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南戈壁政府投資預算分配決策過程之研究

A Research on Decision Making Process of South Gobi
Government's Investment Budget Allocation

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摘要

南戈壁省是國家預算收入的主要來源。該省的經濟增長增加了其公共投資預算和項目數量。但是它在投資的計劃過程中仍然沒有效率。本研究將根據理性選擇理論，探索並定義投資失敗的原因和情況。從研究人員的角度來看，有一些主要的影響因素降低了投資效率，其中包括豬肉桶和滾滾政治工具的失敗以及政客和選民的私利。

因此，該研究將在 2018-2019 財年公共投資項目和替代方案中完成成本效益分析。可以評估其公共投資的有效性。它還負責採訪計劃過程中的重要利益相關者。最後，描述了投資有效性評估結果與訪談之間的關係。

這種關係有助於更新相關的政策和行為，設定更有效的投資項目。避免人員個人利益也很重要。

關鍵詞：公共投資、豬肉桶、相互捧場、政客自利、成本效益分析、事前評估



ABSTRACT

The South Gobi province are main generator of state budget revenue. Economic growth of the province increases their public investment budget and number of projects. But it has still inefficiencies in planning process of the investment. This study will explore and the reasons of failure and the circumstances of the investment according to the rational choice theory. In researcher's point of view, there are some main influences decrease effectiveness of the investment that pork barrel and logrolling political tool's failure, and politically and voter's self-interest.

Therefore, the study will accomplish cost-benefit analysis in 2018-2019 fiscal year public investment projects and options. It may assess their effectiveness of the public investments. It also handle to interview with important stakeholders in the preparation procedure. Lastly, it describes to the relationship between the result of evaluating the potency of the investments and interviews.

That relationship leads to renewal related policies and acts, define more effective the investment projects. It also present that importance of avoiding their personal self-interest.

Keywords: Public investment, pork barrel, logrolling, politician self-interest, cost-benefit analysis, ex-ante evaluation

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CHAPTER 1. INTRODUCTION

1.1 Statement of the Problems

South Gobi is one of the largest provinces of Mongolia, is sited in south of Mongolia. Territory of South Gobi province is 165,000 km² squares and population are 65645. It owns 15 villages, Dalanzadgad village is the heart of the South Gobi province.

The south Gobi province is rich in mineral resource such as amber, copper and coking coal. It has very beautiful nature spots such as yowling am, Khongor sand dunes, Bayanzag and so on, and has 2654388 livestock that includes horse, camel, beef, goat and sheep.

In recent decades, Mining sector of South Gobi has been rapidly growing. For instance, Oyu Tolgoi LLC has started out to export gold and copper concentrate that Rio Tinto group holds 64 percent of total stock shares. Oyu Tolgoi gold and copper field is one of the biggest in the world. Therefore, Tavantolgoi and Nariin sukhait coking coal field located in South Gobi province. There is Tavantolgoi JSC, Erdenes Tavan Tolgoi JSC, Energy Resource, LLC, Chinhua MAK LLC, MAK LLC, South Gobi Sands LLC companies have been working in the excavation and export of mineral products. The south Gobi province holds 51 percent of total stock shares of Tavan Tolgoi JSC. That share creates most percent of the income of the South Gobi province (government, 2019). In 2017, percentage of heavy industry and mining product was 53.3 percent for total gross domestic products of the province (Statistic, 2017).

Fiscal year budget of the South Gobi province has been increasing year-by-year for when mineral product's price increase in the world economy. For instead, 2013 fiscal year total budget of the South Gobi province were 93,827,627.8 thousand Tugrik (Tugrik means the currency of Mongolia) and 2019 fiscal year total budget were 209,606,900.3 thousand Tugrik. The growth rate between 2013 fiscal year and 2019 fiscal year was 123.3 percent that is very huge expend of budget. Thus, the public investment size has expended for recent 7 years. For instance, 2013 fiscal year total public investment was 35,473,446.0 thousand Tugrik, 2019 fiscal year total public investment was 76,319,459 thousand Tugrik (Committee, 2019). The public investment growth rate was 115.1 percent between 2013 and 2019 fiscal year. It presents that budget growth rate was approximately same at the investment growth rate in the time duration. In this case indicate to economic and budget of the South Gobi province, both are mineral resource dependent.

However, some public investment in the province wasn't efficient in the time duration. Because the local government staffs couldn't plan local public investment without local

politician affects. For example, the local government of province planned that would buy new high school dormitory for the Gurvantes village from the federal government budget. The village has had 180 student's dormitory. There were only 120 students live in here in 2017. It is enough to the village. As well as, the province has been building 320 student's new high school in the Nomgon village by federal government budget. Nomgon village had 320 student's school in 2017. But there were only 260 students studied here in 2017. It was enough for Nomgon village. Because population growth of Gurvantes village has been little bit increasing and population growth of Nomgon village has been decreasing in year-by-year.

Meanwhile, the number of students of Dalanzadgad village and Tsogttsetsii village exceeded by 1417 and 493 in 2017, respectively (Education, 2017).

It presents the politicians influence to the process of planning local public investment in order to they want to get more vote from the next election campaign. They don't consider about real cost-benefit, alternative choices and how to manage and supply to operating expenses the new buildings. But mineral resources are limited. When it will be exhausting, the province how to govern the economic and budget without mineral resources. Therefore, the province should wittily allocate public investment into social and economic in order to reach sustainable development.

1.2 Definition of Terms

Politician self-interest: Local self-governing organization has 33 representatives of villagers who elected from 15 villages. The main purpose of every governing party is reelection (Downs, 1957). Each representative struggles for gain own number of voters. Thereto, representatives would invest into their constituency that built a new school, park, kinder garden, and bought equipment, car for emergency, school, and administration bureau and so on. In other word, they bought the vote by public investment in the province.

Voter's desire: According to Anthony Downs, voters want to increase the chances of their interests being implemented into public policy. Public policies are all things that the government decides to do, whether it is making a law or a regulation that is created. If an individual strongly believes in one topic, then they will use their vote to choose a candidate, or political party, that most strongly sides with their views.

For voter's self-interest example, we suppose that the voter lives in Nomgon village. He wants with his kid will study in building of the school. He thought that if his kid's studying environment will be better, kid's study performance will increase. Then, the voter

always talks that we need new school building in own village in every conference of villagers with representatives or officials of the village. With an election for the voter's local representative approaching, the voter feels a need to find a candidate that has similar views.

But the voter's don't know which one can give more benefits to them build in their village or another village. In other word, the voters can identify problems since they want to what that don't be able to problems of the whole province.

Official's performance: The officials who plan public investment usually find out the simple way of according with the law execute duties. Their preparation of a complete set of alternative choices is limited by their satisfied information. Because most of officials struggle for valuing to their high level managers. The output of their working performance usually reconciles to hierarchical authority from high level managers and representatives.

Therefore, they usually don't evaluate the demands of social and economic, and expectation of their satisfied projects or alternatives. Because they fear of being laid off when the output of their evaluation of alternatives don't belong to satisfaction of representatives and high level managers.

Pork-barrel politics is the legislator's practice of slipping funding for a local project into a budget. The project may have nothing to do with the bill and may benefit only the legislator's home district. Before a bill gets to a vote, pork-barreling has often greatly inflated its costs through the addition of various legislators' pet projects.

Logrolling: A practice common in the U.S. Congress and in many other legislative assemblies in which two (or more) legislators agree for each to trade his vote on one bill he cares little about in exchange for the other's vote on a bill that is personally much more important to him. Logrolling is especially common when the legislators are relatively free of control by their national party leaders and are trying to secure votes for bills that will concentrate sizable benefits on their own home districts while spreading most of the costs out over taxpayers in the rest of the country. Local projects such as federally funded dams, bridges, highways, housing projects, VA hospitals, job-training centers, military bases and the like are often pushed through by logrolling.

1.3 Theoretical Framework

The rational theory is the more appropriate approach to approve researcher's hypothesis. Because all level governments face to process of decision making in order to solve social problems and reach for nation goals. They have to consider rational choice theory

and rational decision making model because they has not enough resources to resolve the problems. Rational decision making is a multi-step process for making choices between alternatives. The process of rational decision making favors logic, objectivity, and analysis over subjectivity and insight. Rational choice theory states that individuals use rational calculations to make rational choices and achieve outcomes that are aligned with their own personal objectives. Also, it reconsiders about individual’s self-interest. But it has some restriction and limitations to make a pure rational choice that is limited information, decision making time, and ability of take analysis and an outside effects of decision makers.

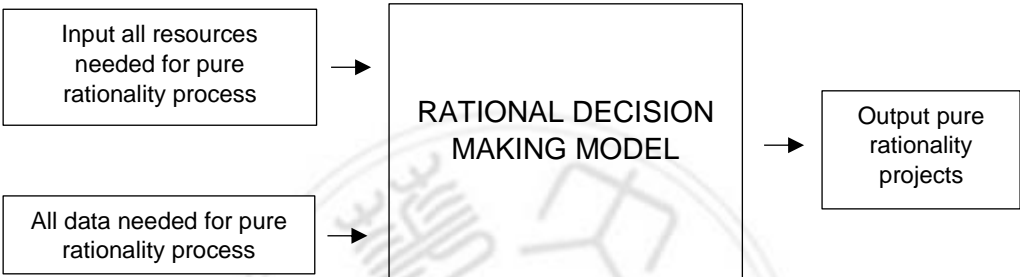


Figure 1.1 Rational Decision Making Model

Source: (Dror, 1968)

Thus, a local government of the South Gobi province has to use rational decision making model in order to choose effective public investment projects.

This study will explain an outside effects of rational decision making process that are who, what kind of reason and self-interest.

1.4 Methodology

This research will assess to the local government’s some inefficient public investment projects that more obviously planed within external effects. It is going to accomplish cost-benefit analysis in implementing projects and alternative choices. The result of that assessment will may be able to approve that the local government made inefficient decision in the planning process of public investments. He has also explored and define the reasons that why staffs chosen inefficient public investment by Interview. Finally, it will explain to the relationship between the result of Cost-benefit analysis and Interview.

Thus, Ex-Ante Evaluation Study design is appropriate to achieve the study. It has largely two purposes: (i) project planning and (ii) the evaluation planning. In ex-ante evaluations of the study, an ex-ante evaluation is planned and performed according to the Five Evaluation Criteria. The results of ex-ante evaluations are utilized to improve the plan, and to

determine the relevance of the project. The ex-ante evaluation provides information to serve as a basis for monitoring and evaluation after starting a project and is an indispensable step to the appropriate management of a project throughout the project cycle.

The retrospective study design is helpful to consider what happen and why they didn't choose efficient public investment in the planning process.

Finally, the study will define the relationship between the result of ex-ante evaluation study and retrospective study in order explain that why they decrease public investment benefits. Correlation and Regression analysis can define the relationship.

1.4.1 Type of Research

Quantitative and qualitative types, both are in this study. Cost benefit analysis in Ex-ante study will return to statistical numbers (cost-benefit ratio). It means that which alternative could give highest benefit and spent lower cost. Interview in retrospective study will inform reasons that why and what happen in the process. Then, integrated outcome (mixed methods) tell the final result of the study.

1.4.2 Respondents

- For cost-benefit analysis, it will assess to 2018-2019 fiscal year public investment projects. It means that reassess to planning process documents and calculate cost and benefit of alternatives in the time duration.
- Mayor of the province, staffs of Department of Developing policy planning.

1.4.3 Cost-Benefit Analysis

Cost-benefit analysis represents a practical technique for determining the relative merits of alternative government projects over time. Use of cost – benefit analysis can contribute o efficiency by making sure that new projects for which marginal social cost exceeds the marginal social benefit are not considered for approval. Cost-benefit analysis, if done well, provides essential information to be used by government authorities and citizens in making choices among alternative government projects (Hyman N.D, 2005).

1.4.4 Interview

In a structured interview the researcher asks a predetermined set of questions, using the same wording and order of questions as specified in the interview schedule. An interview schedule is a written list of questions, open ended or closed, prepared for use by an interviewer in person-to-person interaction (this may be electronic media). Note that an

interview schedule is a research tool/instrument for collecting data, whereas interviewing is a method of data collection (Kumar, Research methodology, 2011).

One of the main advantages of the structured interview is that it provides uniform information, which assures the comparability of data. Structured interviewing requires fewer interviewing skills than does unstructured interviews.

1.5 Research Question and Hypothesis

1.5.1 Research Question

- How did the province government distribute investment budget?
- How did the province government pick public investment programs?
- Why did the local government choose inefficient public investment projects?

1.5.2 Hypothesis

H1 = Politician self – interest influences on the output of rationality process.

H2 = Official’s independence influences on the output of rationality process.

H3 = Politician self – interest influences on official’s independence.

H4 = Politician self-interest and official’s independence, both reconcile to voter’s desire.

1.6 Reviews of Related Literature

Nowadays, Public investment would be an important factor of economic and social. Most of researcher oversees that public investment should support gross domestic products (GDP). For example, Mongolian researcher D. Oyuntsetseg (Teacher, Business School of Mongolian National University) conducted a research that topic is “Research of efficient of state budget investment in Mongolia” (Oyuntsetseg, 2016). In brief, the legislations and purposes of the budget investment policy of Mongolia have been taken into account in this survey. The budget investment growth, total budget expenditure and the changes of the density to GDP since 1990 on dynamic growth method have been studied by using the official sources like National Statistical Office of Mongolia and the Ministry of Finance. Moreover, she summarized the budget investment efficiency by using the Incremental Capital-Output Ratio method (hereinafter referred to as ICOR) and data of the National Statistical Office of Mongolia from 2002 to 2012.

