections in November 2010. The government introduced the ‘National Comprehensive Development Plan (NCDP)’ immediately after its coming into power, followed by the ‘Framework for Economic and Social Reform (FESR)’ which was launched with intent for socio-economic development with the identification of four policy priorities for Myanmar under the FESR. To accomplish these priorities, the government has intended to focus on ten

priority areas. Among them, three are concerned with economic sectors such as ‘private sector development’, ‘basic infrastructure development’ and ‘governance and transparency’. In terms of infrastructure development, ‘upgrading plans to national airports’ is included in the immediate term priorities. Moreover, the Myanmar government has a roadmap to develop infrastructure with procurement tenders out for development of airports (KPMG, 2013).

To implement the national economic strategy, the initial steps towards a more liberalized economy are to allow foreign direct investment and to encourage private sector participation in infrastructure. So, the new government upgraded the ‘Myanmar Citizen Investment Law’ and the ‘Foreign Investment Law (FIL)’ to allow this in 2012. The guidelines for FIL were issued in 2013 whereby according to the FIL Chapter (III), a body named ‘Myanmar Investment Commission (MIC)’ was formed in 2011 with an appropriate Union level official as the Chairperson of the Commission and consisting of experts from relevant government ministries, departments and governmental and non-governmental organizations, as well as other suitable persons as its members (MNPED, 2014).

Currently, in order to engage in business activities in Myanmar, the first step needed is to obtain licenses from the commission and register the foreign or local company in line with the ‘Myanmar Companies Acts’. Subsequently the approval of investment amount for the business as well as for the projects they want to apply for is sought for and obtained from the MIC in lines with the law. They have to submit these applications to the MIC together with the company registration or business licenses and also the Letter of Commitment from the relevant Ministries because for all technical and other detail business procedures for investment projects, investors must operate under the relevant Ministry’s guidelines and regulations (MNPED, 2014).

According to the FIL, foreign investment can be participated up to 100% in airport expansion or building operations. The Ministry of Transport (MOT) is the agency responsible for air and water transportation in Myanmar. In the case of airport development projects, the key regulatory authority is the ‘Department of Civil

Aviation (DCA)' which is under the MOT. The DCA initiates the policy and the project master plan is then applied with MOT regulations in order to submit for the approval of the MIC as well as other government agencies (DCA, 2014).

2.3 Basic Policies in Airport Development

There is a significant of competence of Flexibility in Strategic Planning (FSP) when implementing airport infrastructure. It is always estimated based on the future reasonable approximates. Moreover, choosing "real options" for investment in certain infrastructure by FSP is also needed. Meaning of real options is that there are different possible focus claims of locations, traffic demands and risks for infrastructure. Besides, if one was implementing PPP policy in terms of airports, we need to choose right options and locations because this approach can not only result in lower cost and more realistic growth in air traffic, but also can reduce the risks or uncertainly in terms of air traffic demands (Huber, 2009).

There are some several types of policy. But in this research the general literature reviews only two policy formats in airports will be used; state owned and managed, and public- private partnership (PPP). Until the late 1970s, the ownership and management structure in these establishments was originally established in order to launch self-directed authorities owned by governments such as government-linked corporations. Private participation and privatization of airports began in the 1980s, and then gained momentum in the late 1990s and early 2000s. In order to facilitate these changes in terms of movement from public to private airports, International Civil Aviation Organization (ICAO) has provided the guidelines and manuals for its member nations in terms of airports policy structures. It has to be mentioned here that the ICAO is a specialized agency of the United Nations for fostering the development of international air transport to ensure safety and growth of the industry. There are 191 member nations in the ICAO including Myanmar (ICAO, 9980) .Similarly, the Asian Development Bank (ADB) is the facilitating body for the economic development of countries in Asia. ADB analyzed the PPP projects of its member countries. So, based on these two organizations' reviews, this study's research will be focused on the types of policy implemented in airports (see in paragraph 2.4 and 2.5).

2.4 State Owned and Managed Policy

Under this policy it means that airports are owned and operated by governments or local bodies. They are commonly measured as public properties which are managed using public funds. Government and local bodies provided the funds for their development and operation, without paying any attention of their financial or economic feasibility. Based on the budget, government employees function as ‘the managers’ of airports especially in terms of management and dispensing of operational expenses in regard to utilizing revenues generated from the various operations for airports (ICAO, 9980).

In Europe, privatization and market oriented structure have influenced in the community enough to favor change. One of the few countries that favored the model of state ownership is France, so they tried to move slowly in terms of changing their regulations and developing models of airports under privatization schemes. But their airport policies were adaptable even with the market-oriented of European requirements even though they applied state owned policy models. This shows that infrastructure development can be implemented with appropriate model of each country’s own requirements but the policy should be adaptable with modernization and globalization, especially within the regional community, example EU. It also shows that the implementing a change of airport policy is important for efficient air transport even though the airport is planned and controlled by the government (Villard, 2011).

But today, government financed airports are becoming increasingly difficult to manage in many States. In some States especially in developing countries, “financial difficulties have led to a decline of airport infrastructure which is unable to be rectified. Some States are unable to provide the large investment required to create extra capacities in order to meet the nonstop increases in air traffic. This means those states that faced financial problems in airport development need to reduce budgetary shortages by removing this burden from their annual expenditure budgets which likely has been coupled together with the emergence of a global airport management industry.” When coupled together this evidence has motivated many States to move

towards privatization and private participation especially in the airline industry (ICAO, 1998).

Government is the body responsible for realizing infrastructure development and relevant implementation policies. Today, several states encourage the private sector participation in infrastructure development in line with their market strengths, especially in developing countries. The drive for private sector in these countries to provide infrastructure is depending on the incentives which have been allocated by design of public policy. So, a clear financing appliances framework is also needed to enable proficient finance investment by private sector. The government can use three ways to encourage these investments in public capital; 1) by indirect support for private provision, 2) regulate private provision by imposing constraints on other parties, and 3) direct share participation with the private group. According to this analysis, governments do not need to invest all the capital required for infrastructure development even they have sufficient budgets. They just need to encourage the private sector participation intend to both sides' benefits (Chatterjee, 2007).

2.5 Public- Private Partnership (PPP) Policy

The Asian Development Bank (ADB) defines in its handbook that “Public-private partnership (PPP) means the agreements between the public and private sectors for the establishment of assets and/ or services. Unlike old procurement contracts, PPP distribute risks between the share associations and make efficiency incentives for the operators by linking payments to definite performance criteria”. In principle, PPPs can be used when there is a need to increase productivity well beyond the ability of the productivity rate currently obtainable by public sector management. The PPP policy must be promulgated into investment plans in projects as follows;

- Develop specific legal framework for public authority and public sector legislation to allow PPPs. Although many countries have already developed PPP laws, if there is has already good policies and legal space for PPPs to exist, it is not required.
- Make the institutional framework for PPPs, which should include clear guidelines for project tendering, evaluation, and awards. Many countries have already formed

PPP units to take accountability created step by step from initiated selection of project ideas to the contract stage.

- Develop government's risk management, contract monitoring and evaluation capabilities. Risk management is needed to estimate the scale of the risks expected by the government under PPP arrangements.

2.6 Good Governance for PPP

In infrastructure development, the investment is obtained by the development of new forms of private sector participation with varying forms of PPP models. In these processes, there should be the clear comparative advantages compared to utilizing only the public or private sectors with the critical role of improved regulation and governance. It should include transparency, good governance, and then requires upgrading of regulatory, restructuring, and monitoring roles. It can lower risk and result in sustainable development (ADB, 2000). To become more efficient, infrastructure management with governance is needed indeed "Accountability is maybe the most critical and practical aspect of infrastructure governance. Any existing infrastructural system has to avoid political and corrupt influences" (Samli, 2010).

"Effective PPP require careful risk allocation and a strong enabling environment because that can be a challenge to be perfect. Most unsuccessful PPP were formed from inadequate risk allocation, poor contract preparation, the absence of competitive and transparent tendering procedures, and weak contract monitoring and implementation systems"(ADB, 2012). Generally, the standard PPP processes include: (1) government commitment and risk allocation (2) PPP unit and relevant laws, rules, regulations (3) proper PPP model and accurate agreements in Contract (3) tender selection basis with international practices and (4) evaluation of the progress of infrastructure by monitoring (ICAO, 9980).

The authorities should prepare the tender documents with all the information necessary so that bidders are able to take a decision or to decide to have a bigger package compared to that which is being tendered. This big package includes

invitations for bids, instructions to bidders, bid data sheet, draft form of contract and, sample forms and procedures. Special care and consideration should be given to the short-listing of appropriate bidders. Moreover, the contract document should provide for the completion of the contract by the government and the continuation of control of facilities and services in serious situations without paying undue compensation to the private sector. “ Since private participation in the provision of airport services is a complex process in which many States may not have adequate expertise, it may be necessary and helpful to obtain the advice of external consultants” (ICAO, 9980).

2.7 Reasons to Develop Policy and Procedures in PPP Projects

Policies are the activities of rules and guidelines for tentative plans that ensure reliability and compliance with intentional direction. Under the policy, procedures are developed. Procedures address the arrangements for the implementation and enforcement of these policies. A supportive policy and regulatory setting must be strengthened in any strategic conditions. However, investors frequently mention some main policy weaknesses:

- (1) The strain on many governments with several recent high-profile regulatory decisions has caused political risk and renegotiation risk as a critical concern for many investors especially in developing countries which are emerging from conditions of monopoly power. This is why the arrangements of possible governance and contract instruments are needed to reduce these political and renegotiation risks.
- (2) Bidding for a public-private partnership (PPP) project is time consuming and costly for investors. So a lack of standardization is a major problem to a competent process. A responsible body or PPP Unit should be given the task of enhancing transactional capacity and competence from the governmental division, and also should ensure standardization in the procurement process.
- (3) Regulatory and environmental permit processes should be revised and rationalized. Complex permit processes with absence of harmonization and predictability will constrain investment even for financially attractive projects.

(4) Rapid and unstable taxation schemes which change from time to time give an advantage or disadvantage to certain types of investors. They should be stable over time in order which can ensure the continuity and ease for investors. The impact of all forms of taxes should be evaluated based on the financial feasibility of the projects.

(5) Governments should develop a standard procedure for allocating risks especially in financing risk and demand risk. To manage the financing risk, governments could consider other methods to provide guarantee via incentive transactions, such as credit guarantees. For demand risk, the justification options could include availability-based payments and risk sharing (World Economic Forum, 2013).

2.8 Role of Regulators in PPP

To reduce the risks which may be inherent to the private sectors in a PPP, an effective regulatory framework is required. If and when such regulatory frameworks do not exist, PPP contracts become more complex, as all the conditions that would normally come under the authority of regulators must be combined into the PPP contract (ADB, 2012). Another problem is that even if one could use total public and private investment in infrastructure sectors, sometimes there are serious stock figures calculated from investment flows. There will not be returns on effective infrastructure stocks and the level of services that they provide. The main reason for this is the fact that, especially in developing countries, the official costs of investment are often disconnected from their effective value, mostly because of governmental inefficiencies or institutional weaknesses (Straub, 2008). This is why the regulations and regulators play an important role and are important parts in PPP.

Many governments have created a regulatory body to administer airports, usually named an 'Airport Authority'. These Airport Authorities are usually independent entities, charged with the operation and oversight of an airport/group of airports, often governed by a group of airport representatives, who are selected by government officials. The Airport Authority has to oversee daily activities and enforce airport rules and regulations issued by the State. In some countries, the Airport Authority are private authorities (example, British Airport Authority)

authorized by government but in the United States, the Airport Authority is not a private organization and is controlled by the federal government. The Airport Authority is cooperating or run in tandem with local governments in some special supervisions (Bacot & Christine, 2006).