GDP and investment indicators are computed at 2005 constant prices. Investment at current prices was multiplied with the deflector of the year 2005 to convert to at 2005 constant prices. Although, as the result of the analysis, the amount of budget investment cost

and its density to GDP and state budget expenditure is increasing, investment budget is still not efficient enough. Accordingly, it is recommended to increase the budget investment benefit and to sophisticate its composition

According to (Bayasgalan, 2010) (Ph.D., Professor of Economics and Financial Management, Department of Mongolian Management Academy) that according to economic growth, it requires policy maker's management skills that they have to properly manage investment capacity in order to main factor of economic growth public investment capacity has been rapidly increasing. In recent years, the number and budget of investment projects financed by the state budget has been rapidly increasing due to the increase in budget revenue. For instance, in 2010, investment expense increased by 28 percent compared to 2009, which is 6.5 times higher than in 2005.

He mentioned that there were two aspects of public investment management in Mongolia. First, planning of public investment, second, implantation, monitoring and reporting of public investment. According to a first aspect, in the planning process of the investment, they have to set projects and alternatives, assess needs, define goals and targets, estimate technical requirements, feasibility and efficiency of projects in order to allocate budget resources. Particularly, the public investment projects that financed by state budget have to include in the annual state budget for support to macroeconomic and regional development goals and sector development policies.

However, there were not unified policies of public investment that could be an obstacle of planning to more effectively invest. Ministries and agencies planned projects without pre-assessment and financed projects didn't keep the industry and country development polices. This situation would decrease the effectiveness of public investment budgets.

In a second aspect, implementation of the investment has decreased since 2006. In 2006, the implementation of the public investment project was 96.6 percent, in 2009 it was 88.9 percent and in 2010 it was 89.1 percent.

Therefore, according to National Audit Office and State Professional Inspection Agency's inspection, there were some violation of implementation phase. But these kind of violation repeatedly occurred and couldn't be eradicated. It demonstrated that here was a lack of discrepancies in the legal acts which investment stakeholders have the rights and obligations of investment relations in the execution and implementation of monitoring

projects. It required a clear understanding of this phase regulation and acts, and unified management.

1.7 Scope and Limitations

1.7.1 Scope

There are 147 projects financed by local province annual budget in 2018-2019 fiscal year. That number of projects are too much to accomplish cost-benefit analysis due to the time duration in order to narrow down the scope of the research. Thus, research will choose obviously inefficient investment by prepared criteria that will set in Chapter 3.

1.7.2 Limitations

- Personal bias: Interviewers like and dislike can affect their judgment.
- Respondents: there are important few respondents in local government who carry out the planning process of local investment. That number will be able to affect in the reliability of the interview.
- Didn't assess to effectiveness of investments: according to (Bayasgalan, 2010) that they hasn't still pre-assessed to the investments. Perhaps, it will be decreased outcome of cost-benefit analysis which researcher cannot compare financed investment to lost alternatives.
- Number of initiated projects: if there are few obvious inefficient investments, it decreases the reliability of cost-benefit analysis.
- The interviewer then judges the entire nature, personality and attitude of the candidate on the only basis of the answers given by the interviewee.

1.8 Significance of the Study

Perhaps, defined circumstance of public investment in the province by the study deliver 2 kinds of contribution. First, it's hand out the clear assumption of the public investment planning process with local government officials, elected officials and politicians. If they can consider the importance of the planning phase, they try to assess effectiveness of public investments in order to develop the country and achieve to their personnel and social goals. Second, it suggests that renewal of policies and acts related to public investment planning phase to state government and legislators.

The cost-benefit analysis of the study will be able to proper example to local government officials who contribute the investment planning phase. Probably, they still hadn't tried to assess the investment projects.

Finally, the research will discover the importance of avoiding voter's selfishness and political self-interest. And it will recommend to how to improve benefit of public investment and how convince to voters, while their selfishness contribute the development of the whole province.



CHAPTER 2. BACKGROUND OF STUDY

2.1 Rational Choice Theory

In the standard view, rational choice is defined to mean the process of determining what options are available and then choosing the most preferred one according to some consistent criterion (Levin, 2004).

Rational choice theory (RCT) argues individual's behavior and social life. According to Adam Smith, there are three important assumptions in RCT: (1) individuals have selfish preferences, (2) they maximize their own utility, and (3) they act independently based on full information. It presents that individuals pursue their implicit or explicit benefits.

There are a lot of different variants of RCT such as “thin”, neoclassical economical versions, “thick”, sociological versions. It differs between the type of rationality, preference, and individualism assumptions.

For “thin” versions, also we called full rationality. If there isn't any cognitive limitation, individuals assume their decision alternatives, the probabilities of outcomes and consequences. Their decision is based on cost-benefit calculations in order to choose highest utility and lowest expenses. However, in practice, there are a lot of cognitive limitations such as calculating time, acquiring information that becomes difficulties of operating full rationality. Thus, Herbert Simon suggested a bounded rationality model that individuals tend to adopt decisions that are “good enough” to maximize their satisfaction and utility under limited information and time conditions.

2.1.1 Rational Policy

A rational policy is one that achieves “maximum social gain”; that is, governments should choose policies resulting in gains to society that exceed costs by greatest amount, and governments should refrain from policies if costs are not exceeded by gains (R.Dye, 2013). In this definition, there are two important assumptions. First, if the costs of policies exceed by benefits, policies shouldn't adopt. Second, decision makers choose the policy that produces greater benefit over the cost of total policy alternatives. Thus, policy makers have to accurate cost and benefit of the policies. In practice, we cannot measure costs and benefits by dollars and cents framework. Because there are tangible and intangible cost and benefits. Policy makers who produce rational policies should calculate all social, political, and economic values that sacrificed or achieved by a public policy.

According to (Dror, 1968), policy makers must fulfill following assumption in order to select a rational policy.

- Know all the society’s value preferences and their relative weights
- Know all the policy alternatives available,
- Know all the consequences of each policy alternative,
- Calculate the ratio of benefits to cost for each policy alternative,
- Select the most efficient policy alternative

Thus, rational policy making requires an appropriate decision making system. It involves getting information about alternative policies, predictive capacity to foresee the consequences of alternative choices, and correctly calculate cost-benefit ratio. Figure 2 present that the diagram of the decision making process.

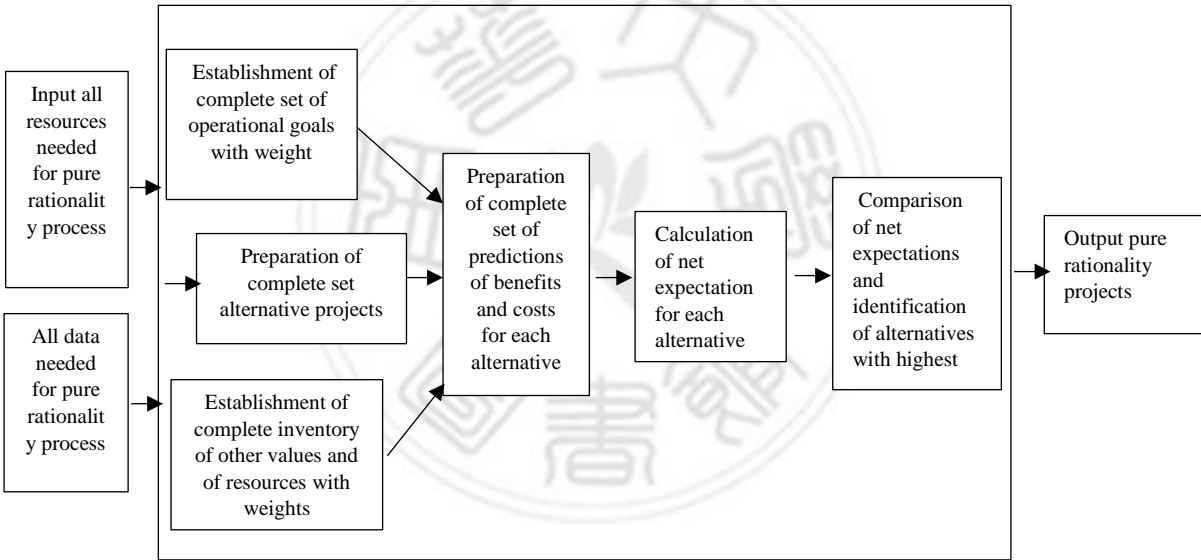


Figure 2.1 Rational Model of Decision Making System

Source: (Dror, 1968)

The model of maximum social gain requires to reconsider about the optimal size of government policies from policy makers. In other word, government budget reaches peak of maximum net gain, and then there aren’t more resource to pick projects. Thus, policy makers must conduct cost-benefit analysis.

Charles E. Lindblom recommended that there is some kind of obstacles to make a pure rational choice (Lindblom, 1959).

- Specific groups and individuals often conflict. Because their understanding of societal benefits is different from each other
- Sometimes, we cannot compare and weight cost and benefit. Because a type of cost and benefit is quite different.
- Policymaker's decision doesn't depend on societal goal in sometimes, instead they try to maximize their own rewards, political power, status, reelection, and money.
- Policymakers don't want to maximize social gain, but merely satisfy demands for process. They don't search until finding "the best one", instead they break off their search when they find first alternative.
- Main obstacles of the system are collecting all the information requires know all possible policy alternatives and the consequences of the alternatives. There is also cost of information gathering, the availability of information, time of information gathering, calculating cost and benefit.

Governments must try to use rational decision making system, even if there are innumerable barriers in rational policy decision making system. Because the model remains important analytic purpose; it helps to identify barriers to rationality in their process of decision making. It means that government may know what factor directly influence to their decision and consequences of the policy.

2.2 Public Investment

All governments have essential obligation that invests tangible and intangible assets to economic and society in order to supply equitable utilities to society. In other words, government has to allocate public resources by public goods and services in order to they achieve national provision.

Public investment refers to government spending on economic infrastructure such as airports, roads, railways, water and sewerage systems, public electric and gas utilities, telecommunications and social infrastructure such as schools, hospitals and prisons (Fund, 2015). But also public investment spends human capital such as education, health, social welfare, and wealth funds.

Thus, we can consider that public investment separates 2 types of infrastructure. First, economic infrastructure, the government invests and builds new roads, electricity networks, power plants and specific industry areas in order to increase economic growth. Because these

kinds of infrastructure are bases of private firm which runs the business. Second, social infrastructure, government build new schools, public parks and hospitals in order to constitutes comfortable living environment. These kinds of infrastructure also support social growth, such as education, health, social security and well-being of citizens.

Public investment also divides 2 categories such as construct new public assets and maintain existing public assets. This study focuses on more constructing new public assets.

Therefore, the public investments are financed by not only government budget, but also public – private partnership funds. It means that the government and a private sector partner working together and sharing risks to deliver policies, services and infrastructure. In this case, governments deal with private firms in order to increase economic condition and firm's productivity when their provision stands on the same point.

The public investment is technically different from other kind of government spending. According to (Fainboim, Last, and Tandberg, 2013), there are a number of distinctive challenges of tangible public investment.

- Investing in tangible public investment projects often demands significant cost and span several years. Making clearly accurate budgeting is naturally more challenging. Because public investment projects often exceeds estimating cost that is a major fiscal risk of the government.
- Sometimes spending on public investment claims that governments aren't always regular and predictable.
- The timing of cost and benefits is usually an imbalance because the projects often require up-front financing, while the benefits accrue over years and may be fully realized decades after the asset has been built.
- Spending on investment creates long-term assets that need for maintenance. Which means that create future financing obligations for operation and maintenance to government.

Mark Miller and Shakira Mustapha (Miller, Mustapha, 2013) mentioned that there are political pressures and corruption in public investment. First, political pressures, some kind of the huge sums and the appearance of investment gives obvious benefits to specific and particular locations. It means that politicians and voters pay attention to decisions on selection of public investment project processes. That process has political effects of public investment choices.

Second, corruption, the nature of public investment is also particularly prone to corruption. The construction of assets usually involves contracting private providers to undertake the work. Such contracts are often high in monetary value and so politicians and government officials get the potential returns from a contract winner.

2.3 Public Investment Management

The unique challenges of managing public investment appeal necessary for the efficient management of public investment. According to previous studies, efficiency of public investment depends on not only good system of appraisal and budgeting, but also decision on selection of public investment. It means that decisions take when preparing, selecting and implementing projects, such as reconsider to maintaining and operating the assets which construction has been completed. Mark Miller and Shakira Mustapha (Miller, Mustapha, 2013) mentioned that life cycle of public investment involves following various component processes.

- Investment appraisal, before public investment projects approve in fiscal budget, government officials decide and consider whether investment projects should go ahead or not.
- Selection of investment, it includes that selecting and approving new projects are financed by government budget.
- Project implementation, it is processed for implementing investment projects
- Operation and maintenance, after the construction has been complete, government supply maintaining and operating cost for it.
- Evaluation, processes for evaluating projects once they are completed to help inform the improved design and planning of future investments

According to these components, the public investment management cycle links to the annual budget cycle at certain key junctures.

However, there are critical challenges that happen in public investment management. In public investment appraisal phase, first, the guidelines may be unclear, and even if they are clear, the requirements to follow them may not be enforced. Second, the government may simply lack staff with the requisite skills and/or lack the necessary resources (such as reliable forecasting models or statistical data) to conduct complicated appraisals.

In the 1970s and 1980s, many countries invested in training their staff in Cost-Benefit Analysis (CBA) in order to resolve second problem. However, lack of continued political

support led to these staff moving on to other positions in government and not applying their skills to improve the project selection (Rajaram, Le, Kaiser, and Kim, and Frank, 2014).

Political interests may be forced certain public investment projects to adopt in the budget without accurate outcome of formal appraisals. They also would conduct public investment appraisal, after it has been approved by the legislator bureau in the annual budget. Even the management systems of appraisal are quite complicated, they may add the projects that estimated cost exceeds estimated benefits when the projects have a high political priority.

2.4 Politician's Self-interest

Most of studies based on self-interest axiom that related to human inherent behaviors and economic theories. There are crucial 2 definition of self-interest. Adam Smith's definition of self-interest axiom:

Man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. . . . It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages (Smith, 1937)

This assumption of the nature of human behavior applies equally to political decision making. John C. Calhoun's definition of self-interest axiom:

That constitution of our nature which makes us feel more intensely what affects us directly than what affects us indirectly through others, necessarily leads to conflict between individuals. Each, in consequence, has a greater regard for his own safety or happiness, than for the safety or happiness of others: and, where these come in opposition, is ready to sacrifice the interests of another to his own. (Calhoun, 1954)

According to these 2 definitions, we may assume that motivation of political party members try to acquire the income, prestige, and power which come from being in governing office. Thus, politician treats policies to the attainment of their private goals instead of carrying out particular policies. It means that formulate policies in order to win elections, rather than win elections in order to formulate policies.

However, they act like a pure social man, which they do something to improve the individual's utility income from their decision in order to loss their acquisition of holding the office.

Thus, every party wants to hold the governing office in order to they maximize to social well-being towards their political ideological. Charles S.Bullock mentioned that there were 20 percent of members who had elected at least ten period times in United States Congress in 1971 (Bullock, 1972). It seems that candidates on election campaign want to win the election in order to they get good pay and high prestige. Mayhaw argues that congress members who may have various personal goals, try to win reelection. Mayhaw defined key factor that has high influence on the reelection. It is credit claiming that persuade to voters, which their representatives or elected officials have done something to improve the voter's utility income from government activities. It means that the representatives or elected officials deliver particularized benefits to their constituents from government annual budget. Mayhew defines particularized benefits as those (1) allocated specifically to individuals, group, or geographic area; or (2) allocated in a manner that highlights the representative's instrumental role in securing the benefit (Mayhew, 1974).

Thereof, politician's self-interest of this study is that influence to planning process of local government, public investment in order to reelect in the next election campaign. In other word, representatives of local committee or elected official's influence to the decision making process that invest to their constituents such as build Sport stadiums, Public Park, and School in order to get more votes in the next election campaign.

But it is the main barrier of rational policy making which declines effectiveness of the investment. Anthony Downs recommended that governing parties never interested future return from their activities. They always focus on the next election and votes from constituting. Hence, no government aims at maximizing a stream of incomes composed of separate incomes for each of many periods. Rather, it always organizes its actions so as to focus on a single quantity. Its vote margin over the opposition in the test at the end of the present election period (Downs, 1957). It demonstrates that public investment of democratic government, unlike to private investments. In other word, the government is never concerned about future income of the investment like never calculate net present value of the investment. It is the main reason why their investments are usually inefficient.

2.5 Voter's Desires

Why does the incumbent party invest in the specific area in order to gain votes? First, we need to recognize what voter's desire is. Second, to define that voters how chooses candidate on the voting form. According to the self-interest axiom, individuals have selfish

desire that improves their utility in spite of others. In other word, the benefits of voters in the decision making are streams of utility from government activities. Because rational people always take one which may give highest benefit and spent lowest cost. Utility is measurement of benefits in voters' mind which he or she uses to decide between alternatives. There are quite a lot of utility from government activities such as their streets are policed, water purified, roads repaired, shores defended, garbage removed, weather forecast, etc.

Anthony Downs defined that voters how making rational decisions in an election period towards incumbents and previous governments, utility incomes (Downs, 1957). At least two election periods enter into a rational voter's calculation: the one following the coming election, and the one ending on Election Day. We will refer to these periods $t + 1$ and t respectively. To illustrate the verbal analysis, we also employ several other symbols as follows:

- U stands for an individual voter's real or hypothetical utility income from government activity during one election period.
- A is the incumbent party, i.e., the governing party in period t .
- B is the opposition party, i.e., the party out of power in period t . (In the first part of the analysis, we assume a two-party system.)
- U^0 stands for utility income actually received during a period. It is the utility income provided by the party in power during that period.
- U^t stands for the utility income which a voter believes is the highest he could possibly have received during some period. It is the utility income which the ideal government would have provided him if it had been in power during that period.
- E stands for expected value.

The citizens vote to the party that he or she believes which party will provide to him a higher utility income than any other party. Indeed, citizens compare the utility income of each party's government office. In a two-party system, this comparison can be set up as a simple subtraction.

$$E(U_{t+1}^A) - E(U_{t+1}^B) \tag{2.1}$$

The difference between these two expected utility incomes is the citizen's *expected party differential*. If it is positive, he votes for the incumbents; if it is negative, he votes for the opposition; if it is zero, he abstains.

However, if citizens are more rational who know that any party could not do everything, citizens consider that performance of the parties. In this case, both performances of incumbent and opposition parties must take place (2.2) under the same conditions, and in the same time period. Therefore the voter must weigh the performance that the opposition party would have produced in period t if it had been in power.

$$(U_t^A) - E(U_t^B)$$

It means that citizens actually have received utility income from incumbent in period t deduct citizens would have received from if the opposition had been powerless. This difference is *current party differential* that is important to voters' decision making.

In answer to the question, voters always want to get more utility income from government activities. It is the basis of the government's policies which can reach maximum social well-being. Thereof, political parties always play on the voters' desire which they change or set political policies in order to get power, prestige, and income from the election.

2.6 Official's Independence

Rainey (2014) mentioned that government executives often have to be very responsive to elected officials. For example, the researcher interviewed the secretary of the Florida Department of Community Affairs. The department managed programs into people who are struck by a hurricane. It got a lot of attention from political officials. Because it had a high influence on constituencies of them. During the interview, even though the secretary had agreed to take no phone calls, she would have to interrupt the interview to return a phone call. Then, she showed the message to the interviewer that was from one of the powerful state senators. It said that "this is my SECOND phone call to you and you have not returned my call." She felt that she had better return the call right away. It represents that government officials have high pressure from elected officials.

Rainey also mentioned that there are ten sources of political authority and influence of institutions, entities, and actors in the political system on government staffs environment as Chief Executives, Legislative Bodies, Courts, Government Agencies, Other levels of Government, Interest Groups, Policy Subsystems and Policy Communities, News Media, General Public Opinion and Individual citizens (Rainey, 2014).

Political authority influences (Chief Executives and Legislative Bodies) often occur in South Gobi province government staff environment. Chief executives have the greatest formal

power of the public bureaucracies in their jurisdictions. For example, appointments, chief executives appoint heads of executive agencies and usually an additional array of patronage positions within those agencies. Those new agency heads often change agency's action and outcomes into chief executives preferences (Wood, Waterman, 1994). There are also policy initiatives and executive orders in the environment. It means that chief executives have formal authority to order agencies what they should do (Cooper, 1996). It demonstrates that chief executives, the mayors are the most influential actors who may initiate and implement public investment projects without cost and benefit analysis.

Another huge factor is informal influence of the legislative body that legislators call administrations on the phone to press them for information or to ask for certain actions. If administrations may not respond the phone call, outraged legislator whose districts will loss facilities and public investment projects frequently expresses about effectiveness administration operation, or decline budget of their projects.

Warwick (1975) mentioned that legislators press for the hiring of political friends and allies in agencies or argue against their firing. It means that staffs are feared to loss their job by arguing against chief executives and legislators

2.7 Pork Barrel

Pork barrel politics are part of congressional life and the legislative process. David Mayhew mentioned that linkage between representative's desire for reelection and particularized benefits (credit claim) (Mayhew, 1974). It involves pork barrel projects.

Therefore, pork barrel projects and distributive benefits are discrete both highly divisible benefits targeted to specific populations such as states and congressional districts; the cost is spread across the general population through taxation.

Rational theorists (Ferejohn, 1974) (Shepsle, Weingast, 1981) (Baron, 1991) argued that distinguish between pork barrel and distributive benefits. They define pork barrel benefits as a subset of distributive policy consisting of inefficient policies, in the sense that the cost of a pork barrel project exceeds its benefits (Evans, 2011).

Representatives' motivation of seeking pork barrel is clearly recognized by two categories of reasons. First, they supply pork barrel to themselves in order to improve satisfaction of constitutes district demands. It may boost the recipients' chances of reelection (Shepsle, Weingast, 1995). Second, representatives support pork barrel for their collective benefits. Key political actors support their most favored general interest legislation (Evans,

1994) (Lee, 2003) party lead the party's majority try to protect party's majority (Balla, Lawrence, Maltzman, and Sigelman, 2002) (Cox, and McCubbins, 1993), and bureaucrats support pork barrel for their agencies and programs (Arnold, 1979). Thus, these two kind of categories are explained by individual-benefit and collective-benefit theories.

2.8 Logrolling

Voters exchange their vote in order to would pass their issues by the committee. In other word, decision makers have not enough vote to pass their bill in committee. Then, they support other's bills that are unrelated to their bill. From the result of the activities, they may get other's votes into their own bill. Such a vote-trading process is called "logrolling".

Buchanan mentioned that there are 2 ways that occur logrolling. First, it happens in a small structure of direct and representative democracy committee. In this way, changing the votes is easy to arrange and operate. Second, implicit logrolling, large bodies of voters may be called on to decide on complex issues, such as which party will rule or which set of issues will be approved in a referendum vote (Buchanan, 1962). In other word, it occurs when political interests succeed in pairing two or more issues of strong interest to divergent groups on the same ballot or the same bill. For example, when the local representatives committee approves an annual budget of local government, representatives who want to get investment funds into constitutes find someone who has the same goals to them. They push investment projects into local government public investment list in annual budget. If local government refuses their projects, they make deadlock in local committees. Otherwise, they support to local government annual budget.

Buchanan mentioned that ethical and moral considerations are both crucial to logrolling process. If vote trading process without ethical and moral occurs in there, perhaps, income may not addressed to society instead voters may increase personal incomes. Therefore, even if vote-trading should be viewed as a morally reprehensible behavior, it might still be necessary to analyze the phenomenon carefully if it were observed in the operation of real-world political processes (Buchanan, 1962).

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Research Framework

The study examines correlation between rational decision making system and external factors that involve politician self-interest, official’s independence, and voter’s desires. In other word, it defines clearly these external factors how influence on a public investment plan of the South Gobi province.

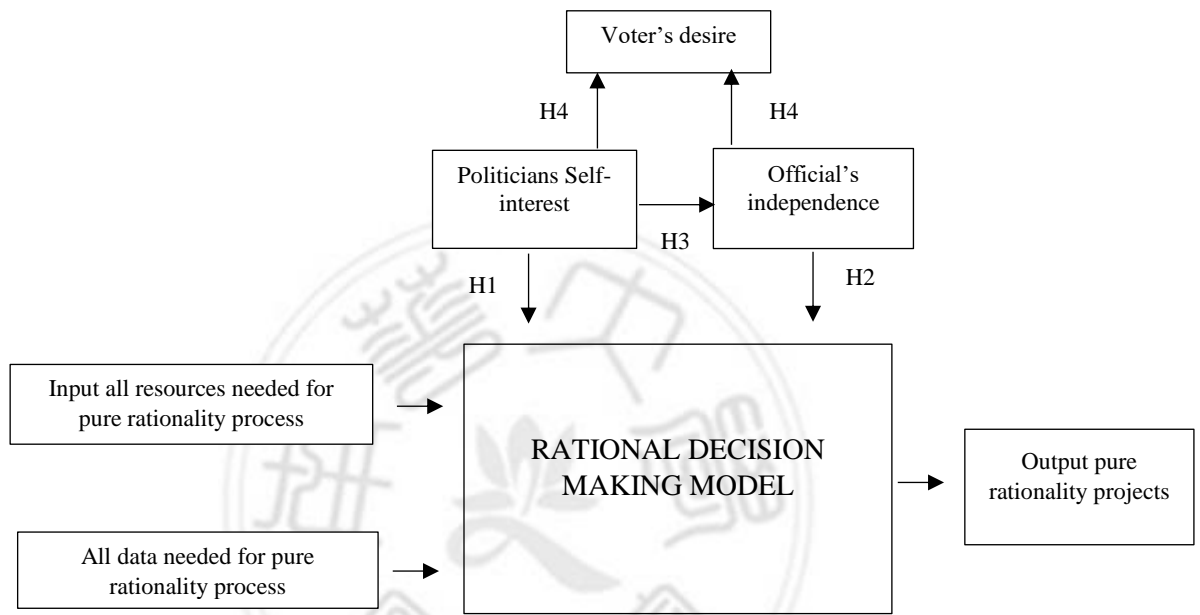


Figure 3.1. Research Framework

Source: Drew by Author

Table 3.1. Summary of Hypothesis

H1	Politician self – interest influences on the output of rationality process.
H2	Official’s independence influences on the output of rationality process.
H3	Politician self – interest influences on official independence.
H4	Politician self-interest and officials' independence both reconcile to voter’s desire.

Source: Drew by Author

3.2 Research Flow Stages

Research flow process helps to understand the relation of each stage, according to the proposed hypothesis. Each stage has a crucial understanding of public investment, political and governing procedure, public opinion, and policy evaluation in order to approve the proposed hypothesis.

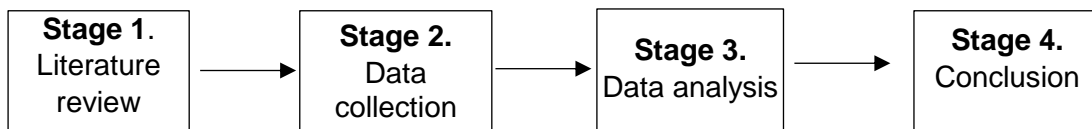


Figure 3.2. A Research Follow Stages

Source: Drew by Author

Stage 1. Literature review: Collect academic journals, books, and studies related to the topic in order to improve researcher's theoretical knowledge and clear define the terms of this study.

Stage 2. Data Collection: Primary and secondary data both are useful for this study. In this stage, researcher (i) sets criteria in order to choose appropriate public investment projects from the South Gobi province 2019 annual investment projects list, and (ii) explores some reasons what happened in planning process of the investment.