2.9 Types of PPP models

PPPs can take different forms depending on the nature of the earnings, desired allocation of risk and investment requirements. To implement the private sector participation policy in airports, generally there are two types of PPPs, full privatization and partial privatization. Partial models include Contract(s), Concessions, Build-Operate-Transfer(s) and strategic partnership(s). The private sector equity of ownership may be as a minority or without a total majority ownership. Partial privatization is used if the airport is a State critical airport which should not be under long term control by the private sector, or if the government regulatory framework and regulatory body has not yet been incorporated (ADB, 2000).

Table 1 Models of PPP by ADB' Research

Option	Duration	Asset Ownership	Capital Investment	Commercial Risk	Operation & Maintenance
Service Contract	1-2 years	Public	Public	Public	Public & Private
Management Contract	3-5 years	Public	Public	Public	Private
Lease	8-15 years	Public	Public	Private	Private
Concession ROT/RLT	25-30 years	Public	Private	Private	Private
Greenfield BROT/BOT/ BOO/BLO/ BOOT	20-30 years 30+	Private (transfer to Public)	Private	Private	Private
Divestiture (Sale)	Indefinite	Private	Private	Private	Private

Among the partial privatization models, Myanmar has used the ‘Concession’ model for YIA project avoiding the full privatization model. In order to reference the relevant models for Myanmar projects, the overview of ADB was used as follows;

2.9.1 Concessions

It can be denoted as transference of maximum amount of risks (e.g., demand, operating, investment/finance, etc.) to a private investor in exchange in some system of limited operating license. These concessions have agreements which are typically a new investment to expand services but may also comprise the assumption of existing assets. The ownership still remains as public, but the private sector takes responsibilities of operation with some amount of investments in a period of time. This is the most complex model in PPPs and needs careful arranging and monitoring. The Contract of concession duration is normally 20–30 years (ADB, 2000).

The World Economic Forum elaborates (World Economic Forum, 2013), on the process of concession as there should be some possibility of negotiations between the government and private investors as follows;

“(1) *Profit sharing or return limits*- Contracts can be arranged to cover investment returns, or enable profit sharing with the government after a certain rate of return has been reached. This aids governments to enable that they receive some sort of positive returns when there is a profit-earning situation.

(2) *Equity retention*- Government’s retention of an equity stake acts as a safeguard as well as an incentive against political reaction if the project performs particularly well or badly. Joint participation in a project also can help to support the interests of both sides and create better cooperation.

(3) *Exemptions from future political and regulatory changes, or compensation*- If future changes have a negative impact on the project (for example, in the case of a public utility, a contract entitles to a transfer payment from the government), clear guidelines for suitable compensation with certain regulatory or legal changes should be made between investors and governments.

(4) *Dispute* – the resolution framework that explicitly allows for international arbitration if there are any disputes and provision for disputes to be settled by an independent body which is from a different country from both the investor and project host government.

(5) *Well-defined termination payments*. For example, if there are nearly terminations, investors should be compensated for the difference between the winning bid and the revenue already received.

(6) *Appropriate incentive mechanisms*. This means that Contracts should focus on operating and performance targets (e.g., for safety, environment and capacity) instead of investment inputs to certify appropriate service levels for clients.

(7) *Payment structure*- Governments may also agree to receive a concession payment in annual installments, or accept a fractional sum payment disbursed in installments.”

2.9.2 Build – Operate- Transfer (BOT)

It means “ the existence of an ownership and management system by which a private entity obtains the right to finance, build and operate a certain facility (including land and/or buildings) for a predetermined period of time, and on expiry of the right returns it to the owner” (ICAO, 9980).

2.9.3 Full Privatization or Divestiture

It is the change of ownership and management of the running of airports. It should be noted that this consists of either full ownership or majority ownership of facilities and services. “Full privatization involves the transfer of ownership of airport assets from a public corporation to private investors through a flotation or through a trade sale” (ADB, 2000).

CHAPTER III

RESEARCH FINDINGS

This Chapter will provide the overview of the findings on policies of airport development and its effectiveness on economic growth. The findings in this Chapter will be used in next Chapter as basic facts to analyze the Myanmar policy level to reach the main objective of the whole study. As mentioned in Chapter I, this research focuses on the PPP policy based on the experiences and guidelines of ICAO , ADB , World Bank and as well as the experience from some other countries' overseas projects. In connection with research about the development of Myanmar airports with PPP policy, this study focused especially on the working processes and activities of Yangon International Airport Expansion project. The research data has been extracted from the documentation and the answers of interviewees as the project has not yet completed. It will be divided into two main categories such as

- (1) The impacts of PPP policy and PPP models in worldwide airports in sub paragraphs (3.1) and (3.2) are being findings intended to sub- objective (1) to learn about the international PPP experiences.
- (2) The situation of PPP policy in Myanmar in (3.2) and then the findings of YIA project implementation procedures in (3.3) are intended to full fill sub-objectives (2) and (3) of the study.

3.1 Impact of PPP in Airports Development

In the period of 1990-2010, the air transport average growth rate was 4.6 per cent per annum. But after 2010, it was projected that the rate of the growth rate 4.7 per cent and it will continue up to 2030. At first, the requirement for airport infrastructure was insignificant, only directed by the size of aircraft and the volume of traffic. But today, more efficient facilities are required intended not only for smooth air operations but also for the pleasure and convenience of airport users. Then the different states invited private participation for the development and allow their

operating of major airports. Airport users normally welcome private participation in running of airports as they expect enhancements of competence. “However, they feel that there have been irrational increases in airport charges and rates in many cases. In general, it has been described that aeronautical charges have generally decreased in real terms and services have improved after private sector participation in airport management ” (ICAO, 9980). “In spite of the airport remaining publicly owned, the operator seeks to earn a return for its shareholders and they can charge for the supply of air services much as an owner would”. But productivity and efficiency were increased and became more sustainable in post- PPP than in the pre- PPP period. Private participation may be one of the reasons for this difference (Oum, Adler, & Yu, 2006).

Thirty years ago, all major airports were public entities as they were designed to be a form of infrastructure without ownership and control of the private sector. Today, airports have become a form of cooperation with the public sphere using different modes of airport ownerships or management control with private participation. So, the number of PPP airports in the world regions have now been increased with the examples of airport public private partnership patterns as follows (World Bank, 2008) ;

Table 2 Worldwide PPP airports data by World Bank PPI in July 2008

	South America	East& Pacific Asia	South Asia	North America& Middle East	South-Saharan Africa	Europe & Central Asia
PPP (general)	1252	1228	417	127	374	715
PPP (airport)	43	27	8	12	13	27
Airport%	3.43%	2.19%	1.92%	9.45%	3.74%	3.78%
Highest Country	Mexico	China	India	Tunisia	South Africa	Turkey
Concession (BOT)	32	5	2	4	5	8
Contract	6	9	4	4	3	7
Divestiture	4	2	2	4	2	6
	1	11	0	0	3	6

According to the above table, most of the countries used partial PPP models in airports (80.3%) and only (19.7 %) used divestiture or full privatization models. The main intention of PPP in airports are to fulfill the need of insufficient public funds for airports modernization or new airports construction, unsuccessful airport management by public sector and governmental economic policy following privatization trend and others. But, over the long term, private sector ownership can abuse their market influence. So, States tried to ensure that service providers do not misuse their dominant position. For this reason most countries used only partial privatization models than full privatization (Tomová, 2009).

3.2 Full Privatization Model (Divestiture) and Developing Countries

The full privatizations of airports are most influenced in the Asia Pacific region. But they are facing some problems such as using monopoly power for water and electricity, high user charges as well as problems of traffic congestion, noise to environment, etc. To solve these problems and get more efficient, stronger lawful procedures, regulations, deregulations are needed in airport privatizations. Normally full privatization can increase the cost of capital more than operational costs to the state but competent produce gains are small (Findlay, Chia, & Singh, 1997).

In Europe, through the process of privatization, private companies always hope to obtain profits and try to accumulate unfair charges from airport users such as passenger service charges, airlines operating charges, etc. To control such improper performance, in the United Kingdom, the British Airport Authority fixed prices with strong regulations (Little & McLeod, 1972).

In other developed countries such as in the United States, in 1980's, the government decided to start private participation in airports because of the supervision and congressional budgetary problems. Most people agreed for private participation in national airports. When the private companies were wholly given the responsibilities of managing and running airports, there were both undesirable and progressive effects. Although the services and financial investment were better than when they were publicly managed, there were abuses of the monopoly power in terms

of poorer levy charges to airport users for their profit. Full privatization is defined by whole transfer of ownership and authority to the private sector, so it makes it difficult to solve the consequences of the problem. The strong legal context and suitable strategies are needed when the state intends to use it. So it can cause negative effects if there is a lack of regulations and this may not be suitable for developing countries (Roth, 1987).

3.3 Policy Implementation for Myanmar Airports Development

Over the years the Myanmar government has constructed a number of airports and today there has a total of 69 airports, but among them only 33 are operable and can operate scheduled services. Because of unsuitable or outmoded facilities, some airports are unavailable to offer services even though they have high market demand for flights into the area. Some were built with large amount of investment but has no demand for flights. These kinds of airports can be deemed as being useless airports. Most of the projects were urgently implemented without master planning. Government ordered to do land grabbing in some areas for airfields and which caused to out of social justice for people. The consequence of these land problems are until affect until the time of current government. For instance, ‘Pakokku Airport’ located in upper Myanmar was built in 2002 and farmer lost over 900 acres land. But the appropriate compensations have not given yet until 2014 (Eleven Media, 2014). Currently, that airport is not useful for schedule operations because road transportation is more convenient and cheaper than air. Similarly, ‘Nay Pyi Taw International Airport’, ‘Dawei Airport’, new ‘Hanthawaddy Airport’ and others airports except YIA also have been land acquisition problems since the Military government period to until now. Some have been already solved with low compensations but some are still confusing.

3.3.1 Nay Pyi Taw International Airport (NIA)

As before, there was no long-term master plan for airports development in Myanmar. But Myanmar government implemented one PPP airport among the state owns. That airport is ‘Nay Pyi Taw’ and it has been operated as one of the PPP

models since 2007. But actually, it was not activated using a tender basis. It was a green field project intended for the new capital city ‘Nay Pyi Taw’. The Military government selected one private company to undertake and complete the project with a contract period for 60 years. To build the NIA, the military government had awarded the contract to a local company “Pioneer Aerodrome Services PAS”, the same company currently awarded the tender in the YIA project. It is a subsidiary of the Asia World crony company. The military government accepted it for construction and operation to the Nay Pyi Taw airport with a 60 year Built Operate Transfer (BOT) contract (*BOT mentioned in Chapter (II)*). For financing, this company used a loan obtained and approved by China's Import and Export Bank’s loan through a Myanmar government guarantee. The construction was scheduled to proceed in three phases. But PAS has implemented the first phase of building the airport.

The project started since 2007 but as Nay Pyi Taw is not a business city and only few passengers and airlines have operated, it has been running at a loss to the company. So, to recover their losses, the government provided a profitable contract by giving them an offer to operate the terminal in Yangon International Airport under a lease contract since 2008. But there has been a critique that PAS only hoped for a loan and wanted to go for an undue termination procedure without *Force Majeure* circumstances for Nay Pyi Taw project as “Asia World (PAS) has advised the government to scrap the Nay Pyi Taw project, and keep the airport at its current size. The government is currently discussing as to whether or not they should stop the project” (Investvine, 2013). Presently, it is still being run by PAS and has not officially declared to terminate the project as yet.