Stage 3. Data analysis: first, the study conducts cost-benefit analysis in order to approves to proposed projects are inefficient than alternatives. Second, interview, explores factors reason why the government chose inefficient projects. Third, it explains the relationship between the outcomes of cost-benefit analysis and interview.

Stage 4. Conclusion: according to result of data analysis, the researcher gives hints to stakeholders of the public investment projects that they how to improve their investment effectiveness, how to avoid external factors, and how to effectively allocate public resources into society and the economy.

3.3 Data Collection Method

Previously part of the study mentioned that there are two kinds of data resource such as primary and secondary. First, we have to determine secondary data resources and why we use it. Second, we also define target respondents of the interview in order to get primary data.

3.3.1 Secondary Data

According to (Kumar, 2011), someone gathered your required data from other resource in order to use own research or support someone's studies. In qualitative research, it separates to two categories as descriptive (historical or current) and narrative information. In quantitative research, it extracts categorical and numerical. There are a lot of sources such as bellows.

- Government and semi-government publications - these organizations collect data on a regular basis in a variety areas. They publish it for public and interest groups use it.

For example, census, vital statistics, registration, labor force surveys, health reports, economic forecasts, and demographic information.

- Earlier research – there are innumerable number of studies in practice. It can provide the required information to researchers.
- Personal records – someone writes personal notes about historical and personal records. It is very helpful to researchers.
- Mass media – reports published in newspapers and on the internet. Nowadays, it becomes very popular secondary data source (Kumar, 2011).

Moreover, it has weaknesses and strengths of using in studies. The main benefit of using secondary data sources is that it saves time and expense of collecting information. Although, when a researcher uses it, he or she should be more careful to validity and reliability, personal bias, availability of data, and format of data. It losses their original intention of collecting from primary sources; information mentions from source to source. It declines validity and reliability of information. Personal bias is another important factor that may decrease validity and reliability. Holder, who belongs the personal diaries has different objectives and purpose from certain researchers.

Another huge weakness is format of data that requires the same measurement of data. It means that format of current study variables has to be pretty same to secondary data variables. Actually, it is quite difficult to be the same format in practice.

A main object of this study is the ratio of public investment effectiveness. It means that this study examines effectiveness of public investment projects of the province in 2019 fiscal year according to their keeping documents and statistical data. Therefore, the researcher collected secondary data from a Local Government of South Gobi province.

Table 3.2 Secondary data resources

Sources	Information	Validity
Department of Investment and Development Policy Planning	<ul style="list-style-type: none"> - Public investment plan of 2019 fiscal year - Demands and requisition of proposed projects - Documents of planning process - Alternatives that are waiting for implementing 	Good
Department of Statistic	<ul style="list-style-type: none"> - Population of specific area - Gross Domestic Products of targeted area - Other statistical data that related to the topic 	Good
Office of Local Representative's Committee	<ul style="list-style-type: none"> - Notes of Committee - Representatives opinion - Other required data 	Good
Department of Finance	<ul style="list-style-type: none"> - Economic circumstance of the province - Income and expense - Annual budget 	Good
Department of Public Administration	<ul style="list-style-type: none"> - How to define demand and requisition - How to push on the list? - Expected returns of the projects 	Good

Source: Drew by Author

3.3.2 Sample of Public Investments

There were 85 public investment projects planned in 2019 fiscal year. If a researcher will evaluate all of these projects, it will consume a lot of time. Thus, this study is conducted by judgment sampling in order to choose more appropriate public investment that may illustrate aspects on the planning process of public investment.

Judgment sampling (a type of purposive sampling) occurs when units are selected for inclusion in a study based on the professional judgment of the researcher. Judgment sampling

commonly used for a variety of reasons. The main goal of judgment sampling is to deliberately select units (people, events, objects) that are convenient to approve research hypothesis. It is often associated with qualitative and mixed-method study designs. It may provide desired information to researcher. However, it has limitation which it may prone to researcher bias.

In order to avoid the researcher bias, criteria are defined, what is key measures of inefficient public investment by theoretical background (Chapter 2).

Table 3.3 Criteria of researcher judgment

No.	Criteria	Description
1	Place	The public investment projects have to be available to build in all villages of the province.
2	Demand	General purpose of the projects increase satisfaction of population in proposed place instead of increase their needs.
3	Social infrastructure	The projects, which have to be social infrastructure that, solve social problems.
4	Budget	Total amount of budget above 500 million Tugrik.
5	Initiated by politicians	Someone who is a politician or elected officials initiates the projects.

Source: Drew by Author

Table 3.4 Proposed public investment

No.	Name of projects	A Brief Description
1	New Sport Hall of Khankhongor village	<ul style="list-style-type: none"> - Capacity of Building: 5617.18 m³ - Efficient area: 781.14 m² - Total budget: 1,031.2 million tugrik.
2	New Sport Hall of Bayandalai village	<ul style="list-style-type: none"> - Capacity of Building: 5617.18 m³ - Efficient area: 781.14 m² - Total budget: 1,031.2 million tugrik

Source: Drew by Author

3.3.3 Interview

The interview is a commonly used method of collecting information from people who keep primary data. There are many definitions of interviews as according to (Monette, Sullivan, DeJong, 1986) an interview involves an interviewer reading question to respondents and recording their answers', according to (Burns, 1997), 'an interview is a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to elicit information, beliefs or opinions from other person'. In other word, interview is discovered cause of phenomena by interviewer integrate to individuals or groups opinion. It is often used in planning monitoring and evaluation studies. It gives opportunity to researcher which research fluently formulates question and think about the results. Interviews are divided into different categories such as unstructured and structured, semi-structured interviews.

Unstructured interviews are free to set the question sequence in during the interview. It means that the researcher may formulate the question when important issues occur in context of discussion. It's often used in both qualitative and quantitative studies. In structured interviews, the researcher ask predetermined questions, and set order of questions as an interview schedule to respondents.

Semi-structured interviews base on a checklist of predetermined questions. But it also is allowed to discuss on interviewee's interest and opinion. Therefore, the interviewer isn't always asking questions in the same order, and the same way in during the interview. Questions can be added or omitted as appropriate, and questions on the checklist can be asked in different ways or at different times during the interview by the interviewer. During semi-structured interviews, respondents are often encouraged to give examples or elaborate on different aspects of the topics which are of interest to them, or seem important to them. This can lead to important issues being raised which the interviewer had not previously considered.

Thus, this study used semi-structured interviews in order to explore the aspects on planning stage of public investment in the local government that decrease efficiency of proposed public investments. There are the main reasons why choose it, which is good for acquiring qualitative information on a range of topics, and are useful for acquiring information on unintended as well as intended changes brought about through a project or program. They are more systematic than unstructured interviews, and can lead to the generation of some statistical data.

3.3.4 Respondents of Interviews

Department of Investment and Development Policy Planning dominantly contribute the planning process of public investments in the South Gobi province. Mayor of the province is main contributor of this stage. Interviews involve mayor, chief, and staffs of the department.

Table 3.5 Respondents

No.	Name	Occupation	Contribution
1	Naranbaatar. N	Mayor of South Gobi province	<ul style="list-style-type: none"> - He is elected official, representatives of the local committee, and chief of the incumbent party. - He has a lot of political power in the province - He makes the final decision of every project, which build or refuse it. - A lot of citizens and politicians suggest new ideas of public investment projects to him. Thus, he is more initiative than others. - He manipulates budget of the province - He gives orders to local government staffs
2	Sukh-Erdene. J	Head of Department of Investment and Development policy planning	<ul style="list-style-type: none"> - He is manager of local government bureaucracy. - He manages a team that plans every development policy and public investment. Thus, he has power that gives order, initiates projects, and submit or refuse other's initiated projects
3	Zolboo. Ts	General Architecture of South Gobi province	<ul style="list-style-type: none"> - He is the staff of the department. It means that he has to follow orders of the head and mayor. - He draws plan of new projects and

			approves other building plans that other people designed.
4	Chinjargal. N	Staff of Department of Investment and Development Policy Planning	<ul style="list-style-type: none"> - She calculates the cost-benefit ratio of planned projects. - She develops usages and demands of the projects - She calculates required finance of the projects.

Source: Drew by Author

3.4 Data Analysis Method

This section illustrates data analysis tools, technique, and method that used in this study. As the data analysis is the procedure of investigating collected data. In order to researcher makes a conclusion based on the result of data analysis, this study conducted a cost-benefit analysis for investigating proposed public investment projects, and descriptive analysis for interviews.

3.4.1 Cost-Benefit Analysis

Cost-benefit analysis is a practical technique to determine the merits of alternatives of local government projects over time. Usage of cost-benefit analysis provides essential information to government and citizens which means it contributes to make choices among alternative government projects. In other word, a cost-benefit analysis is a systematic approach to estimating the outcome of a policy. It is an analytical tool used to estimate the costs and benefits of a policy in monetary terms, and to subsequently answer the question of whether the policy, project or investment has benefits that are larger than the costs, and higher benefits than alternative policy options ((CIPE), 2017).

Hyman recommended that there are three basic steps involved in a cost-benefit analysis are (1) enumerate all costs and benefits of the proposed project, (2) evaluate all costs and benefits in dollar terms, and (3) discount future benefits (Hyman, 2005). This allows future benefits and costs to be reduced to their present value so that they can be compared with the dollar amount of budget authority necessary to finance the project. It seems simple to conduct. But it might require the combined talents of economists, engineers, and scientists to correctly enumerate and evaluate cost and benefits. As benefits can be divided into direct and

indirect benefits. Costs are defined correctly defined by alternative benefits if the alternative is adopted as opportunity costs. Thus, there isn't a formula or template for correctly conducting cost benefit analysis.

Therefore, this study sets step of cost-benefit analysis as below chart (figure 4).

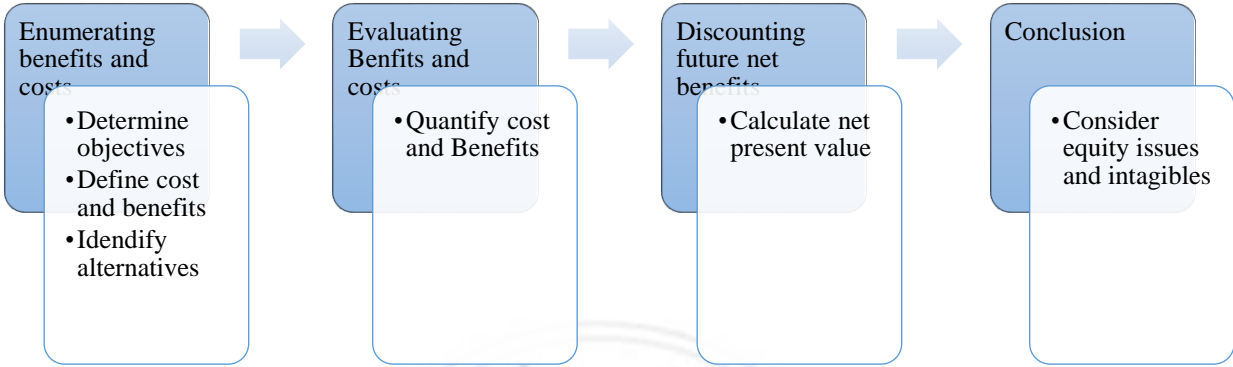


Figure 3.3. A Research Follow Stages

Source: Drew by Author

In addition, the discount rate is crucial to rank cost-benefit ration. As positive interest rates imply that dollar of benefits in the future will be less than a dollar of present benefits.

In general, the present value of X dollars to be received n years from now at simple interest rate r is obtained by solving the equation $X = PV (1+r)^n$

$$PV = \frac{X}{(1+r)^n} \tag{3.1}$$

The higher the interest rate used to discount a certain amount of future income X, the lower the present value of X. The interest r, called the social rate of discount, is used to compute the present value of X. If a particular project yields benefits over a number of years, the net benefits, X_i , per year must be discounted in each year as follows:

$$PV = \sum_{i=1}^n \frac{X_i}{(1+r)^i} \tag{3.2}$$

In addition, projects are usually ranked by discount net benefits in order to make a decision. There are two kinds of equation to compare alternatives. First,

$$Net\ Benefit\ Criterion: B - C = \sum_{i=1}^n \frac{(B_i - C_i)}{(1+r)^i} \tag{3.3}$$

If all projects have positive net benefits, it is quite difficult to set rank and make decisions. Thus, decision makers often used to benefit cost ratio that the present value of the

benefit is divided by the present value of cost. Where B_i are benefits in year i , C_i are costs in year i , n is the life of project, and r is the discount rate.

$$\text{Benefit - Cost Ratio: } \frac{B}{C} = \frac{\sum_{i=1}^n \frac{B_i}{(1+r)^i}}{\sum_{i=1}^n \frac{C_i}{(1+r)^i}} \tag{3.4}$$

If decision makers enumerate correctly criterion and ration, these rules may ensure that inefficient public investments will not approve in the government budget. However, it is quite difficult to accurate ration without miscalculation. As Cost – benefit analysis is more of an art than a science. It requires a lot of special skills from scientists, engineers and other experts who evaluate cost and benefits.

3.4.2 Deductive Qualitative Data Analysis

In qualitative research, there are frequently used two kind of data analysis approach as inductive and deductive. Frist, inductive approach, which is top-up approach, it tends to observation become to theory. Second, deductive approach is bottom-up approach that is aimed to approve hypothesis by observation and evidence.

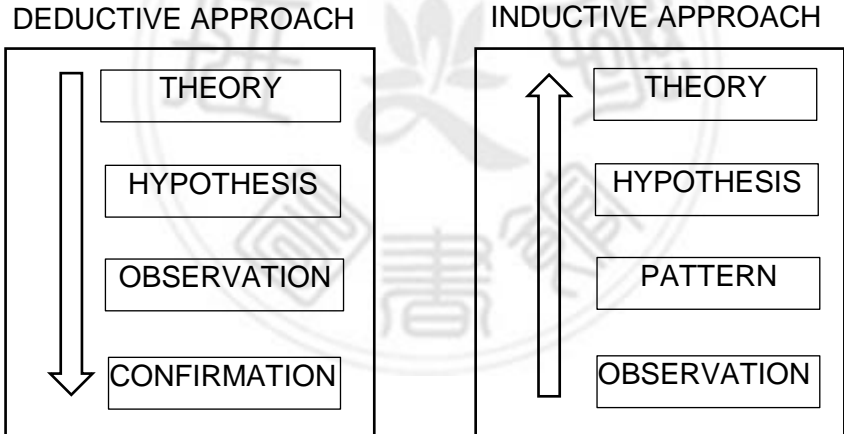


Figure 3.4. Deductive Approach versus Inductive Approach
 Source: (Boyatzis, 1998)

Deductive qualitative research may be different from other qualitative approaches in that it takes as its departure point, the theoretical propositions that are derived from a review of the literature and applies these to the collection and analysis of data (Boyatzis, 1998) (Fereday, 2006) (Hyde, 2000). In other word, it compares conceptual theoretical assumption and collected data in order to approve research hypothesis.

It may contribute to not only assessment, intervention, and evaluation in social issues – but also conducts policy research, program development and evaluation, community

organizing, social development, advocacy, and studies of program implementation. The findings of the deductive qualitative analysis are a good fit with the research agenda of the social problem solution, because they arise out of the interaction of researchers with research participants, show multiple meanings and multiple dimensions of human phenomena, and, at their best, show connections between concepts and theories and their concrete indicators in the natural world. In addition, there are three types of initial concept model of deductive qualitative analysis, such as highly abstract parsimonious, composed of a loose set of ideas, and roughly formulated ideas and hunches.

Moreover, pattern matching is crucial to conduct the second type of initial concept of deductive analysis. It was described by (Campbell, 1975), which it origins in quantitative studies using small samples, and usefulness and appeal was in identifying patterns in small data sets and in testing hypotheses. However, (Hyde, 2000) and (Yin, 2014) recommended that it may able to use in qualitative studies. Pattern matching involves identifying the patterns in data, and then comparing this against one or more patterns that are proposed in the literature (Almutairi, Gardner, and McCarthy, 2014) (Gibbert, Ruigrok, & Wicki, 2008).

Therefore, this study uses deductive qualitative analysis, and pattern match in order to approve politician self-interest influence of rational decision making theory. There are the six steps in the procedure for deductive qualitative analysis with pattern match in Table 3.6.

Table 3.6 Procedure of Deductive Qualitative Research

No.	Step	Description
1	Conceptual framework	<ul style="list-style-type: none"> - Summarizing a literature review is helpful to reach a conceptual framework for the deductive qualitative analysis. - It explains either graphically or narrative form, and defines the key factors, variables, or constructs – and the presumed interrelationship among them. - It could be simple or elaborate, commonsensical or theory driven, and descriptive or causal (Miles, MB, Huberman, AM, & Saldaña, J, 2014). - This study has drawn at <u>Research framework</u> (see figure 3.1)

2	Propositions	<ul style="list-style-type: none"> - A proposition is a statement of the qualitative nature of the relationship between various concepts contained in the literature. - The propositions have to be derived from the theory. - The positioning of the propositions in the conceptual framework should also be evident (Yin, 2014) - It adjusted in Research framework (see Table 3.1)
3	Code book	<ul style="list-style-type: none"> - The key concepts are given an abbreviation (or code) to facilitate the labelling of the data. A preliminary code book is generated based on the conceptual model that was developed from the literature review. - As data are often text such as interview, or document.
4	Question matrix	<ul style="list-style-type: none"> - While the interview will be semi-structured in nature, it is essential in deductive qualitative studies that the researcher prepares interview questions pertaining to all the propositions of the study, and that all of these questions are asked in the interview.
5	Data collection	<ul style="list-style-type: none"> - It described in section 3.3 (<u>Data collection method</u>)
6	Analysis	<ul style="list-style-type: none"> - The code book and coding memorandum are applied to the analysis of the data collected. This involves reviewing, revising and/or confirming that the codes do in fact appear in the data by finding examples (Boyatzis, 1998). - A theme “represents some level of patterned response or meaning within the data set” (Braun, V & Clarke, V, 2006). Themes therefore arise from connecting codes to one another and thereby identifying patterns in the data (Fereday, 2006)

Source: Drew by Author

CHAPTER 4. ANALYSIS OF DATA

4.1 Cost and Benefits Analysis

According to the proposed public investment project, sport facilities must be operated and maintained primarily for the purpose of facilitation of community sports activity. Therefore, there are three key factors in assessing effectiveness of sports facilities as impacts, benefits, and value. First, impacts, which the outcomes facilitated by community sport infrastructure, can be both positive (benefit) and negative (cost). Second, benefits, which the positive outcomes facilitated by community sport infrastructure, can be represented by net impact where net impact is positive. Third, value, which is used to describe net benefits delivered and supported by community sport infrastructure.

Participation in sport activity in sport facilities brings particular benefits to individuals and collective community. Government agencies build sport facilities and recreation in order to contribute community health and wellbeing, confidence building and empowerment, social integration and cohesion, national and cultural identity, and reduction in crime and vandalism (Grieve, and Sherry, 2012).

Crompton (2001) mentioned that there two basic category of impacts of social facilities as (1) an economic impacts, and (2) noneconomic impacts. First, economic impacts involve things as spending by at events, by players in the community, money generated by spin-off businesses, as well as a wide variety of other impacts that can be tied to the flow of money in the economy. Second, noneconomic impacts include social impacts, such as the communal experience of attending sporting events at a ballpark or the community identity and pride generated by a local championship team. In other word, economic impacts may increase economic activity, productivity, employment, contribution of volunteers, and induce visitation. Noneconomic impacts are divided in two categories as health impacts, social impacts (KMPG, Australian Sport Commission , 2018).

4.1.1 Cost and Benefits of Sport Hall

According to above understating of sport facilities, this study adjusts economic and community costs and benefits. The assumption is well to define cost and benefits in high development countries. However, there are few restriction of defining cost and benefits, according to the assumption in Mongolia. First, Emerging of economic impacts is quite week because economic condition and population both are pretty lower than high development

countries in targeted areas of proposed projects. Second, Community integration not only depends sport infrastructure, but also culture, and other social affairs.

4.1.1.1 Economic Cost and Benefits

Table 4.1 illustrates direct and indirect real cost in order to assess costs and benefits of the sport hall. As Cost and benefit analysis is enumerated by money term. Table 4.1 also represents that local government don't adequately enumerate indirect costs of the project.

Table 4.1 Economic costs of sport hall

No.	Cost	Brief description
Direct cost		
1	Land Acquisition Cost	<p>Definition:</p> <ul style="list-style-type: none"> - The local government pays funds to individuals and organization for land which belongs them in order to build a sport hall on the land. <p>Proposed project:</p> <ul style="list-style-type: none"> - In targeted area, government have not to buy the land. As anyone did not belong the land.
2	Construction Cost	<p>Definition:</p> <ul style="list-style-type: none"> - Expense incurred by contractor for labor, raw materials, equipment, financing, services, utilities, and overhead, contractor's profit. <p>Proposed projects:</p> <ul style="list-style-type: none"> - 1,031.2 million tugrik (approximately 412.5 thousand USD)
3	Operation and Maintenance Cost	<p>Definition:</p> <ul style="list-style-type: none"> - Expenses that related operations and fixing the sport hall as salary, facility equipment, electric and water fee, etc. <p>Proposed projects:</p> <ul style="list-style-type: none"> - The province government did not enumerate these costs. - This study calculates it that compared other sport facilities example.
Indirect cost		
4	Required Infrastructure Improvements	<p>Definition:</p> <ul style="list-style-type: none"> - Expense to improve infrastructure that supplies the projects. For example: electricity, water, road, heating, etc. <p>Proposed project:</p> <ul style="list-style-type: none"> - That infrastructure did not plan on the budget.
5	Public Service Cost for Events	<p>Definition:</p> <ul style="list-style-type: none"> - Expenses that related to organizing public sport activity which proposed to arise impacts on villagers. For example:

		<p>police, when there will be organized public events, more than vacancy of a policeman should work on there.</p> <p>Proposed projects:</p> <ul style="list-style-type: none"> - It was not calculated
6	Opportunity Costs of Funds	<p>Definition:</p> <ul style="list-style-type: none"> - Value of public investment instead of building sport hall in targeted areas. <p>Proposed project:</p> <ul style="list-style-type: none"> - It was not enumerated
7	Opportunity Costs of Land	<p>Definition:</p> <ul style="list-style-type: none"> - The value of the land instead of building a sport hall on the land. For example: there are alternatives that use the land in order to improve satisfaction of villagers as build green park, and public utility. Local government also transfers the land certificate to private companies. <p>Proposed projects:</p> <ul style="list-style-type: none"> - It was not enumerated

Source: Drew by Author

Table 4.2 represents circumstance of direct and indirect benefits of sport hall. According to Table 4.2, the government of the province has not idea of the benefits of the sport hall. It becomes a question that “what are expected benefits of the sport hall of the provincial government?” This study will clarify it in Deductive Qualitative Analysis.

Table 4.2 Economic benefits of sport hall

No.	Benefits	Brief description
Direct		
1	Sport Hall Revenues	<p>Definition:</p> <ul style="list-style-type: none"> - The sport hall is rented by companies or individuals, or groups who pay for it. For example: company’s employee work out in the sport hall in order to company reaches human resource goals. An Amount of the revenue depends market and population of the area. <p>In project:</p> <ul style="list-style-type: none"> - It was not calculated.
2	Tax Revenues	<p>Definition:</p> <ul style="list-style-type: none"> - If the project becomes the essential background of running a business in the area, tax income of the province improves. <p>In project:</p>

		- It was not calculated.
3	Spin-off Business	Definition: - It may become good environment of business. In project: - It was not calculated.
Indirect		
4	Village Development	Definition: - The project would influence to village development. It depends how much economic and community impact of the projects. In project: - It was not calculated.
5	Impact of Other Events	Definition: - It may be background of other events that proposed to improve the economy of the area, or province. In project: - It was not calculated.
6	Economic activity	Definition: - The value that expenditure on community sport infrastructure add to the province's economy. In project: - It was not calculated.
7	Productivity	Definition: - The value of the additional productivity of physically active people. For example: the people who participate through community sport infrastructure, improve productivity in their workplace. It may influence to the province's economy. In project: - It was not calculated.
8	Employment	Definition: - The number of people who manage to operating activity may be employed in the project. In project: - It was not calculated.
9	Contribution of Volunteers	Definition: - The value of the contribution of volunteers to community sport. In project: - It was not calculated.
10	Visitation	Definition:

		<ul style="list-style-type: none"> - The economic benefit of tourism generated by an event held at the projects. <p>In project:</p> <ul style="list-style-type: none"> - It was not calculated.
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Source: Drew by Author

4.1.1.2 Community Cost and Benefits

Table 4.3 illustrates that the sport hall may bring unfixable problems to the community. If it will happen after construction complete, the province government spend overestimated budget for solving the problems.

Table 4.3 Noneconomic cost of sport hall

No.	Benefits	Brief description
1	Community identity	<ul style="list-style-type: none"> - If the project will be failed, the community will argue the value of the project. It may bring serious problems to villagers living environment.
2	Potential for Political Conflict	<ul style="list-style-type: none"> - Sports facilities almost always engender tremendous political debate, requiring substantial investments of resources from the governing coalition and diverting attention from other issues of importance. Additionally, these projects often polarize a community, generating political discord that can haunt a community for years.
3	Disconnect with Development Logic	<ul style="list-style-type: none"> - The project may not link to the development policy of the area or province. For example: the area villagers would plan to improve livestock, but the sport hall would not directly support their purpose. It may arise problems that villager conflict with local government.

Source: Drew by Author

Table 4.4 shows that there are more significant benefits than economic benefits. It required that decision maker has to consider noneconomic benefits of public sport facilities.

Table 4.4 Noneconomic benefits of the sport hall

No.	Benefits	Brief description
Health		
1	Personal health benefits	- The benefits derived by individual participants through decreases in their risk of developing chronic diseases and a reduction in the severity of mental illness as a result of being physically active.
2	Health system benefits	- The savings to the health system as a result of improved health of villagers.
3	Reduce risk of accidents	- Participation in sports can significantly reduce the risk of fall related injury in elderly, sport hall can reduce the risk of drowning.
Social		
4	Human capital uplift	- Participants in the sport benefit from cognition as well as the development of a number of skills that improve their education employability outcomes
6	Social inclusion	- The sport hall, by facilitating the creation of links between different sectors of the community, can improve social inclusion.
7	Community pride	- Communities can take pride in the successes of their local sport teams, as well as events hosted at community sport facilities.
8	Positive role modelling	- Role models of positive behaviors provided for young people in the village.
9	Reduction in crime and anti-social behaviors	- Academic and anecdotal evidence to support the assumption that community sports and the reduction and anti-social behaviors have a significant positive relationship.
10	Elite sporting outcomes	- The outcomes supported by the development of professional and traditional athletes through community sports, including national pride and the role modelling of a healthy lifestyle.
11	Disaster response	- Broader uses of the many sports facilities are disaster response center or central meeting points in remote communities.

Source: Drew by Author

According to the tables, the government of the South Gobi province has never calculated benefits of sport facilities in order to reach their vision. It is quite difficult to compare cost

benefits ratio of proposed projects and alternatives. Therefore, the study sets some required cost and benefit within example of community facilities.

4.1.2 Alternatives

The south Gobi province has 15 villages, one of them central village of the province (Dalanzadgad). There are not community sport facilities despite of high school, mining company, and central village. Assumption of the community benefits of sport facilities demonstrates that it has a lot of significant benefit to the community. It would become main demands that decide to build new sport facilities in a specific area. Thus, this study considers alternatives that there are 14 possible places for build sport facilities.