3.3.2 Airports Development Master Plan and Implementing Processes

Even though Myanmar airports are inadequate, nowadays the air passenger demand has continued to increase after change of the political situation. “The number of passengers in 2013 will increase to 4.2 million from 3.6 million last year. By 2030, that number is expected to rise to 30 million”(International Business Times, 2013). “While the growth opportunities in Myanmar are exciting, it will take time for the

potential of the country's aviation sector to be fully realized. Myanmar has the ingredients to become Asia's next hottest tourist destination but this cannot be achieved without infrastructure" (CAPA, 2012b).

To fulfill these requirements, the authority implemented airport development Master Plan. According to it, all of these scheduled airports will be transferred to private participation setup in order to develop the airport's economic sector. But for safety and security areas such as (air navigations services, airport security, Immigration, Customs) will be controlled and the facilities upgraded by government. Some potential domestic airports are going to be upgraded as international airports. In future, there have been plans to encourage an 'Airport Holding Company Limited' which is participated in all various airports operators, and will be allowed as the primary management arm for all airport business operations. Then, an airport authority will be organized to become the primary administration of all of them in line with 'The Airport Authority of Myanmar Act'.

To achieve the goal of the National Economic Strategy and to implement the FESR, the government produced the following policy cycle for implementation of PPP airports in Myanmar;

- (1) *Agenda setting* – to solve the inefficient situation of the public airports, Department of Civil Aviation initiated the policy model in 2011 to change to the new policy after they had learned the international practices of airports and formulated this policy change.
- (2) *Policy Formulation* – then, discussions was mooted with economists and expertise from other ministries to involve exploring the Public – Private Partnership policy based on Myanmar economic national policy, Laws and regulations.
- (3) *Decision-making* – the national level approval of the PPP policy in 2013 for airport development as well as to promote the foreign investment opportunities in 20 aviation-related services areas issued in the rules of FIL.
- (4) *Implementation* – to implement the PPP policy in airports, the government organized the committees and prepared bid package documents, formulated the

Master plan, planned to formulate and pass required laws, regulations and procedures. Then, the government released a scheduled plan to implement PPP airports phase by phase.

(5) Evaluation –the first three priority airports projects are now being implemented and are under the processes of tender evaluation and drafting of Contracts. The evaluation stages will be valued according to the assessment of these projects.

According to phase one of the Master plan, two current operating major international airports ‘Yangon’, ‘Mandalay’ and a new green field airport ‘Hanthawaddy’ will be started as PPP projects on a tender basis. For the second phase, there have already been invitations to the private investors to come forward to operate the next 30 domestic airports. Based on the intention of private investments, the government will rethink and plan as to the categories of other airports and their levels of upgrading, such as from domestic to international or semi-international (allows foreign charters but only as nonscheduled flights) or to remain as a domestic establishment.

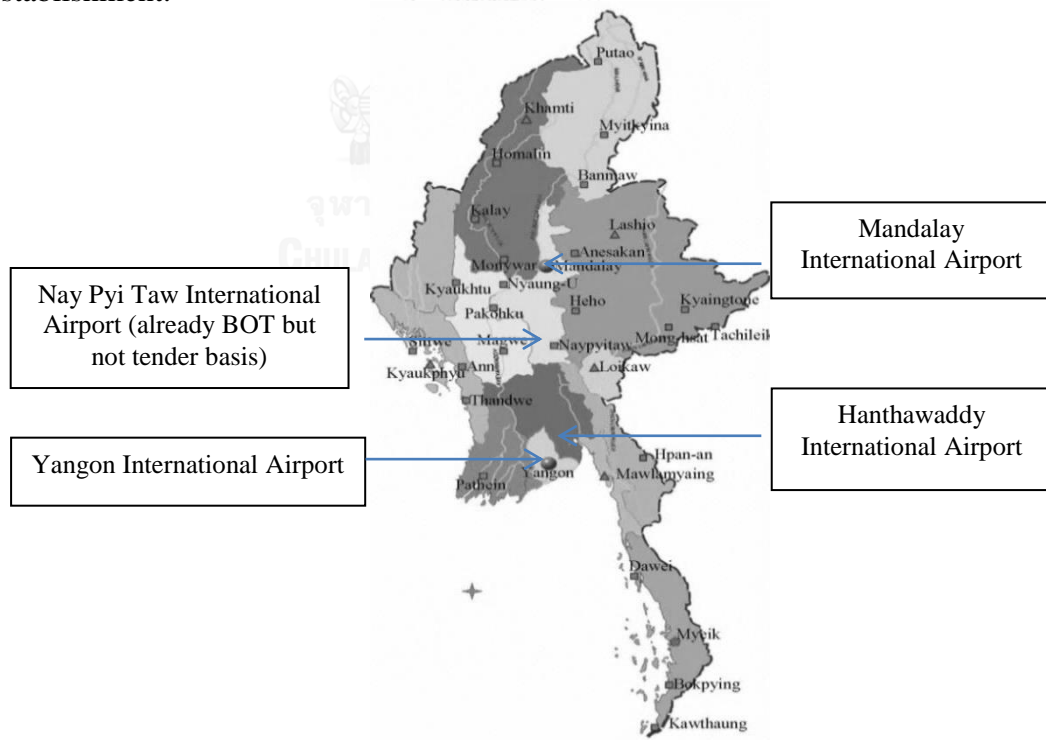


Figure 2 Prioritization of PPP airport projects in Myanmar (Source DCA)

Presently, the rule of Foreign Investment Law has been issued for foreign investment and private sector participation in (20) aviation services in Myanmar, as follows:

- 1) Domestic air transport services (allowed as JV, foreign investment maximum 49%)
- 2) International air transport services (allowed as JV, foreign investment maximum 49%)
- 3) Airport construction investment & terminal operation services
- 4) Civil aviation training services
- 5) Aircraft repair and maintenance services
- 6) Selling and marketing of air transport services
- 7) Computer reservation system (CRS) services
- 8) Aircraft leasing without crew services
- 9) Aircraft leasing with crew services
- 10) Air freight forwarding services
- 11) Cargo handling services
- 12) Aircraft catering services
- 13) Refueling services
- 14) Aircraft line maintenance services
- 15) Ramp handling services
- 16) Baggage handling services
- 17) Passenger handling services
- 18) Ground handling services
- 19) Airport hotel services
- 20) Airport spare parts selling and marketing services

Except for domestic and international air transportation, the other 18 items can be invested in by the foreign sector up to 100%. According to these opportunities, the entire operational scheme of an airport can be operated as a PPP via a consortium operating together with different kinds of operators for the various services.

3.4 Yangon International Airport (YIA) Expansion Project

Yangon airport is located 17.7 km north of Yangon City. The area of airfield is 4.6 km² and the last terminal building expansion was completed in 2007 by Asia World Company. Around the airfield area there is a 'Myanmar Air Force compound' which consists of military-owned land and residences for staff and their families. Currently, the airport buildings can only handle 2.7 million passengers per year. Inside the airfield, there is only one single runway, length 3414 m and it has 5 aircraft taxiways. At present they can handle 1800 peak hour volume flights. The navigation and radio communication systems currently being used for traffic control and flight facilitation are; High Frequency (HF), Very High Frequency (VHF), Non Directional Radio Beacon (NDB), VHF Omni Range Navigation System/ Distance Measuring Equipment (VOR/DME), and Instrument Landing System (ILS).

The aircraft parking area is too narrow and can only accommodate 16 aircrafts at a time to park. Although the airport is designated for commercial flight only, air force flights are still using the airport for their training, taking off and landing among the commercial flight. Because of this weakness of facilities, "two Airbus jets were involved in a ground accident at Yangon airport that left both planes damaged and revealed how Myanmar's limited airport infrastructure is struggling to cope with a rush in demand in air travel. Yangon's airport terminal has only four gates, and the adjacent annex which is used for bus boarding, is very small and compact as well, leaving almost no space for additional aircraft to be parked during overnight hours". "Yangon's terminal was already operating above its designed capacity at the time of military government. But the parking space problem worsened and will continue to grow worse since the military, which controls large part of the airport, appears reluctant to give up land to build new annexes for aircraft parking" (Wall Street, 2014). There have been a total of four accidents / incidents at YIA after 2007 which was the date of the last expansion. There were three commercial aircraft incidents involving Singapore Airlines, Golden Myanmar Airways and Myanmar Airways International. There was also an incident involving an aircraft of the Myanmar Air force which had an accident during flight training (Aviation Safety Network, 2014).

Currently, there are a total of 38 international and domestic airlines which are operating at the Yangon International Airport. Yangon is the major city for business in Myanmar, so the statistical data in terms of Yangon Airport has increased greatly compared to other airports as can be seen in the figure below ;

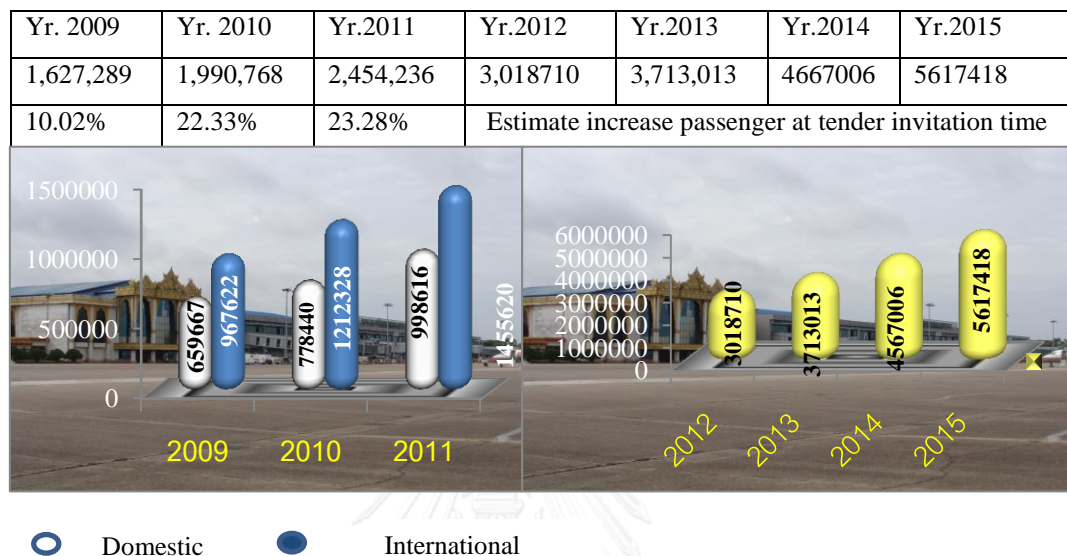


Figure 3 Status of YIA passenger increased rate in each year (Source DCA)

In the future, according to ASEAN's goal of creating a single aviation market within the region in 2015, almost all member countries have signed and ratified the three ASEAN aviation Multilateral Agreements of full liberalization in terms of air freight and air passenger services. ASEAN also has negotiated and plans to sign with dialogue partners such as China, Japan, India, etc. By these Agreements, any airlines from ASEAN and the dialogue countries can operate any type of aircrafts, no limitation of passengers and freights within ASEAN airports. Furthermore, Myanmar has signed 46 Bilateral Air Services Agreements with other countries especially with Europe for air services linkages. In all these Agreements, Yangon airport is a major destination point from which to fly to and from other countries. Generally as the results of these air linkage promotions, the demand of airlines operations and air services will be increased in the future. For these reasons, Yangon International Airport (YIA) has become in urgent need of expansion compared to other priority airports.