Table 4.5 Alternative places

No	Place name	Population					Singularity of the area
		2014	2015	2016	2017	2018	
1	Bayandalai	2098	2090	2098	2082	2088	Livestock is main singularity
2	Bayan - Ovoo	1706	1716	1758	1733	1753	Livestock is main singularity
3	Bulgan	2076	2092	2066	2122	2104	It is the basis of the agricultural sector
4	Gurwan Tes	4503	4617	4729	4869	4934	Few national mining companies run in there.
5	Mandal- Ovoo	1622	1615	1628	1602	1633	Livestock is main singularity
6	Manlai	2522	2481	2499	2577	2588	Livestock is main singularity
7	Noyon	1347	1336	1357	1394	1406	Livestock is main singularity
8	Nomgon	2572	2557	2567	2580	2564	Livestock is main singularity
9	Sevrei	2015	2026	2055	2009	2008	There is a lot of the famous attraction of travelers.
10	Khanbogd	5057	5344	6387	6978	7668	There is a biggest copper mining company as Oyu Tolgoi LLC.
11	Khanhongor	2099	2047	1992	2010	1987	Livestock is main singularity
12	Khurmen	1610	1597	1590	1593	1553	Livestock is main singularity
13	Tsogt-Ovoo	1677	1694	1760	1811	1816	Intersection of domestic transitive

							infrastructure
14	Tsogttsetsii	6574	7030	7103	7422	7869	There are three biggest coal mining company running a business. A lot of workforce moved to there from other provinces.

Source: Drew by Author

Table 4.5 represents that proposed area of the project has 2088 population in 2018 as well as it ranked at 7th in the province (Department of statistic, 2018). It means that there are six more significant places where it has a higher population than proposed area. As the population is a crucial measurement of benefits as how many people can get benefit through the sport facilities.

4.1.3 Value of Cost and Benefits

According to above assumption of cost and benefits, value has to be separated by two categories as economic and noneconomic value. In this case of sport facilities, the economic cost is obviously exceeded by economic benefits, therefore, it represents that noneconomic value is higher than economic value. Thus, this study considers two kinds of cost-benefit ration.

Table 4.6 Budget of sport hall in Dalanzadgad (2018)

SOURCE	Amount
<i>(Thousand MNT)</i>	
COST	
- Construction cost	0
Operating cost (usage of the sport hall)	
- Electricity	3,427.0
- Water	10,920.4
- Heating	3,119.0
BENEFITS	
- Sport hall revenue	10,000.0

Source: Budget of Sport Hall in 2018

Table 4.6 shows that the operating cost of the sport hall in Dalanzadgad was higher than the benefits. The sport hall revenue (10,000.0 thousand Tugrik) was not enough to finance their operating activities. It means that each sport hall of the province has to be financed by government budget despite of their activities are inefficient in monetary term. Thus, noneconomic impacts are crucial to the province government in order to improve community factors. According to Table 4.6, Sport hall of Dalanzadgad village gets 10,000.0 thousand MNT income from 26,143 populations. It means that one villager spent 0.383 thousand MNT to participate sport activities in the facilities in per year. It represents that market of the sport facilities is very tight than high development country.

Table 4.7 forecasts income of alternatives according to spending of one villager in Dalanzadgad. There are only three villages can earn above 1,000.0 thousand MNT income. Therefore, the proposed place of this study may earn 799.7 and 761.0 thousand MNT in per year.

Table 4.7 Income of alternatives

Village	Population	Income per year (Thousand MNT)	
		Total	Per villager
Bayandalai	2,088	799.7	0.383
Bayan-Ovoo	1,753	671.4	0.383
Bulgan	2,104	805.8	0.383
Gurvan Tes	4,934	1,889.7	0.383
Mandal-Ovoo	1,633	625.4	0.383
Manlai	2,588	991.2	0.383
Noyon	1,406	538.5	0.383
Nomgon	2,564	982.0	0.383
Sevrei	2,008	769.1	0.383
Khanbogd	7,668	2,936.8	0.383
Khankhongor	1,987	761.0	0.383
Khurmen	1,553	594.8	0.383
Tsogt-Ovoo	1,816	695.5	0.383
Tsogt-tsestsii	7,869	3,013.8	0.383

Source: Drew by Author

4.1.3.1 Economic Value

According to Table 4.6 and Table 4.7, economic impact of alternatives are calculated by this study through Formula 3.2 (see Appendix A). In this case, period of calculation is first

five years after completion construction, and the discount rate is same to policy interest rate in National Bank of Mongolia (11 percent) in 2018. Table 4.8 represent that all alternatives have negative net benefit trough formula 3.3. It means that no one may not operate activities with economical effectiveness. Thus, the benefit cost ratio (formula 3.4) can illustrate which one is better. In the ratio, there are six better choices in Table 4.8 as Tsogttsetsii, Khanbogd, Gurvantes, Manlai, Nomgon, and Bulgan villages.

Table 4.8 Net present value of alternatives

Village	Net Benefit	Benefit Cost Ratio	<i>First 5 year period</i>		Rank
			Total benefit	Total cost	
Bayandalai	(1,332,063.2)	0.0064	8,628.5	1,340,691.7	7
Bayan-Ovoo	(1,333,454.5)	0.0054	7,237.2	1,340,691.7	11
Bulgan	(1,331,998.4)	0.0065	8,693.2	1,340,691.7	6
Gurvan Tes	(1,320,306.8)	0.0152	20,384.9	1,340,691.7	3
Mandal-Ovoo	(1,333,950.6)	0.0050	6,741.02	1,340,691.7	12
Manlai	(1,330,003.1)	0.0080	10,688.57	1,340,691.7	4
Noyon	(1,334,883.6)	0.0043	5,808.07	1,340,691.7	14
Nomgon	(1,330,100.2)	0.0079	10,591.5	1,340,691.7	5
Sevrei	(1,332,396.4)	0.0062	8,295.2	1,340,691.7	8
Khanbogd	(1,309,016.4)	0.0236	31,675.3	1,340,691.7	2
Khankhongor	(1,332,483.8)	0.0061	8,207.9	1,340,691.7	9
Khurmen	(1,334,276.4)	0.0048	6,415.3	1,340,691.7	13
Tsogt-Ovoo	(1,333,190.3)	0.0056	7,501.4	1,340,691.7	10
Tsogt-tsestsii	(1,308,185.9)	0.0242	32,505.7	1,340,691.7	1

Source: Drew by Author

According to Table 4.8, proposed project (Sport hall in Bayandalai) is not better choice of public investment trough economic views. Thus, the study make sure the noneconomic value because all of the alternatives have negative net benefits.

4.1.3.2 Noneconomic Value

According to the literature review of sport infrastructure, decision makers prefer noneconomic value than economic value of sport facilities as governor of the province decided to build a sport hall in Bayandalai villager despite of sufficient of the economy. As a market of sport facilities, highly influence to the revenue of the facilities. Number of people who want to spend time and money in the sport hall are also a main factor of noneconomic impacts. The policy that address for mass of community may be measured by the number of participator. In other word, benefits of the sport facilities depend on the number of people

who would change their behavior, attitude, productivity, health circumstance, and how many people would get benefit from the sport facilities. Also, that number of people have a positive relationship with target consumers who are possible to spend time to work out in the sport facilities. Thus, this study considers that number of target consumer is the main indicator of the noneconomic impact of the sport facilities.

Therefore, the population is divided by two categories in the villages of the province. First, target consumers, residence of central who live in the center of village. Most of them work in public bureaucracies, private sector, and people who don't look after livestock in the countryside. Second, non-target consumers, herdsman who live in the countryside, and look after their livestock. Practically, they don't have time to spend in sport facilities because their living place is quite far away than the center of the village.

Thus, table 4.9 represents the difference between target and non-target consumers about alternatives. There are also six possible choices that may get higher noneconomic impact than proposed sports hall (see Rank of noneconomic). It means that the provincial government had opportunities that influence high noneconomic impact to the whole province community.

Table 4.9 Available consumers

Village	Population	Herdsman	Residence of center	In 2018		
				Rank of Noneconomic	Rank of Economic	Average Rank
Bayandalai	2,088	708	1,380	7	7	7
Bayan-Ovoo	1,753	540	1,213	10	11	10.5
Bulgan	2,104	568	1,536	6	6	6
Gurvan Tes	4,934	1037	3,897	3	3	3
Mandal-Ovoo	1,633	560	1,073	8	12	10
Manlai	2,588	779	1,809	4	4	4
Noyon	1,406	432	974	13	14	13.5
Nomgon	2,564	941	1,623	5	5	5
Sevrei	2,008	636	1,372	8	8	8
Khanbogd	7,668	622	7,046	2	2	2
Khankhongor	1,987	803	1,184	11	9	10
Khurmen	1,553	602	951	14	13	13.5
Tsogt-Ovoo	1,816	498	1,318	9	10	9.5
Tsogt-tsestsi	7,869	482	7,387	1	1	1

Source: Drew by Author

4.1.4 Summary

There are few phenomena explained by cost benefit analysis in this chapter.

- Decision makers have not idea of the cost and benefits of their public investment.
- Province government has never calculated the cost and benefits of their public investment.
- Noneconomic benefits of public investment are more important than economic benefit to the province decision makers.
- The province didn't plan more feasible public investment in the fiscal year investment plan.



4.2 Qualitative Deductive Analysis

A findings of interview devote to explore incidents what happen in the planning process. The interview is separated to 12 questions in 5 sections (see Appendix II) by effecting factors in order to clear define the process. According to the interviews, understating of factors that are defined by literature review is revised by the interpretation of the interview.

Table 4.10 represents revised incident that happens in the planning process of public investment in the South Gobi province.

Table 4.10 Incidents of interview

Title of incident	Description
Initiated with self-interest	Representative initiates public investment that implies to their electoral village in order to they want to get points from voters. It may increase their political status.
Deadlock	If the representative's initiated project is not supported by government, they also don't support government projects. They also would blame to officials working performance until support their initiated public investment
Advantage of Occupation	A representative appointed mayor of the village where is representative's electoral village. The representative has more chance to push the public investment than others.
Undemanding condition	Officials don't have to calculate cost and benefit. Law environment of public investment is not enough to manipulate the planning process of the investment.
Relationship	Officials have good relationship between politicians. They support each other's events and projects with their self-interest to be approved by local representative committee.
Permission of denying	There are not regulation and law that lower level officials can refuse high level manager's order. It becomes the reason that officials have to execute high level official initiatives.
Politician commitment	Representatives could describe public opinion, and could express their opinion with self-interest.
Lack of attention	People may not take attention to the planning process of public investment. Because they don't have enough information, and knowledge to consider the cost and benefit of the projects.
Focusing on noneconomic impacts	Most of public investment devotes to noneconomic impact. But evaluating cost and benefit of noneconomic impact is quite difficult. It is the main reason why a representative initiates social infrastructure. Because any one of voters or the opposite person cannot calculate real cost and benefit of the project in order to argue the representative.

Source: Drew by Author

Table 4.11 represents examples of transcription in interview that demonstrate the real condition of their planning process, and the opinion of the interviewee. According to Table 4.11, High level officials could clearly define political influences as mayor of the province and head of the department. It means that they are more close to representatives than staffs. (see Appendix III).



Table 4.11 Incident verification

Incidents	Example of transcript			
	Interview 1	Interview 2	Interview 3	Interview 4
Initiated with self-interest	<p>... They could push more public investment to their electoral village in order to make a good appearance to their voters.</p>	<p>... They want to distribute an understating to voters that only representatives could bring public investment from province, budget into their home district or village through their efforts.</p>	<p>...They seeing that if competitor party's representatives invest to electoral villages through the government budget, that representative would have great chance to reelect in next election campaign. ... Voters actually more like who can develop their utilities. ...most of them act creative people who can solve all problems of voters.</p>	<p>... We have to supply voter's needs and demands in order to achieve electoral action plan. ...We have to reach our electoral promise in order to reelect next election campaign. ... Real purpose of their initiated projects is different from public opinion, which devote to increasing initiator self-utilities. ...If you are follow some representatives in social media, you can easily read post that public investments are approved to our village or district by my participation in the committee.</p>
Deadlock		<p>... If we set some criteria of their projects, they complain to high level officials.</p>	<p>...If we argue the cost and benefits to representative or mayors, it becomes very serious topic to political party.</p>	<p>... Although we have different political interest, but we have to understand each other, and go with them for future of the province. ...we have to support each other initiative public investment. ... We have to compromise each other's initiated projects in order</p>

				to avoid the deadlock.
Advantage of Occupation	... Mayor of the Bayandalai village initiated the project.	...mayor of province and representative of local committee who elected from the village represented it.	... Mayors of these two villages initiated the sport hall.	... Sport hall based on the villagers opinion, which expressed by the mayor of the village. ...some of opposite party's representatives who mayor, or high officials of villages support our policy with their self-interest that develop their home village.
Undemanding condition	... We don't calculate alternative places, and we have several reasons. In that time, Mongolian law, and regulation that about planning public investment had not required to consider alternatives.	... But we don't have regulation and hand guide for calculating cost and benefit.	...we choose this two villages for constructing the sport facilities which are early represented by the mayor of the village.	... Law environment does not enough to obtain the order without complain of other factors. Also, human resource is quite important to calculate alternatives.
Relationship		... Representatives had already compromised the list of their public investment.	... These interest groups have powerful relationships with high level officials of the province government who can support to their required public investment would be part of the local government public investment projects.	...we have different political interest but we have to understand each other, and go with them for future of the province
Permission of denying	... I don't have a chance to refuse head of our	... Even I informed to them some serious issues,	... Mayor of the province directly gives the order that	