Under the process of PPP policy implementation, the three airport development projects including Yangon have completed some steps of the working procedures. The Department of Civil Aviation (DCA) is an authorized body of the government to implement the PPP projects in airports. A Japanese expertise consultant group “Nippon Koei Co. ltd” from Japan has been hired by the government to initiate these projects. The consultant team is responsible until the time of project completion. Currently, the ‘Mandalay International Airport’ expansion project is under the process of drafting contract agreement (stage 7) while the ‘Hanthawaddy’ new airport construction project is under the tender evaluation stage (stage 5). Yangon International Airport is now already in the process of having drafted a Contract and currently there proceeding to the MOU signing phase (stage 8).

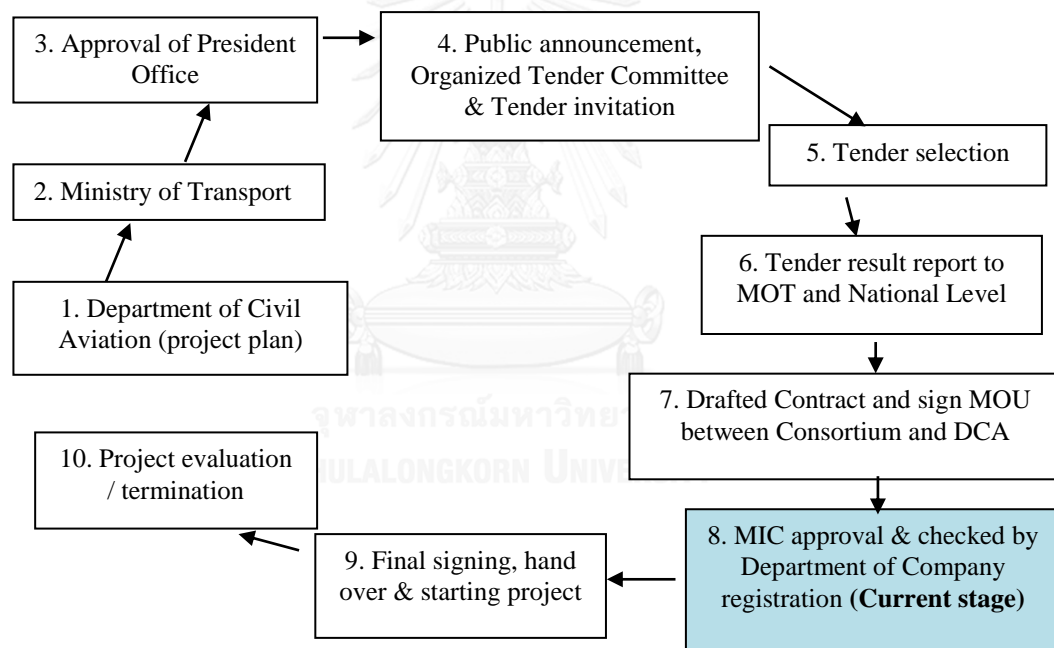


Figure 4 Procedure model of airport development project under PPP policy

3.4.1 Tender Evaluation Process

According to the Department of Civil Aviation’s information, the objective of having private sector investing in the YIA Project lies in relieving the financial burden of the DCA / the Government as well as in establishing a truly world class airport, in addition to introducing the most advanced technology that the private sector can mobilize. The YIA Project will be initiated in this way to accelerate all

activities for financing, design, construction and completion of the Project Facilities with the guarantee of “efficiency” as this is being powered by the private sector. Moreover, quality service provision could be created and provided in a safe and comfortable environment that will eventually result in reasonable prices and service charges. In order to achieve this objective, the following activities were performed.

(1) Firstly, DCA invited firms interested in bidding for the Yangon airport project in October 2012. Then, the prequalification process was done after examining the applicants companies’ portfolios and company capabilities via their submitted documental evidence. Nine (9) firms passed pre-qualification evaluation procedures conducted in February, 2013 were interested and purchased the Tender Documents (Request for Proposal (RFP). It included detailed conditions of YIA and requirements for the investment for the Project which had to be submitted for the Tender such as ;

- Conditions for current land areas, assets, revenue status, regulations, services and how parts will support by government for the project to private operators. For statistics information to be used as input for generating projections. The DCA has used the description of “air traffic demand based on the current GDP growth rate produced by the World Bank” and this was provided in RFP. However the DCA mentions that it shall not be able to guarantee any quantitative volume of passengers and cargo or growth rate in the future.
- In terms of project requirements, RFP expressed that when the project development is completed it shall be at least in the middle of 2015, and at this time the capacity of the airport shall be 6 million passengers per annum, including both domestic and international operations. Thus requirements must include these specifications and be able to cater for them as well as the requirement that future development plan by private operators and conceptual design plans must be in compliance to Myanmar’s relevant national laws, and have to be of Concessions type of PPP.
- To complete the financial proposal from the private sectors, they were allowed to do break-even point analysis feasible studies and then calculate for suitable

settings as well as to propose equitable user charges rate, as well as to show projected profit/loss statement annually in the proposal. For the investments that are to be made, the operator can project and show this with the arrangement of transaction shares and loan systems but this has to show the interest rate, fees and other expenses to be paid for the process of loans, grace period, amortization period and expenditures statement.

- (2) The DCA then asked for submissions of the tender proposal with RFP requirements to prequalified firms for applications and had received seven Tenderer's Proposal among nine passed firms by April, 2013. These prequalified seven tenderers were (1) ACO Investment Group Consortium, (2) Incheon Airport Consortium, (3) Pioneer Aerodrome Services Consortium, (4) Sojitz Corporation Consortium, (5) Toyota Tsusho Cooperation Consortium, (6) Vinci Airports Consortium, and (7) Yongnam –CAPE JGC Consortium. They applied tender financial and technical evaluation criteria in documents which were issued by the DCA, Myanmar.
- (3) The tender evaluation board was organized and composed of the Deputy Minister of the Ministry of Transport as Chairman and members consisting of the Director Generals, Deputy Director Generals and Directors of the Department of Civil Aviation, Ministry of Construction, Ministry of Public Works, Ministry of Forests, and Myanmar Investment Commission.
- (4) The tender evaluation was based upon the financial, technical and total score point evaluation methodologies, Each Tenderer's financial proposal was examined based on three major categories, which are (i) Financial Feasibility, (ii) Investment Planning, and (iii) Source of Funds. The technical proposals were to be based on Design, Construction Supervision, Operation, Maintenance, Environmental Protection, Construction Cost and Construction Schedule.
- (5) As the result of total evaluation, when the score points was revealed Toyota Tsusho Corporation Consortium was evaluated and ranked first, Incheon Airport

Consortium was second and the Pioneer Aerodrome Services (PAS) Consortium was third.

However, to consider the Project Cost, Economic Efficiency, Financial Viability and Contract Period, the committee asked the first to third ranked groups to consult in an Oral Discussions. Following this, the PAS Consortium was chosen as the final successful bidder.

When asked to elaborate on this point, the DCA official replied in interview as, *“The ranking system of tender selection was not only based on the financial, technical and experience skills but also on ability for faster implementation time and their loan sources because the project is urgently needed. Another point to be noted that since this is the first step of PPP airport schemes, so we have to consider the risk of private sector’s possible financial problems which may affect the project in future”* (Government officer 2, 3 July 2014, Yangon).

But, other bidders among the seven groups shared their opinions on this tender selection, *“To tell you personally, we tried our best but Chinese backed PAS consortium was selected by Myanmar government. All tenderers wanted to win in the bid for the YIA project because of its traffic potential more than Hanthawaddy, but we failed”* (Key informant Nr 18, 15 July 2014, Yangon).

They also commented that *“The basic frame of the process was almost the same with international practices, for example tender basis used, hiring consultant for RFP, evaluating and selecting of successful tenders and negotiating but we analyzed that there had been weaknesses in the implementation process whereby the evaluation sheet and conditions should have been more clear and mentioned some of the details that they required. In the feasibility study, for example, the financial part is almost not mentioned. Also air-traffic demand forecast was done by the client (DCA) and there was no guarantee for it. We guess this is the lack of experience of preparing documents for tendering for overseas bidders by the Myanmar government. In short, the contents of RFP were too weak and inadequate”*(Key informant Nr.17, 14 July 2014).

3.4.2 The Agreements in Contract

The contract agreed to use the PPP model of “Concession” with a term of 30 years. The project includes creating design, construction, operation, maintenance and services in all airport activities except air navigation services. The private operator (PAS group) will have to apply relevant Myanmar rules, regulations and laws of safety, security and environmental impact under the standards and practices of ICAO. The DCA or the Government will use its reasonable endeavors to refrain (interruption) from carrying out any operation or taking any action that would prevent or impede operations during the concession period.

Construction Works relating to the project shall be performed within a period of eighteen (18) months from the construction commencement date. With regards to the construction and operations of the airport, there will be a “Management Committee” under the supervision of the board of directors from the shareholder companies and DCA. The PAS group shall undertake or cause to be undertaken the *maintenance* to be carried out in accordance with an annual maintenance plan to be prepared by the Concession Company. It takes into account the budget allocated for repair and maintenance costs for each calendar year during the concession period as set out in the financial plan.

The Concession Company (PAS group) shall have the sole right to levy and collect the airport charges and other revenues and also obtain the right to manage the allocation of airport users. If *Force Majeure* circumstances such as ‘indirect political events’ (act of war, revolution, etc.), ‘direct political events and exceptional’ events (flood, earthquake, etc.) happened, there can be postponement, termination and compensation if requested by the private consortium. On the other hand, the government can terminate the agreement if the company fails to conform to any regulations or restrictions in the Concession or their profit collection programme.

According to the contract, the airport buildings will be expanded to enable a maximum handling capacity of 6 million passengers annually and also extend the aircraft parking areas and also to build an airport hotel in the terminal building. But,

there will be no more land volume area allocated for expansion of the airfield compound in the future. This amount of 6 million passengers will be the maximum capacity for next 5 years according to increased passenger rate projections. So YIA will only be a medium size airport in the future. There are no plans to expand the airport to cater to more than 6 million people annually as there is a plan that after 2015, the new green field airport “Hanthawaddy”, which will be the biggest one in Myanmar, will be used as an alternate airport for the city of Yangon. It will be located only 50 miles away from Yangon.

3.4.3 The Overall Consequences of PPP Implementation in YIA

According to the documentary findings, Myanmar decided to implement the PPP policy in airports to replace the State owned hoping with positive effectiveness in airports. YIA is one the first projects with PPP. So, related to the PPP effectiveness on this project the Advisor gave his overview opinion as

“The countries mostly move to the types of policy with Private sector participation in their infrastructure development in global. Because, PPP can generally fill the basic things especially finance assistance to build the infrastructure. During the time of reforming period, Myanmar is needed many assistances and good strategies for her development. As the results of PPP policy implementation, the airports can get high beneficial for development. YIA is the first one, so there can be faced the effectiveness with some aspect risks. But mostly are good points of results by PPP” (Consultant 2, 8 July 2014, Yangon).

Compared with PPP before period, there are the findings of the general effectiveness and consequences to YIA after PPP can be as follows;

- (1) YIA and others PPP airport projects were making evidences to the world as Myanmar new government’s economic reformed activities (*referred Chapter II, 2.2*). Because all of the projects planning are under international practices not similar as before such as long term master plan, tender basis, standardize Contract, and foreign investors’ participations, etc.

- (2) Under the state owned and managed policy, there had been requirements of finance, technical, and good management. Private participation can solve all these problems of requirements in airports.
- (3) Airports development can be more implemented with private investments under PPP to fill the potential traffic demand and air transport market. Facilities can be upgraded according to the agreements of Contract and Master plan. Related to this, the Air Traffic Control Officers expressed that;

“As the status of flight operations continues to increase, the instruments and airfield layout plans need to be upgraded because flight operations will reach a peak very quickly. In this PPP project contract, the private consortium will provide only maintenance of the Air Traffic Control Tower building. Equipment and other facilities will be refurbished by the State’s budget as well as by technical assistance of the JICA programme according to our Master Plan. Safety and security must come under the standard regulations with everyone who is a public or private operator so DCA will be able to monitor private operators on their navigation sector activities” (Air Traffic Control Officer 1 and 2, 15 July 2014, Yangon)

- (4) By the Contract, the State has no need to invest the tune of the amount of 200 million USD in the project and also can reduce the work load of aviation-related services. Moreover, the company has to give a share to the State of some 10% of revenue in first 10 years, then 15% and 20% in subsequent decades. Land rental fees, premium fees, and income tax will be paid to the state as well.
- (5) From the private side, currently, the revenue of Yangon airport is around 20 million USD in each year and traffic demand is increasing. So, it is most possible for the company to recover their investment within 12 years.
- (6) For the aeronautical charges, there is no description in Contract that how much the private operator will collect the charges to users. But by the expansion

plans, there will extend 3 times of former facilities such as shops, hotel, warehouse etc. in YIA project. So, the income will increase to the State.

- (7) For assessment of the satisfaction to the users, one of the passenger said,
“I have been one or two oversea private operating airports. The facilities are completed and make efficient to the passengers during the time in airport before boarding. They have the practice of request travelers to vote as customer satisfaction survey on airport to get the image of their airports. For the YIA, after 2007 because of the government leasing private company for terminal services and it becomes better for us. If private will operate the whole airport, we hope more and more good services will be as in others oversea airports” (Passenger 2, 8 November 2014, Bangkok).

3.5 Conclusion

According to the above findings, nowadays world countries favor PPP policy for airports. In the case of Myanmar, the new government launched plans for the country’s economic and social development under which air transport is a key facilitating measure. Thus airport infrastructure development and other 19 aviation services are under the economic strategy plan and government encouraged private participation and foreign investment. Currently three international airports are in the beginning processes of being run as PPP projects. For the YIA, a tender bidding and evaluation process was done and the Pioneer Aerodrome (PAS) consortium group was awarded the project. The Concession Contract is now being drafted and agreed upon as for a period of 30 years. . Based on the findings of this Chapter, it can summarize some effectiveness at YIA and other Myanmar airports by PPP.

- (A) Related to the sub objective (1) (*to study international experiences*), there are the findings that most of the world’s countries encourage and favor the PPP policy in terms of airport infrastructure development. But most of the projects have tried to avoid the full privatization model. They would rather use partial privatization types in airports. This is because the full privation model (divesture) has many risks. But in developed countries, they have implemented

strong enough regulations to minimize these risks and also have enough experience to cope with problems especially for the levy charges and so they are willing to proceed for full privatization.

- (B) For the sub objective (2) (*to analyze the reasons of government policy changing in the case of YIA*), the data found out that YIA airport is the most urgent one because it already cannot cope with existing passenger demands and thus its expansion project needed to be carried out immediately. There is needed big financial investment, technical skill and management and government thought that private can fill these requirements by PPP.
- (C) There are some findings to support the sub objective (3) (*to find the risks of YIA by current procedures of PPP*). Although PAS leading group obtained lower experience and technical scores compared to other tender applicants, the tender committee selected PAS group after the final oral discussion process. The reason given by the committee was that PAS proposed an interest rate of payment which was of lower amount and starting time of the project by this consortium was far earlier than others. In the contract document, all parts of provisions are similar to those outlined by international guidelines for this. For the tender and contract processes, government hired local and Japanese consultants. According to the information, construction will start before the end of 2014 after the approval of the MIC although YIA implementation process was started in 2012. Some of the regulatory processes in Mater plan are under developing.

CHAPTER IV

DISCUSSION AND ANALYSIS

This chapter will provide the analysis of the data and findings which have been obtained from documentation and the answers of interviewees. The obtained data was then inferentially analyzed, linking connected information and grounding them with theoretical concepts in order to reach the conceptual framework. In order to fit into the conceptual framework, these analyses have to solve the Research Questions in Chapter (I).

4.1 PPP Airports and Economic Development

According to literature reviews of international experiences in ICAO, ADB and World Bank in Chapter (II), airport infrastructure development is important for the social and economic sectors. Because of an airport with adequate facilities can function as a foundation for air transport growth rate and comfortable to the travelers. On the other hand, it could supply the state with much-needed revenue. For these reasons, many countries try to develop an increased number of airports. We can see in the findings of Chapter (III) that today most countries have moved to change PPP practices. The Aviation Analysis Group CAPA further elaborates on how PPP airports can support state economic development using Indian PPP airports as an example. In their report it says, “The intention of allowing private capital in Indian airports was broken into two perspectives. Firstly, fast growing passenger and cargo transport industry, and secondly, possible projected benefits of non-aeronautical revenue. As can be demonstrated via the results, in the last five years, total non-aeronautical revenue produced in all airports (PPP and metro airports) in the country (excluding Cochin airport) has grown by more than 340% from INR 4.9 billion to INR 21.6 billion. All PPP airports have grown by themselves; with their non-aeronautical revenues amounting to at least 35% of total revenue, and more than 45% in the case of Delhi and Hyderabad airports. There is estimated projection that in terms of revenue, Indian middle class airports are estimated to increase revenues from 55

million in 2005 to 256 million in 2015 and 557 million in 2025” (CAPA, 2012a). Unfortunately there are no projections like these in Myanmar as there are no official reports of each airport’s revenues. However it is known that tourism is mostly dependent on airports and we can say that airports are part of the State’s economic sector.

To analyze the commercial capability of an airport, it can be understood that there are two types of revenues, aeronautical and non- aeronautical revenue. Generally, aeronautical revenue includes (a) charges for the aircraft and airlines; landing charges, parking charges, security charges, fuel commission charges, check in counter charges and passengers loading bridge charges, (b) charges for the passengers; service charges, usage of check in charges, and security charges. Non-aeronautical revenue includes commercial charges; inflight catering, car parking, taxi services, advertising and rental fees from shops, hangers, and cargo house, etc. The economics of an airport must depend on the growth income of non- aeronautical charges to keep fair rate for passengers and keeping aeronautical charges low. So, good image of a business airport can be measured by their fair levy charges, good services, and airport adequate facilities. Private investors can complete the levels of development needed to maintain a good business airport level but sometimes they want to get higher profits and engage in improper conduct such as raising levies indiscriminately. So, there are both advantages and disadvantages to the effects of PPP.

4.2 Advantages and Disadvantages of PPP Airports

Generally, PPP has advantages in the sense of making available financial, technical and other forms of service assistance via the operators to ensure infrastructure and maintenance of it is of good standards for the usage of the public. In addition to this PPP can transfer the burden of public or government to the private sector. So, worldwide it can be seen that the percentage of PPP airports are more in number compared to the others.

But on the other side, there have been risks to States and citizens because of PPP. For instance, to draw another example from CAPA, the Airport Authority of India decided to invite private capital to participate in the modernization of its metro airports, a move designed to deliver significant benefits for passengers, airlines and the government. “However clear processes had not been established for determining the appropriate level of capital expenditure in airports and for monitoring project costs to prevent the massive budget over-runs which occurred in some cases and had to be recouped through higher charges borne by airlines and passengers” (CAPA, 2014a).

This is why in the case of properly structured PPPs, there is cost-control elements built in and thus generally the result is lower costs of service delivery to public and savings which could be passed on to consumers. Successful PPPs must allow for full cost recovery, but this is not to suggest that all subsidies should necessarily be abolished (ADB, 2014). This point can be made using Shoreham Airport, England as a specific example. In 2006, due to debts the airport was sold by the local authority to a company on a 150-year lease intended to increase commercial flight activities for the city of Brighton and Hove. “But, this also became uncertain after the buyer’s parent company went into receivership, with debts of a quarter of a billion pounds. The Erinaceous Group was appointed administrators and trading in its shares has been suspended. Managers at the airport immediately grounded all flights because of fears the insurance might no longer be valid and were soon looking for a new buyer, closing the airport till things were resolved” (UK Airport News, 2008). In this example, the airport project’s condition actually became worse and was faced with problems brought on by the private sector. Similarly to this situation, sometimes overstretched private companies who have debts tend to abuse their agreements in some airport they manage by compensation for external losses such as by collecting extra user charges, failing to pay the share benefits, reducing in investment amount or utility to get more profit against agreement in Contract, neglecting areas of safety and security, etc. These are some of the negative effects to the public by the private sector by using PPP.

But alternatively, sometimes private sectors also face risks such as when the government fails to honor commitments or grantees such as bidding and ongoing

costs are greater for investors, lack of accountability regulations, poor governance, corruption of government representatives, unfair procedures, government improper intervention, and neglect the risks shares (wars, inflation, etc.). These are unbeneficial status and a form of risk to the private by the public sector. To give an example, 'Baghdad International Airport, Iraq', was developed under a consortium led by a French company in 1979 but had to frequently close down to face the interference of war and this caused huge losses to the consortium. In addition the Persian Gulf War and the subsequent imposition of a no-fly zone and the stopping of all civil flights in 1991 worsened conditions and probably caused the failure of the consortium to even survive.

Another example of risk to private investors by public is 'government implemented the projects with own decree without thinking about general public participation'. All over in India, rural communities have been battling against a land grab of epic proportions since 2010. The biggest cause of land grabs is for green field and expansion of existing airports. "Affected communities have concerns beyond their own future. Loss of wildlife habitats and biodiversity is of such a monumental scale that entire ecosystems are destroyed. Encroachment onto farmland reduces food supplies, in a country where one in five citizens go hungry. Some airport operations are also destroying their heritage culture temples". The demonstrations have been frequently and consequently effect the risk to private investors of airports (The Ecologist, 2013).

These analyses are enough to answer the first research question in Chapter (1). It has been clearly formulated that PPP have both positive and negative effects. But, mostly it has beneficial effects especially in terms of airport development especially for financial weak countries. So in return for these good points, states need to try to reduce the possible sources of disadvantages. By the above analysis, to become a successful PPP, the government needs to organize better policy guidelines and procedural implementation. In the example of the Indian experience, there should be a clarification of roles and responsibilities of public actors and the principles of public law, before the arrangements of PPP are made. Because in all processes of PPP, firstly both sides need to understand the meaning of PPP that basically means

transfer from obtaining of infrastructure assets to procurement of infrastructure services. In addition there also needs to be an understanding of the role and responsibility of government in PPP which means the government must select a technically talented bidder by a competitive method. So, specific laws, regulations and regulators are strongly needed for successful PPP (Krishnaswamy, 2006).

4.3 Negative Impact of State Owned and Managed Policy in Myanmar Airports

This part has already been discussed in data findings highlighted in Chapter (III). In the past, the military government constructed airports but without quality rather just for the quantity. There was also a large amount of corruption that was inherent between the government and some of the members of the Myanmar elite. Then government also to raise the airport user charges in order to cover the unprofitable investments that had made building these expensive airports, while other countries in the region were trying to reduce their airport levy charges in order to attract market development. These are all the weak points of state owned management policy and regulations. In addition to all these the airports that were built and soon-to-be-built all utilized out-of-date technology.