	<p>department's order. I have to follow what he says.</p> <p>... If there are regulation of calculating the effectiveness of the projects, we would have a chance to explain to the reason why we have to refuse it through inefficient condition. Otherwise, I cannot explain the importance of the building to high level managers.</p>	<p>they get orders to us that find solving way for the issues. Anyone could refuse their initiative projects because they have a higher authority</p>	<p>builds a new sport hall in specific villages. I think that he had not choice that refuse it. Because mayors of the two villages are both members of the same party with him and also members of the local representative committee.</p> <p>... We don't have the opportunity to refuse their initiative public investments through reason of cost and benefits. Because cost and benefits are various understanding to us. Benefits are explained by everyone's self-understanding and self-interest.</p>	
<p>Politician commitment</p>	<p>... Representative is a very good way of hearing and exploring public opinion of public investment. Because their working and living place are closer to their voters living hood circumstance that they are possible to know what their voters want.</p>	<p>... They have a lot of power to make decisions on public investment projects. Because local representative committee is supreme authority for self-governing local country.</p>	<p>They have significant contribution to the planning process of the investment.</p>	<p>... Contribution of them in the decision making of public investment has been rapidly growing for recent years. If their creative of public investment devotes to public interest, it contribute significant positive effects to development of the province. Otherwise, it will bring a lot of issues in the future.</p>
<p>Lack of attention</p>	<p>... I have never heard about that people complain to</p>		<p>... Because it can increase their opportunity that receives</p>	<p>...Because we have to predict consequences of the projects for</p>

	construct new infrastructure through local and state budget.		public services in the home villages, and they do not have enough understanding of the cost and benefit.	compare the cost and benefits of alternatives. It requires a specific technique, ability, and knowledge ... Our party wants to improve participation of people in the decision making process in order to effectively allocate the resources of natural to society. Because their opinion is important to the local government.
Focusing on noneconomic impacts	... In order to improve their health condition, government support sport facilities to them.	...Our government purpose to people would be healthy, safety and have high income. Then, we always hear public opinion and needs in order to set plan of public investment.	... The local government must equally relocate tax revenue of the mining industry into a whole community of the province. For the sport facilities, government supply needs and demands to all of citizens through budget. ... We have to don't leave issues of specific areas where has a low population, market capacity, and far away from the central village.	...we have focused to resolve social infrastructure since 2016 as school, kindergarten, public park, hospital, etc. Thus, noneconomic impacts of the sport hall are quite important to villagers ... Community impact is more important to us. ...action plan of the ruling party is oriented public opinion. The sport hall is depended by villager demands.

Source: Drew by Author

A brief of the response of the interviewee represents that incident have a negative effect on output of rational decision making system. For example: Mayor of the province, said that “... contribution of them in the decision making of public investment has been rapidly growing for recent years. If their creation of public investment is devoted to public interest, it contributes significant positive effects to the development of the province. Otherwise, it will bring a lot of issues in future.” It means politician self-interest that wanted to increase political dignity by public investment through the budget of the province could bring exceeded cost into the development of the province.

According to the interpretation of Interview, Table 4.12 represents hits for hypothesis of this study in order demonstrate the relationship between hypothesis and incidents. H1 has 5 hits of the incidents that it has higher influences on decision making process than other hypothesis.

Table 4.12 Hits for hypothesis

Title of incidents	H1	H2	H3	H4
Initiated by self-interest	Y			Y
Deadlock	Y		Y	
Advantage of Occupation	Y		Y	
Undemanding condition		Y		
Relationship	Y	Y	Y	
Permission of denying		Y	Y	
Politician commitment	Y			Y
Lack of attention				Y
Focusing on noneconomic impacts				Y
Total hits	5	3	4	4
Description: Y – Confirmation of hypothesis, Blank sheet – incident had nothing related to hypothesis				

Source: Drew by Author

H1: Politician self – interest influences on the output of rationality process.

There were five incidents happen in the planning process of the sport hall as initiated by self-interest, deadlock, relationship, and politician commitment. It means representative initiates and push public investment to officials of the government to increase their reelection chance in the next election campaign. In consequence of the incidents, the local government planned inefficient public investment to specific places where is influenced by the

representative. Therefore, H1 is true that politician negatively influence to rational decision making of the public investment projects.

H2: Official's independence influences on the output of rationality process.

Official's decision making process with independence is explained by undemanding condition, relationship, and permission of denying. The officials of the government don't have the legal regulation to make rational decisions on public investment projects in order to prevent they lose work place for make rational decision. Therefore, H2 is true that official's independence has negative influence on outcome rationality.

H3: Politician self – interest influences on official's independence.

There are four interpretations explain to politician self-interest, how influences to official's independence as deadlock, advantage of occupation, relationship, and permission of denying. If officials of the government make decision of public investment despite political interest, there will be happen deadlock in the committee. Therefore, H3 is true that politician self-interest directly influences to official's independence.

H4: Politician self-interest and official independence, both reconciles to voter's desire.

Voter's desire that improve utility income through government activities is explained by four interpretations as initiated by self-interest, politician commitment, lack of attention, and focusing on noneconomic impacts. It means politician and government officials, both act to honor people that voters would like to them. Moreover, their initiated public investment based on voter's desires despite it is importance to the province. Therefore, H4 is true that politician self-interest and officials independence both devote to reach voters desire.

CHAPTER 5. CONCLUSION

5.1 Conclusion

Mayor of the Bayandalai village initiated to build a new sport hall in the village in order to maximize their winning chances of the next election. But, there are more feasible 6 alternatives that would produce a higher net benefit to the province community than the village. Even if it obviously had lower benefit, government staffs push to the list of public investment in the province. Because they could not make decision on the public investment without representative's influence.

Therefore, representatives of the South Gobi province intend to win the next election by the province public investment. It is approved by literature review, and interpretation of the interview. They influence the decision making process of public investment in order to get particularized benefits. They don't focus on the consequences of the public investment that the outcomes of the investment are decreased by the political self-interest that want to win next election.

As well as, the representatives aggressively influence to the government official's working independence through direct and indirect way. It becomes a barrier to the officials make rational decisions on the public investment projects.

According interpretation of the interview, there is no legal regulation of public investment in Mongolia. The government officials don't know to manage and integrate initiated the investment of representatives in order to equally relocate public investment budget of the province. But it also depends on human resource and participation of citizens that people must control the spending of the government budget.

Finally, there are two kinds of reason that representative often initiate social public investment. First, people-oriented action plan of ruling party, which a basic demand of the public investment is explained by people-oriented policy. In other word, they said that our vision intends to improve social utility by the provincial budget. However, their interest of initiating public investment is quite different from public interest. Second, understanding of cost and benefit, which means everyone may explain the cost and benefits by yourself, and may argue to other's assumption of the cost and benefit. As there are not any legal and academic understating of it in Mongolia.

Therefore, voter's desire that improve their income on utility despite of other's needs become to essence of reducing the effectiveness of the province public investment budget.

5.2 Suggestion for Problem Solution

This study suggests to solve that may fix the reducing effectiveness of the province public investment budget. The central government of Mongolia have to create legal regulation of the public investment planning process. It has to include follows:

1. All levels of government have to have a list of public investment for a specific period. It must be sorted by significance and demands of the investment.
2. It has to protect officials that they can make rational decisions without external factors.
3. Politician's initiated public investment has to be approved by public opinion.
4. The proficiency independence researcher is possible to analyze costs and benefits of the project through supporting of the government budget.
5. It has to obtain a quote of economic and social public investment in the budget.

5.3 Suggestion for Future Research

This research investigated only one case of public investment in the province in order to approve inefficient public investments. As well as, alternatives of the case have a negative net benefit because it is closer to social infrastructure. The cost and benefit analysis cannot sufficiently work on the case.

Therefore, the researcher who finds out the same interpretation to have to check more than one case of public investment, and it has to intend to support economics. In order to they get more reliability interpretation.

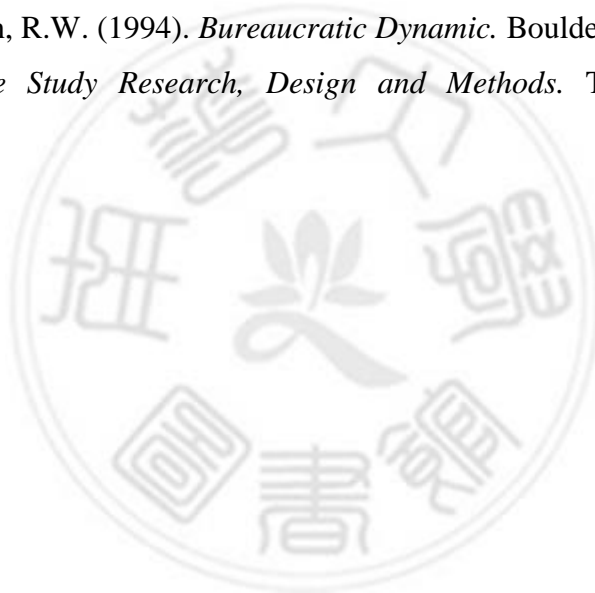
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APPENDIX I. PRESENT VALUE OF ALTERNATIVES

Table I.1 Bayandalai Village

Village: Bayandalai	Discount rate: 11%						(Thousand Tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.6						
Construction cost	1,031,200.0	-	-	-	-	-	
Basic operating cost	154,745.8	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.3	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.4	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	8,628.5	800.0	985.7	1,348.0	2,046.4	3,448.4	
Net impact on the Economy	(1,332,063.16)	(13,547.4)	(16,691.8)	(22,828.2)	(34,654.7)	(58,395.3)	

Source: Drew by Author

Table I.2 Bayan-Ovoo Village

Village: Bayan-Ovoo	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.7						
Construction cost	1,031,200.0	-	-	-	-	-	
Basic operating cost	154,745.8	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.4	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.5	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	7,237.2	671.0	826.7	1,130.7	1,716.4	2,892.3	
Net impact on the Economy	(1,333,454.5)	(13,676.4)	(16,850.7)	(23,045.5)	(34,984.7)	(58,951.3)	

Source: Drew by Author

Table I.3 Bulgan Village

Village: Bulgan	Discount rate:11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	8,693.22	806.0	993.1	1,358.2	2,061.8	3,474.2	
Net impact on the Economy	(1,331,998.45)	(13,541.4)	(16,684.4)	(22,818.0)	(34,639.4)	(58,369.4)	

Source: Drew by Author

Table I.4 Gurvan Tes Village

Village: Gurvan Tes	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	20,384.85	1,890.0	2,328.7	3,184.8	4,834.7	8,146.7	
Net impact on the Economy	(1,320,306.82)	(12,457.4)	(15,348.8)	(20,991.4)	(31,866.5)	(53,696.9)	

Source: Drew by Author

Table I.5 Mandal-Ovoo Village

Village: Mandal-Ovoo	Discount rate : 11%					<i>(thousand tugrik)</i>	
	PRESENT VALUE						
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	6,741.02	625.0	770.1	1,053.2	1,598.8	2,694.0	
Net impact on the Economy	(1,333,950.65)	(13,722.4)	(16,907.4)	(23,123.0)	(35,102.4)	(59,149.6)	

Source: Drew by Author

Table I.6 Manlai village

Village: Manlai	Discount rate : 11%					<i>(thousand tugrik)</i>	
	PRESENT VALUE						
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	10,688.57	991.0	1,221.0	1,669.9	2,535.0	4,271.6	
Net impact on the Economy	(1,330,003.10)	(13,356.4)	(16,456.4)	(22,506.3)	(34,166.2)	(57,572.0)	

Source: Drew by Author

Table I.7 Noyon village

Village:	Discount rate : 11%					<i>(thousand tugrik)</i>	
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Noyon						
PRESENT VALUE						
SOURCE OF DIRECT IMPACT	Year					
	0	1	2	3	4	5
COST	1,340,691.67					
Construction cost	1,031,200.00	-	-	-	-	-
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7
BENEFITS						
Sport hall revenue	5,808.07	538.5	663.5	907.4	1,377.5	2,321.2
Net impact on the Economy	(1,334,883.60)	(13,808.9)	(17,013.9)	(23,268.8)	(35,323.7)	(59,522.4)

Source: Drew by Author

Table I.8 Nomgon village

Village: Nomgon	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	10,591.49	982.0	1,209.9	1,654.7	2,512.0	4,232.9	
Net impact on the Economy	(1,330,100.18)	(13,365.4)	(16,467.5)	(22,521.5)	(34,189.2)	(57,610.8)	

Source: Drew by Author

Table I.9 Sevrei village

Village: Sevrei	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	8,295.23	769.1	947.6	1,296.0	1,967.4	3,315.2	
Net impact on the Economy	(1,332,396.44)	(13,578.3)	(16,729.8)	(22,880.2)	(34,733.8)	(58,528.5)	

Source: Drew by Author

Table I.10 Khanbogd village

Village: Khanbogd	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	31,675.26	2,936.8	3,618.4	4,948.7	7,512.4	12,658.9	
Net impact on the Economy	(1,309,016.4 1)	(11,410.6)	(14,059.0)	(19,227.5)	(29,188.7)	(49,184.7)	

Source: Drew by Author

Table I.11 Khankhongor village

Village:	Discount rate : 11%						(thousand tugrik)
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Khankhongor						
	PRESENT VALUE					
SOURCE OF DIRECT IMPACT	Year					
	0	1	2	3	4	5
COST	1,340,691.67					
Construction cost	1,031,200.00	-	-	-	-	-
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7
BENEFITS						
Sport hall revenue	8,207.87	761.0	937.6	1,282.3	1,946.7	3,280.2
Net impact on the Economy	(1,332,483.8)	(13,586.)	(16,739.8)	(22,893.9)	(34,754.5)	(58,563.4)