Other weak points of the state owned and managed policy are budget limitations, corruption, not plentiful employees, poor skills and services, nonprofit and without plans for future improvement. Despite the Myanmar government having implemented airport construction by using the public budget or international loans, the facilities that were produced were still poor and inadequate. “Following decades of poor management and neglect under the military junta, Myanmar’s airports that were built under government management were small, unsafe and technologically stunted. The government spent about \$12 million annually running all 69 of its airports, and the budget constraint does not allow facilities to be maintained properly, nor skilled staff to be taken on to improve the airports” (International Business Times, 2013).

State-owned management policy may be profitable in some countries, but for Myanmar this has been clearly evident shown the negative effects of this. Even with

aid in terms of technical skills and knowledge from other organizations, the financial bases were still of unachievable margins required for Myanmar.

4.4 Situations to Change Policy in YIA and Other Airports in Myanmar

As per the above analysis, state owned and managed policy was not proper to be continued in Myanmar especially in the airport sector because of its weakness. So, in 2012, the PPP airports implementation team was organized by the Ministry of Transport. They learnt other countries' PPP practices and compared them with Myanmar's requirements. Then they decided to change the PPP policy in airports. Because they believed that private investors could support adequate finances, offer new techniques and provide better services to the airport infrastructure. Moreover, as could be seen in terms of traffic volume situations, there has been an increased number of tourists passing through airports; "After years of stagnation inbound tourism started to accelerate from 2012, a trend which intensified in 2013 when foreign visitor arrivals grew by 92.6% year-on-year. Asia is by far the largest source of foreign tourists to Myanmar, accounting for close to two-thirds of arrivals by air. Tourist arrivals by air have grown at around 35.6% between 2008 and 2013, with particularly strong growth of around 50% in the last two years" (CAPA, 2014b).

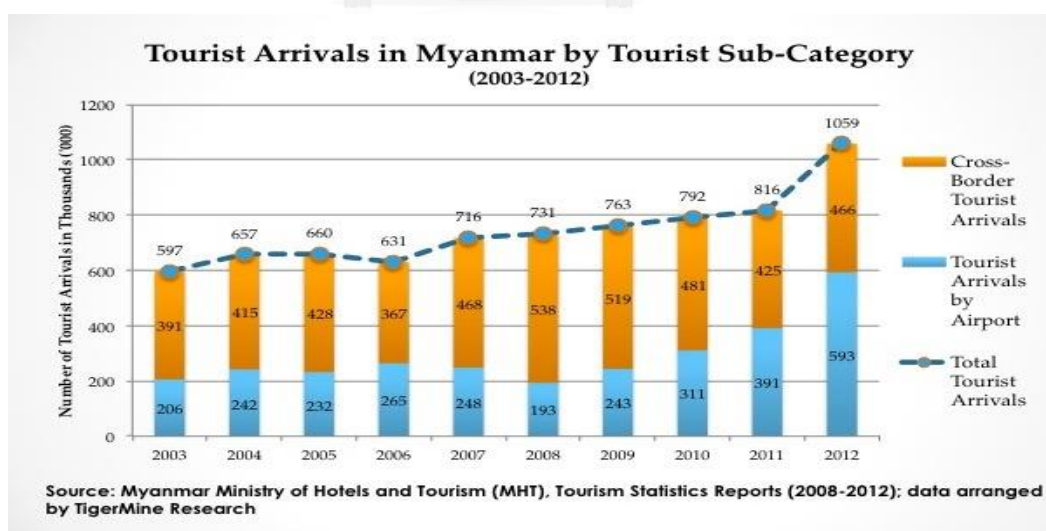


Figure 5 Increase percentage of tourists travel through Myanmar airports

For these reasons, Myanmar needs to upgrade the standards of facilities in all airports including Yangon especially for the government as it heads towards a

decentralization system and attempts to fulfill demand markets of economic development. In the case of Yangon, a new or refurbished airport is absolutely needed to handle the high amount of passengers and big aircraft, and also modernizes facilities and skill services need to be implemented. According to the above analysis of PPP advantages, private participation could fill Myanmar requirement of a modern efficient capable airport.

These are the general reasons to change policy for any airport development including that of Yangon International Airport (YIA). But one of the objectives of changing policy is increasing efficiency for all general public. The YIA is situated at state own land surrounding areas so there is no land acquisition problem to people. But we also need to analyze that the PPP can be beneficial to YIA users or not. The project is not completed yet so there is only an option to discuss on the opinions of current YIA users. Mostly users like the private participation especially for upgraded facilities by *Chapter (III) interviewees*. One of the opinions of airport users (from airlines) is as follows;

“We will welcome the PPP. Because before, we faced very poor facilities and some improper government interventions such as limitations on the business of air services at airport and the number of training flights from the Myanmar Air Force. Those flights created a disturbance and delayed our commercial air operation. These are the negative points of a government managed airport. We also hope that the private sector will give better services to users for their image and profit, and they will also promote airport business activities. But, in other ways, the government should also need to regulate the private sector not to monopolize this opportunity and abuse in terms of raising user charges whenever they want”(Key formant Nr.14, 10 July 2014, Yangon).

Therefore in this analysis, the government side changed the policy for the reasons of current weak policy, and the needs for requirement of finance, technical and service assistance, as well as to support the national development plan. For the users, they hoped changing policies will improve existing facilities and help airport

development. The reasons of policy changes were strong and *thus this is the answer that answers research question (2).*

4.5 Analysis of PPP Assessment in YIA Expansion Project

This part is related to the first point of the research question (3). According to the answer of the second question, the situation of YIA should lead to a change to a new policy. But it needs to analyze whether PPP is proper or not. If it is reasonable, then this study has to continue analyzing the risk and challenges of PPP in YIA project which will answer *question (3).* The following analysis about YIA could help shed light on whether using PPP is proper for that airport by some assessment of the project.

After they decided to change the PPP policy in airport development, Myanmar authorities applied other countries' practices especially from India because India had a similar history as a former British colony with a lot of similar legislation. But political backgrounds were different in India and Myanmar, so Myanmar created its own procedures in some PPP processes. But most of Myanmar's PPP used international practices of PPP such as tender selection basis, negotiation of the Contract and preparation of some procedures to prevent the risks. For the people participation in their projects, government did a press conference of lunching PPP at YIA and other airports in 2012 before the tender time. The PPP implementation committee subsidized in terms of providing some of the good objectives for people (users) and state economic development. In the findings of Chapter (III), the tender applicants said that the PPP basic frame is almost the same as other countries' projects. Then there will be evident facilities upgrade according to the master plan and PPP Contract of YIA. The airport will expand buildings, aircraft parking and will equip some machines and facilities to handle 6 million passengers annually. It will be a development of airport to reflect more than current situation, see the expansion plan in (Appendix -1).

For future development plan, the representative from PAS answered; *“We will perform the project up to par with international standards or up to the best design.*

We have the plan to arrange to get the standard Aerodrome Certificate under examination of ICAO's Audit Team for YIA. It will be a good image for our company in future airport projects. PAS has worked in managing Yangon airport for a decade already. We have had the experience of Yangon airport operations and Nay Pyi Taw PPP more than other applicants. So, we have enough analysis pertaining to this area and can fill the gap of Yangon airport's requirements. This was the one of the qualifications that caused us to be awarded the tender in the selection process. We have just negotiated and agreed to continue to be allowed the current Air Services Contracts between DCA and private companies (for example, cargo services, catering services, etc.)”(Key formant Nr15 and Nr16, 10 July 2014, Yangon).

4.5.1 Proper PPP Model Type and Standard Agreements in Contract

According to the study's findings and literature review, fully privatized airports are controlled with strong regulations in developed countries. There must be enough experience and concrete regulations before and after the time of Contract agreement for it to go on smoothly. Myanmar has no experience and also has weak regulations, no specific regulatory body yet thus it can be faced with a lot of negative effects and will be exposed to risk if it chose the full privatization. Because full privatization has to handover all power of operations and assets to the private for an unlimited period there are low chances to revise this for the public. Partial privatization can only operate under specific time limit and there is chance for reform to be initiated after that period. So, partial privatization might be a form of lower risk for Myanmar as a proper model.

Now in this case study of the Yangon airport expansion project, the 'Concession' type of PPP model, which is one of partial privatization, will be used. The contract period will be for 30 years long and according to the contract, PAS must engage in a construction period of up to 18 months. The government will hand over to PAS all of the airport business income including levying and collecting user charges, the maintenance facilities, leasing of duty free shops, management and administration airport services (ground handling, refueling, etc.). The PAS consortium must pay rent charges for the land usage to the government. From the government side, because of

the non-existence of a specific regulatory body, the DCA will continue as the temporary regulatory body to monitor the progress of the project.

As in Chapter (III), the former PPP airport NIA was used BOT model. Presently, government has restricted the private tenderer to do the Concession model to YIA in RFP since the time of tender application. The reason of decision using Concession in YIA, one of the tender selection committee members said

“At the time of NIA project, the situation was a green field and required the finance investment by private side for the whole project. So, the amount of investment was high and contract period had to take 60 years. After we had learned about the PPPs in international guidelines, we knew to choose the suitable model with fewer risks in our PPP projects. YIA is not a green field and only some parts of investment are needed by private investors. Concession model is short term but invest type. We can manage the effect of risks in short term for next projects and decided the concession”(Government officer 3, 3 July 2014, Yangon).

Besides, in order to maintain safety obligations, ‘the DCA shall manage and operate the runway and taxiway comprised within the airfield civil facilities and air navigation comprising, airfield lighting, control tower, metrology facilities, security post (airside) and police station’. One of the DCA officials said that

“Safety works will not be handed over to the private administration. At the same time, those facilities will be upgraded by the government. So the model and work allocation can reduce some risks for safety” (Government Officer 5, 7 July 2014, Yangon).

As another benefit, as in mention in *Chapter (III), 3.4.3*, the State has no need to invest the tune of the amount of 200 million USD in the project and also can reduce the work load of aviation-related services. Moreover, the company has to give a share to the State of some percentage of revenues in each year. Land rental frees, premium fees, and income tax will be paid to the state as well.

So, this study confirms that Myanmar has chosen the suitable PPP policy with suitable ‘Concession’ model under its national economic strategic plans as well as to fulfill the airport’s requirements.

4.6. Risks and Challenges of PPP Implementation in YIA Project

There is an example of an airport built via the PPP policy in Myanmar, Nay Pyi Taw International Airport (NIA). So, we need to compare the current PPP policy and the former PPP in Myanmar in order to analyze the current PPP process and see whether it is following international practices or not. This study can then continue to answer *the research question (3)*, and analyze the risks and challenges of YIA projects.

4.6.1 Comparison with Former PPP Practices

A former PPP project, NIA is already operated by BOT model in Myanmar. The Military government had implemented private participation in NIA development project, but only one company was allowed, so it was not a real PPP. Because the international practice of PPP needs the selection to be done as choice of the best company among various applicants by an open tender basis. During this period of military government, crony business and Chinese investment played a strong influence in all the economic sectors in Myanmar. The criticism about PAS Company as related to the former lease of the YIA contract as well as the awarding of the new one. This is because, the Asia World Company’s and its owner Steven Law is perhaps the country’s largest and most diversified conglomerate, with ventures spanning industrial investments, transportation, port and road construction. “Pioneer Aerodrome Services, an affiliate of Asia World, was awarded the concession to run Yangon’s international airport. Steven Law is the son of the famous drug lord Lo Hsing Han” (Asia Times, 2011). So, there is also a need to review whether these influences are still present in the current new government or not?

Now in this Yangon expansion project, this PAS leading consortium was selected and won the tender again. This applicant consortium is incorporated with

PAS from Myanmar, China Harbor Engineering Co. Ltd (CHEC) from China, CPG consultant Pte Ltd. from Singapore, and Malaysia Airport Consultant Services Sdn, Bhd (MACS) from Malaysia. But the source of investment shows that their consortium's share contribution is very minimal only PAS (75%) and China Harbor Engineering Co. Ltd (CHEC) (25%). Estimated investment amount amounted to nearly (200 million US\$) including project finance loan which was nearly 170 million US\$. The loan shall be furnished by the EXIM Bank of China. So, we could analyze that the consortium is mostly influenced by Chinese investment and a local crony company PAS. The other partners namely the Singaporean and Malaysian groups will participate only in the technical sectors.

4.6.2 Project Implementation Procedures

Passenger and aircraft movement have caused an extremely crowded and dense situation in YIA especially in the domestic terminal area. There is not enough space parking area for big aircraft in the airfield side. So, the main intention of the Yangon airport expansion is to urgently expand terminal buildings and facilities. The location of YIA is 17.7 km away from the city center but due to the growth of city area, it has now become a suburb with residences nearby. Besides, the airport is closely adjacent to the Myanmar Air Force compound. According to the master plan, because of this limited land situation, there is no more expansion on the airfield side. Relating to this, the DCA representative answered that

“The goal of this project is to increase efficiency for air transport users. Another one is for the environment, as it is to become the Eco Airport; it should and could not be expanded to handle over 6 million passengers annually. Because it is located inside the city, airplane noise can disturb people, and equally the buildings of people can also disturb air navigation. So, for these reasons, we will try to build another airport which is Hanthawaddy. In the future, both airports will operate as international airports”(Government officer 4, 4 July 2014, Yangon).

But on the issue of the airfield land area restriction and the future planned new airport Hanthawaddy, the representatives of the airport users (cargo handling services) gave their opinions as follows:

“According to the Foreign Investment Law, some air services such as cargo handling, freight forwarding, aircraft maintenance, etc. have been allowed to be run by the private sector. Although passenger capacity could be boosted up to cater for 6 million, those kinds of work will need expansion of the land area, because additional cargo warehouses and Aircraft Hangars need to be built. We can see that the airfield area is mostly adjacent to Air Force owned land which is also state owned land and thus there can be expansion into this or the other idea would be to resettle them in other places with separation of commercial and military airports”. For us, we are business persons and of course we favor YIA more and would keep on in this place than HIA because even when completed HIA will be a new airport which will take some time to develop and have a large passenger demand’ (Key formant Nr 23 and 25, 15 July 2014, Yangon).

According to Chapter (III), the alternative airport will be built to cope with YIA’s limited traffic amount; “The current airport is due to be expanded to 6 million by 2017 but this number is likely to be reached very rapidly. In 2012, the Myanmar government opened bids for the construction of a new international airport named Hanthawaddy which is 80 km away on the outskirts of Yangon” (Travel Daily News). The new airport’s operations will be started in around 2016 in HIA, but government has not declared yet the division of airline operations between two airports. It can be a risk to private investors in both the two airports for the division of traffic demands and share of market airlines in the future. Another one is that the current tender awarded to PAS has the negative image of ‘a given up decision to unprofitable project’. So, during the 30 years contract time of YIA, will it be of some the risk to public by HIA and YIA comparison market?

Another challenge for the YIA project is the current employee allocation between current State management systems and changes that will occur with the handing-over to the concession. DCA and PAS has terminated the former ‘Lease

Contract for terminal operation services' in favor of the current new project. PAS has just handed over their current operational management duties back to the government/DCA. The problem is to reallocate and reemploy the current government airport staff at YIA. There will a need to negotiate between public and private sectors in line with the regulation of Myanmar Civil Servant Law. A DCA official said that

“For the government servants who currently number around 70 persons at the Yangon airport, we are planning for them depending on what they themselves volunteer for based on the choices we give them. In line with Civil Servant Laws; some will returned back to duty with the DCA, some will accept gratuity and pension, and some will change their jobs to work with PAS. We have requested PAS to employ not only the technicians but also ordinary staff” (Government officer 6, 7 July 2014, Yangon).

In Myanmar, the pay scale of salary is very different between private and public sectors. The salary and employment rate are lower in government offices than in private companies. So, staff members of the DCA and other departments will agree to these changes especially those who are transferring to PAS as they will get better salaries and other benefits. This similar challenge of reemployment problems will also be faced in the upcoming PPP project airports. According to the foreign Investment Law, in a foreign investment project, there are allocations where by law there are minimum Myanmar citizen employment quotas in place; with at least 25% over the first 2 years, second 2 years 50% and third 2 years 75%. But now as the PAS consortium is the winning bidder with the major shareholder being the local-based PAS, this will be a good opportunity for staff to gain employment.

4.6.3 Tender Selection

In Yangon airport, the agreement period for terminal operation services with 'Pioneer Aerodrome Services (PAS)' was from 2008 to until early 2014. In 2012, government invited the private sectors to participate in PPP for 3 international airports, Yangon, Mandalay and Hanthawaddy. The one challenge that the Tender Committee declared was an advance specification before the tender that 'all

consortium groups for Yangon and Mandalay must involve the participation of at least one local company into the consortium' before application. The reason given for this was to promote the qualifications for local companies and give them some business opportunities. Many foreign investors participated in tender bids for those airports urgently engaged local partners for cooperation. "Among the foreign-led consortiums, the tender for Yangon International Airport was won by the Pioneer Aerodrome services (PAS)-led leading consortium again. According to the scored points available after the process, PAS was actually ranked quite low compared with other bidders because it has only one NIA experience for airport operation. However, the YIA tender selection process was not transparent and there may have been corruption by some high level government officials" (Eleven, 2013). These authors go on to add that transparent evaluation procedures should have been expressed in the tender procedure itself for their good governance. The first part of this chapter detailed the disadvantages of PPP which included two kinds of risks: the risks to the public by private operators and the risks to private by the government (or) public. To elaborate further on those risks; firstly, the tender evaluation process has to be done by the government with certain standardized procedures on behalf of the public. Selection has to be of the best one who can perform the completion of the project in the best manner possible because the level of quality in services and facilities cannot be measured in most cases. In the case of YIA, the committee selected the PAS leading group as the best among other tenders. Currently, the Contract Agreement has been drafted between the two sides. The principles or agreements in the Contract are the same as the international practices in Chapter (II). But will PAS follow the letter of the contract in implementation in the future as per the standards of Contract? How will they do it? How long will they do it for? Will they keep to the contract or deviate in some case? Even in developed countries, special regulators and regulations exist to monitor the private operators. Currently, the formation of a special regulatory body (Airport Authority) and regulations are still under legal formation procedures while the project is going to start. So, this could likely be a source of risks by the private sector to the public in the YIA expansion project.

All regulations and processes must be accountable by government in PPP. There has also been the possible second risk of in the YIA project, according to interviews of some of the other applicants and their answers as was mentioned in Chapter (III), there was some requirements by tender committee (or) the government. The applicants compared their overseas experiences and they analyzed that the Myanmar Government (or the DCA) has kept away from some of the bidders in view of the possible risks they might face; i.e political risk, financial risk and demand risk (reference guidelines in Chapter (II) 2.7). The interviewees said that;

“Evaluation sheets and conditions should have been clearer and mentioned (political risk as a factor to be vectored in). In the feasibility study, the financial part was almost not mentioned. Also air-traffic demand forecast was done by the client (DCA) and there was no guarantee for it (demand risk and political risk). The concession agreement is usually provided by the client (DCA) but in the case of YIA, the contractor needed to provide it by themselves (financial risk). During the process of negotiation with successful and backup-bidder, the change of conditions in terms of the RFP was weird and is usually never done this way at all” (Key formant Nr 17, 14 July 2014, Yangon).

4.6.4 Myanmar Regulations and Regulatory Body in Airport Development

According to Chapter (II) and (III), the role of a regulatory body, proper policy and regulations are important when implementing enhancement projects in airports. Most countries have created a separate regulatory body and regulations framework for airport infrastructure development. “Core airport services are also natural monopoly activities, so a framework of economic regulation is often required to limit the abuse of a dominant position, irrespective of whether the facility is publicly or privately owned” (ADB, 2000).

Today, most of the States including ASEAN members have already created and put into provision their respective Airport Authorities as well as clearly defining their airport regulations. For PPP airport operations, this Airport Authority must act as a representative of the public and work together with the operating private company

or consortium. According to the organization chart and as per regulations published by the Department of Civil Aviation (DCA) web page, Myanmar has no specific regulatory body and no special regulations for airports as yet. Presently the Ministry of Transport is still in the process of obtaining approval at the national level and of the Senate (Hlut Taw) to form “The Airport Authority of Myanmar Act, 2012”. For other related airport regulations and procedures, the DCA is currently using “The Union of Myanmar Aircraft Act (1934)” and “The Union of Myanmar Carriage by Air Act” while for the safety standards for airport operations, Myanmar has to comply with “International Civil Aviation Organization (ICAO)” guidelines.

Consultant hired by the government said; *“Myanmar is starting implement PPPs that we can see in this project. But unlike in other countries, there are no special regulations for PPP. Besides, the processes to formulate these regulations are currently delayed in the Myanmar legal system awaiting approval. For example, the Airport Authority Act was initiated in 2012, but till the present, 2014, the approval has not yet been given for this. But in terms of this first step of the PPP project, the government has wisely chosen the best PPP model and negotiated a rigid strong contract which is the best possible than can be done at this point to prevent risks”*(Consultant 1, 8 July 2014, Yangon).

According to this opinion, it can be seen that there has been no specific government PPP unit (or) authorized body. The Myanmar Investment Commission (MIC) is the authorized unit to allow all foreign investments by using the Foreign Investment Law and Myanmar Companies Act. Today, in order to initiate and monitor PPP projects in Myanmar, the project has to be implemented under the cooperation of relevant Ministries and the President’s Office, Cabinet Decision, and the MIC. Presently, the Yangon airport expansion project Contract and MOU are under the process of submission to the MIC. This has already taken 2 years up to this time and the total procedures are still being delayed by slow government working procedures which are common place in Myanmar.

4.7 Conclusion

To conclude this Chapter, PPP has both positive and negative effects, but PPP can be used to fulfill the basic requirement of airport infrastructure and state economic development. It can be used to support sectors such as tourism, trade, etc. through the increased efficiency of air transport. Moreover it can earn revenue via airport business. So, not only the developing countries but also the developed countries use the PPP method to transfer public burden. But for the social development with PPP, general public participation needs to be emphasized additionally in government planning especially in green fields. It can be leading to the good governance for PPP. Moreover, various legislative and other control mechanisms such as accountability and transparency procedures should be in place to reduce the possible negative effects of PPP but while still being able to get PPP's net benefits. This also satisfies the required regulatory sector for PPP projects.

In the YIA project, the best type of PPP model is used as well as the fact that the project uses international practices of PPP procedures. These are positive points behind the YIA expansion project's PPP policy implementation. Besides, the authority tried to do advanced arrangement for reducing risks for their pilot project YIA such as establishing specific regulations and body, did PPP international practices in Tender and Contract and chose best model. However there are some negative points also found in this project such as unclear process of tender selection, poor regulations and various delays in procedure implementation. These negative points can become unexpected risks during the time of contract. It should be encourage reaching faster regulations and regulatory body to recover the risks by monitoring to the private operators.

CHAPTER V

CONCLUSION

The position of infrastructure as a key part of the State's economic growth and social wellbeing has been established beyond doubt. Airports are one of the essential infrastructures needed for both economic and social development and thus are one of the infrastructure development priorities for Myanmar. The political situation has changed since 2010 but during this political transition period, many foreign investors are still wary and are playing the 'watch-and-wait' game in order to establish the accountability of the new Myanmar government's changes in procedures and willingness to honor commitments. Myanmar is one of the developing countries and has long been isolated from the world under the suppression of military government, thus currently the new government is keen to formulate and carry out changes in policy to address the weakness of the financial and technical sectors. This can be seen in this study as how these changing policies impact the transportation and aviation industry specifically in YIA as it was used as the case study for this research.

The government has tried to implement this new policy for airport development in line with its own National Planning and Strategy, and encouraged a PPP policy. There are two reasons for this; the first being that there were many weaknesses that have existed via the government 'owned and managed' airports which have revealed the fallacy of this policy and second is that there is a lack of financial and technical capability on the government's side to engage in refurbishment and development of airports in Myanmar. This study is in line with that train of thought and supports the implementation of PPP policy as the proper strategy for Myanmar airports. But there has to be some additional strengthening requirements built into the PPP implementation procedures, as can be seen via the YIA expansion project, which will further build a better implementable PPP policy with good results for all stakeholders.

In short, the Yangon International Airport is the one of the first prioritized infrastructure development projects under PPP for the State economic growth.

According to the analysis of this research, the tender selection processes of the YIA expansion project were less transparent especially in declaring evaluation criteria both to the public and investors. Besides, the regulations for PPP and a specific regulatory body have not been concretely formulated even though the project is going to start. These are the potential requirements of PPP policy implementation which needs to be carried out in Myanmar in general and in the airport infrastructure development programmes in particular. According to literature reviews on PPP, the lack of transparency and accountability in procedures may cause diverse negative effects for future private sector investments and might even delay infrastructure development and State economic growth. And also it needs to be thinking related people's point of view for their social wellbeing in public-private partnership. But one of the good points highlighted by this research is fact that Myanmar has opted to choose the Concession model for its PPP projects in the airport infrastructure development field; with a 30 year period for the first airport project. This gives adequate time for the development of the project and enables it to recover from potential problems as well as to address possible risks. It also gives enough time to fulfill the current PPP policy requirements.

To conclude, this study found that Myanmar's PPP policy implementation is entirely in line with the state's economic growth plans and will offer efficient services to the public. According to the basic concepts 'impact of airport infrastructure to state economic social development' (referred 2.1) and 'basic policy is needed in airport development (referred 2.3), the research reaches as recommendation to answer the main question of 'PPP policy in Myanmar can beneficial to the development of Yangon International Airport in terms of infrastructure development'. But the policy requires has to be perfect because of the concept guidelines of adequate 'PPP policy' (referred 2.5), there have been findings of some lack of firm applicability in rules, regulations and procedures for the implementation of this current PPP policy to incentive further private investments in Myanmar airport development projects. One of the basic needs of any infrastructure development project is that of its long-term sustainability, concrete plans and procedures need to be established for successful

development of Myanmar's PPP policy and in this situation, the suggestions for becoming an adequate PPP policy in future would like to be as following;

(1) Accountability

PPP specific legal framework, regulatory body of public authority and public legislation should be developed and to do faster working procedures in government entities.

(2) Transparency

In every PPP projects, there should be strong commitments of equal partnership participations among people, government and private sectors. Then institutional framework of clear PPP guidelines should be in tendering, evaluation, awards and contract.

(3) Sustainability

There should be more developing government's risk management to estimate the scale of the risks expected before projects and should continuous monitoring and evaluation capabilities during the project contract.

Finally, it is hope that this paper will contribute as a tool for advocacy in policy measures of Myanmar airport infrastructure be a guideline for other airport development projects via PPP to get the beneficial of economic and social outcomes to the state.

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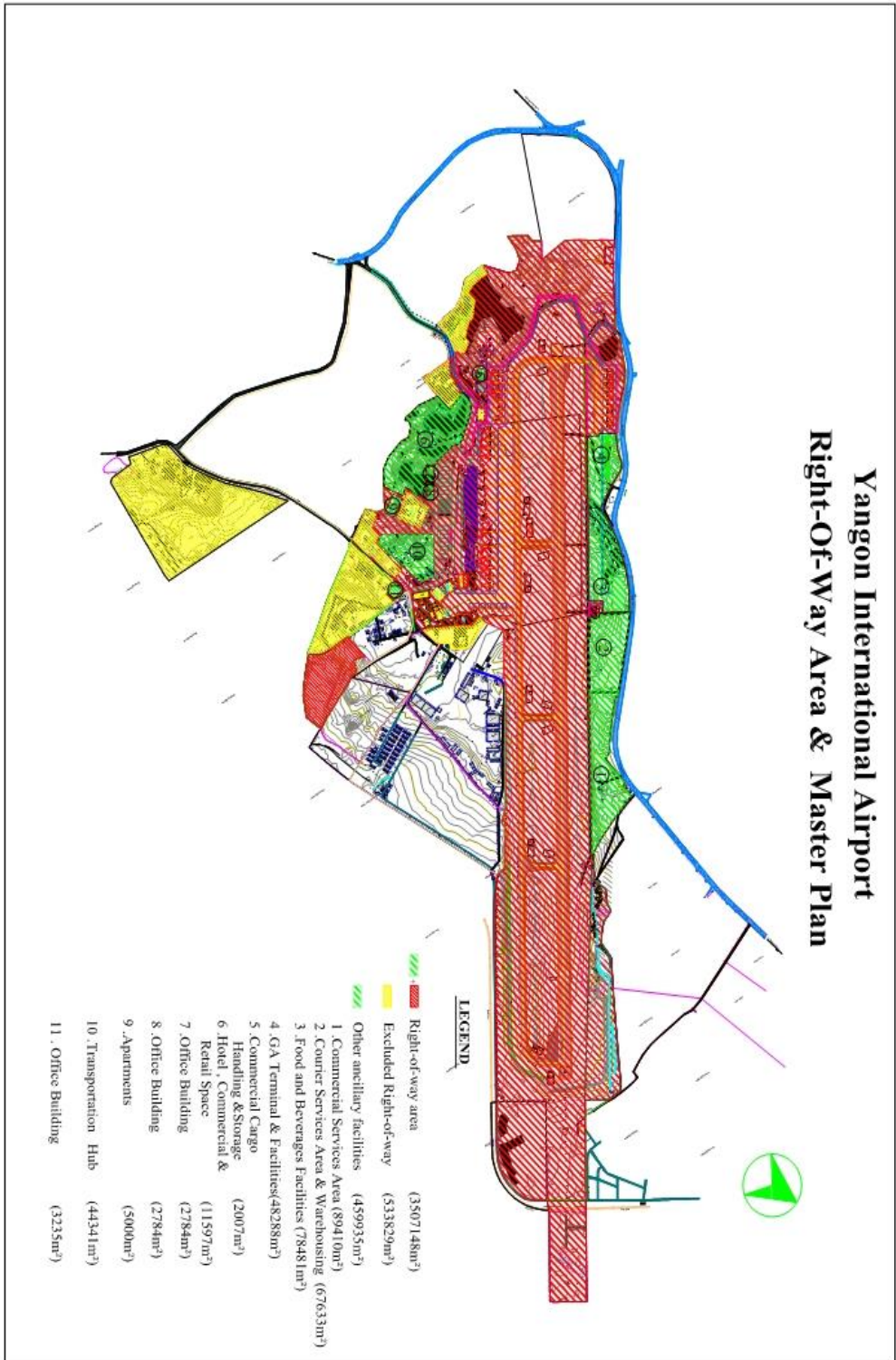


APPENDICES



จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

APPENDIX 1
YIA Expansion Project Plan



APPENDIX 2
List of Interviews

Nr.	Date	Location	Interviewee	Research Method used
1	2-7-2014	Yangon, DCA Office	Government officer 1 (Policy Sector, DCA, Myanmar)	Semi- structured interview
2	3-7-2014	Yangon, DCA Office	Government officer 2 (YIA Tender Committee, DCA, Myanmar)	Semi- structured interview
3	3-7-2014	Yangon, DCA Office	Government officer 3 (YIA Tender Committee, DCA, Myanmar)	Semi- structured interview
4	4-7-2014	Yangon, YIA Office	Government officer 4 (YIA Office, DCA, Myanmar)	Semi- structured interview
5	7-7-2014	Yangon, DCA Office	Government officer 5 (Aerodrome Standard & Safety Division, DCA, Myanmar)	Semi- structured interview
6	7-7-2014	Yangon, DCA Office	Government officer 6 (Legal Sector, DCA, Myanmar)	Semi- structured interview
7	8-7-2014	Yangon	Consultant 1 (Hired by DCA, Myanmar)	Semi- structured interview
8	8-7-2014	Yangon, DCA Myanmar	Consultant 2 (Hired by DCA, Myanmar)	Semi- structured interview

9	9-7-2014	Yangon, YIA	Operation Manager (Myanmar Airways Int'l)	Semi-structured interview
10	9-7-2014	Yangon, YIA	Manager (Bangkok airways)	Semi-structured interview
11	9-7-2014	Yangon, YIA	Manager (Air Asia)	Semi-structured interview
12	9-7-2014	Yangon, YIA	Operation Manager (Air KBZ)	Semi-structured interview
13	9-7-2014	Yangon, YIA	Admin Manager (GMA airlines)	Semi-structured interview
14	10-7-2014	Yangon, YIA	Manager (Air Mandalay)	Semi-structured interview
15	10-7-2014	Yangon, YIA	Project Manager (PAS group)	Semi-structured interview
16	10-7-2014	Yangon, YIA	Project Officer (PAS group)	Semi-structured interview
17	14-7-2014	Yangon	Marketing Officer (Incheon Airport Consortium)	Semi-structured interview
18	15-7-2014	Yangon	Project Staff (Yongnam Consortium)	Semi-structured interview

19	15-7-2014	Yangon, DCA Office	Air Traffic Control Officer 1	Semi- structured interview
20	15-7-2014	Yangon, YIA	Air Traffic Control Officer 2	Semi- structured interview
21	15-7-2014	Yangon, YIA	Staff (Duty free shop)	Semi- structured interview
22	15-7-2014	Yangon, YIA	Owner (Coffee shop)	Semi- structured interview
23	15-7-2014	Yangon, YIA	Manager (MAI -Cargo)	Semi- structured interview
24	15-7-2014	Yangon, YIA	Operation staff (YIA ground handling)	Semi- structured interview
25	15-7-2014	Yangon, YIA	Freight forwarder (Private)	Semi- structured interview
26	8-11-2014	Bangkok	Passenger 1 (taken flight 4 times at YIA)	Semi- structured interview
27	8-11-2014	Bangkok	Passenger 2 (taken flight 5 times at YIA)	Semi- structured interview
28	8-11-2014	Bangkok	Passenger 3 (taken flight 4 times at YIA)	Semi- structured interview

VITA

Ms. Nwe Ni Win Kyaw was formerly graduated in 2002 with Master of Science in Engineering Mathematics from Yangon University, Myanmar. Then in 2003, she joined to the Myanmar Department of Civil Aviation under Ministry of Transport and was appointed as an Air Transport Officer. She was promoted to an Assistant Director (Air Transport Division) in 2008. Her division is mainly responsible for aviation policies implementation including development initiatives. So, with the approval of her Ministry from Myanmar, she was accepted to do Master's degree of International Development Studies at the Faculty of Political science, Chulalongkorn University, Thailand in September 2013. She will be working at the same position in her Ministry after she will have graduated with a Master of Arts degree in September 2014.