Source: Drew by Author

Table I.12 Khurmen village

Village: Khurmen	Discount rate : 11%						(thousand tugrik)
	PRESENT VALUE						
SOURCE OF DIRECT IMPACT	Year						
	0	1	2	3	4	5	
COST	1,340,691.7						
Construction cost	1,031,200.0	-	-	-	-	-	
Basic operating cost	154,745.8	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.4	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.5	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	6,415.3	594.8	732.9	1,002.3	1,521.5	2,563.9	
Net impact on the Economy	(1,334,276.4)	(13,752.6)	(16,944.6)	(23,173.9)	(35,179.7)	(59,279.8)	

Source: Drew by Author

Table I.13 Tsogt-Ovoo village

Village: Tsogt-Ovoo	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT COST	Year						
	0	1	2	3	4	5	
COST	1,340,691.7						
Construction cost	1,031,200.0	-	-	-	-	-	
Basic operating cost	154,745.8	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.4	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.5	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	7,501.4	695.5	856.9	1,172.0	1,779.1	2,997.9	
Net impact on the Economy	(1,333,190.3)	(13,651.9)	(16,820.5)	(23,004.2)	(34,922.1)	(58,845.7)	

Source: Drew by Author

Table I.14 Tsogt-Tsetsii village

Village: Tsogttsetsii	Discount rate : 11%						(thousand tugrik)
PRESENT VALUE							
SOURCE OF DIRECT IMPACT COST	Year						
	0	1	2	3	4	5	
COST	1,340,691.67						
Construction cost	1,031,200.00	-	-	-	-	-	
Basic operating cost	154,745.83	14,347.4	17,677.4	24,176.2	36,701.2	61,843.6	
Electricity	36,962.37	3,427.0	4,222.4	5,774.7	8,766.4	14,771.9	
Heating	117,783.46	10,920.4	13,455.0	18,401.5	27,934.8	47,071.7	
BENEFITS							
Sport hall revenue	32,505.75	3,013.8	3,713.3	5,078.4	7,709.4	12,990.8	
Net impact on the Economy	(1,308,185.92)	(11,333.6)	(13,964.1)	(19,097.8)	(28,991.8)	(48,852.8)	

Source: Drew by Author

APPENDIX II. QUESTIONS OF SEMI-STRUCTURE INTERVIEW

1. Information of Respondent

Name:		Occupation:	
Organization:		Date:	

2. Proposed project

1. Who initiate the Sport Hall? What is initiator purpose?
2. What kind of impacts will you expect the sport hall in Bayandalai, and Khankongor villages?
3. How do you think about alternatives places?
4. Which is more important community impact and economic impact of Sport Hall? Why?
5. How does the Sport Hall consist the Development Policy of the province?

3. Effects of High Level Managers

1. How does your manager respond to the project?
2. If the project is inefficient in your consideration, how will you respond to the order of high level manager? How does your manager receive your response?

4. Effects of Politician

1. What is local committee representative's point of view of Sport hall?
2. What will the representative respond if your department don't support their initiative?
3. How does the representative contribute to plan public investment projects?

5. Effects of Citizens

1. How did villagers receive the decision that build Sport hall in their home village?
2. How do villagers contribute to make decision on public investment projects?



APPENDIX III. INTERVIEWS
INTERVIEW 1

1. Information of Respondent

Name:	Zolboo, Ts.	Occupation:	General Architecture
Organization:	Department of Investment and Development policy planning	Date:	2019.08.28 10.30-11.30

2. Proposed project

1. Who initiate the Sport Hall? What is initiator purpose?
I heard that the mayor of the Bayandalai village initiated the project. When he met the mayor of the province, he expressed to build a new sport hall in their home village. Also, he explains some reason that should build a new sport hall. First, their high school sport hall was dangerous to use for public sport activities. Inspector of local proficiency investigation organization banned to use this sport hall. Second, Volleyball rapidly becomes to trend sports in the village, then the village are dominated in the South Gobi province by Volleyball. In my opinion, the main purpose of the initiative is replacing to old high school sport facility, and support training of young generation sport habits.
2. What kind of impacts will you expect the sport hall in Bayandalai, and Khankongor villages?
Obviously, it develops community physical actives, make out comfortable environment for youths train their favorite sport in their home town. Therefore, we are expecting noneconomic impacts as reduce illness that caused by lack of movement, support to youths precisely enjoy their leisure time, and prevent threats that caused by use dangerous sport hall. If it would happen, the consequences would be unfixable dangerous.
3. How do you think about alternative places?
Exactly, we don't calculate alternative places, and we have several reasons. At that time, Mongolian law, and regulation that about planning, public investment had not required to consider alternatives. Second, actually we don't have enough academic discipline, and experience to handle it. Since beginning of this year, Minister of Finance approves new regulation about planning of public investment. Thus, calculating cost – and benefit is newly understating to us. Third, some mayor, and villagers aggressively demand the public infrastructure with a lot of reasons. If we never complete their request, citizens seeing that worst consequences are caused by our working performance.

<p>4. Which is more important community impact and economic impact of Sport Hall? Why?</p>
<p>Practically, I have never thought about it. In my opinion, community impacts are more important to us. Because nowadays, lack of movement is serious threats to human life. It brings a lot of illness to us such as heart attack, getting fat, high blood pressure, and others. All of these illnesses depend on physical workout. But modern people don't spend pretty much time working out, and they usually do office work. Thus, in order to improve their health condition, government support sport facilities to them.</p> <p>For economic impacts, I don't have any idea. That kind of infrastructure has not economic impacts because it trend to nonprofit organizations.</p>
<p>5. How does the Sport Hall consist the Development Policy of the province?</p>
<p>Our vision of Development policy moves toward to healthy, and educated people. Thus, I think that sport facilities are going to achieve our vision of development policy. Also, every governments want to improve community identity, and integration of people. Thus, sport hall would become good bridge of people's integration.</p>
<p>6. Effects of High Level Managers</p>
<p>1. What kind of order did your highest level manager give to you that related to the planning of the project?</p>
<p>He said that you should adjust technical requirement and prepare to draw designs of the sport hall. We would complete to required documents of the project before meeting of Local Committee Representatives in order to pass by the committee.</p>
<p>2. If the project is inefficient in your consideration, how will you respond to the order of high level manager? How does your manager receive your response?</p>
<p>I don't have a chance to refuse head of our department's order. I have to follow what he says. But sometimes, there were troubles to build new infrastructure that related to technical requirements in Law of Construction, I explained the troubles to him. I don't need to think about efficient or inefficient of the building. In this case, he used to advise us that how revise the trouble, and recommit to the mayor and other who demand to build it. Our work must be under the law and regulation. If there are regulation of calculating the effectiveness of the projects, we would have a chance to explain to the reason why we have to refuse it through inefficient condition. Otherwise, I cannot explain the importance of the building to high level managers.</p>

3. Effects of Politician

1. What point of view is local committee representative in the sport hall?
I have never thought about it. According to their efforts, they could push more public investment to their electoral village in order to make a good appearance to their voters. In my opinion, other's initiative projects doesn't matter to them if it deducts their funding of electoral village.
2. What would the representative respond if your department don't support their initiative?
They don't directly blame to us instead they blame the head of the department, and mayor of the province. Because mayor of the province to achieve to their political interest in order to win an election campaign. The mayor pushes their initiative project on annual budget in order to collect their political power toward governing the province. Thus, we don't support their projects, perhaps, local representatives may reappoint mayor of the province.
3. How does the representative contribute to plan public investment projects?
In my view, representative is a very good way of hearing and exploring public opinion of public investment. Because their working and living place is closer to their voters living hood circumstance that they are possible to know what their voters want. But the mayor of the village who is representative of the local committee of the province often expresses their village public opinion, required needs, and demands. Others don't often illustrate public opinion of the investments.
4. Effects of Citizens
1. How did villagers receive the decision that builds Sport hall in their home village?
Obviously, they are very glad for building new sport hall in their village. Because they could train sport activities in new and comfortable sport hall. I have never heard about that people complain to construct new infrastructure through local and state budget.
2. How do villagers contribute to make decisions on public investment projects?
All of decisions depend on public opinion. It means that villagers have significant contribution in the decision making of public investment. Mayor of the province other officials meets with people in order to introduce our implementation of duty and hear the villagers opinion of province development policy. We always make an effort to achieve their suggestion. In my opinion, our public investments both are purposeful to achieve citizens' desire.

INTERVIEW 2

1. Information of Respondent

Name:	Chinjargal, N.	Occupation:	Staff
Organization:	Department of Investment and Development policy planning	Date:	2019.08.28 13.30-14.30

2. Proposed project

1. Who initiate the Sport Hall? What is initiator purpose?
Of course, the villagers want to build a new sport hall in their village, then mayor of the province and representative of the local committee who elected from the village. Minister of Education recently made decision that sport facilities of high school have to don't use for organizing public activities in the sport facilities. Thus, every village needs to have public sport facilities in order to supply their physical exercise, and avoid lack of movement. For this case, the mayor of the villages brings plan picture of the sport facilities to us. Last April, a task force that headed by the mayor of the province, worked in the villages, people demonstrate that need to build a new Sport Hall in their village in order to supply community sport activities. I see that initiator purpose is to achieve villager demands.
2. What kind of impacts will you expect the sport hall in Bayandalai, and Khankongor villages?
It would make a lot of benefits to the community. First, health benefit, a lot of illness are caused by lack of movement. For example: getting fat, it brings high blood pressure, and heart attack. Other threats are appearing by the lack of movement. These threats also are solved by there would be new sport facilities. Second, it improves youth people's aspiration who train for specific sports. Third, it makes good community integration that people often meet each other, work out together, and share their opinion. It is the main factor of community identity.
3. How do you think about alternative places?
It is possible to build the sport facilities in other villages. But only these two villages demonstrate their demands of public sport facilities. Other villages demands another kind of public infrastructure into resolve their problems. In other word, we only follow the initiative of villages. But, I think that the capacity of the sport facilities has to flex to their population. Because villages have different amount of population, and some their population growth has been decreasing for recent decade. In other word, number of people who would get benefit

from the sport facilities is crucial to local government. If new sport facility's capacity is exceeded by their market size, it wastes a lot of budget in future. But mayor of the villagers contends to each other for the public investment. No one of them wants to get smaller public investment through an annual budget of local government. But we don't have regulation and hand guide for calculating cost and benefit. Since this year, Minister of Finance has introduced a new regulation of planning of public investment. But, when I involved in seminar of the new regulation, I felt that it was not enough to imply in practice. Also, we need more knowledge, and human resource to adopt the new regulation.

4. Which is more important community impact and economic impact of Sport Hall? Why?

Of course, community impacts is important than economic impacts. Because the sport hall is a nonprofit organization that it have to support community variables such as public health, community integration, and develop youth physical condition. We expect community benefit through the sport hall in the village. If we have financial opportunity, we want to build it in another village.

5. How does the Sport Hall consist the Development Policy of the province?

Our government purpose to people would be healthy, safety and have high income. Then, we always hear public opinion and needs in order to set plan of public investment. Thus, this project adopts to the development policy of the province.

3. Effects of High Level Managers

1. What kind of order did your highest level manager give to you that related to the planning of the project?

Head of the department distributed to duties staffs of the department in order to prepare required documents for local representative committee. I check up several law requirements of the projects approved by the committee.

2. If the project is inefficient in your consideration, how will you respond to the order of high level manager? How does your manager receive your response?

I mentioned that the calculating effectiveness of public investment has risen since this year. Thus, I don't have any experience that argued cost and benefits to high level officials. However, if there are some critical issues of law requirements, I have to inform to them. Even I informed to them some serious issues, they get orders to us that find solving way for the issues. Anyone could refuse their initiative projects because they have a higher authority.

4. Effects of Politician

1. What is local committee representative's point of view of Sport hall?

There were not anyone who contested the sport hall because they already followed each other's initiated public investment projects. In other word, representatives had already compromised the list of their public investment. Indeed, they did not argue public investment projects.

2. What will the representative respond if your department don't support their initiative?

Some of them aggressively push up public investment projects to insert annual budget of provincial government. I see that the representatives have posted lists public investment project on Facebook, Twitter, and other social media in recent years. They want to distribute an understating to voters that only representatives could bring public investment from province, budget into their home district or village through their efforts. Moreover, they had already dealt high ranking administration officials who have more power to make decisions on public investment projects. Thus, we don't have to chance for refusing their initiative projects. If we set some criteria of their projects, they complain to high level officials.

3. How does the representative contribute to plan public investment projects?

They have a lot of power to make decisions on public investment projects. Because local representative committee is the supreme authority for self-governing local country. It represents that they have significant contribution in the decision making of planning, public investment and other activities. Actually, they represent public opinion of their electoral districts or villages. I think that they seldom attempt to be heard public opinion of their electoral village in order to figure out voter's desire. Instead of, they persuade to voters that projects are very significant to their living circumstance. That project is initiated by them despite of voter's real needs and demands.

4. Effects of Citizens

5. How did villagers receive the decision that builds Sport hall in their home village?

Citizens always want to improve their utility and live more comfortably, and convenient environment. Thus, they are very happy for new sport hall is constructed in their home village. Rest of people in the province also happy to public investment by local government. The provincial, local government has been spending a lot of funds into improving social infrastructure in all of villages for recent years. However, in my opinion, we have not yet reached enough social infrastructure, indeed, we need to decide the source of funds to make

more over infrastructure.

6. How do villagers contribute to make decisions on public investment projects?

After the last election campaign, action plan new ruling party was formulated by public opinion. At that time, department, and agencies organized a lot of meetings for citizens in order to hear public opinion, and explore what they want. Thus, villagers can directly express their idea of required needs and certain problems into the local government. It means that they have significant power in decision making of public investment planning phase. Thereof, they can represent their problems through their representatives of the local committee.



INTERVIEW 3

1. Information of Respondent

Name:	Sukh-Erdene, J.	Occupation:	Head of Department
Organization:	Department of Investment and Development policy planning	Date:	2019.08.29 10.30-11.30

2. Proposed project

1. Who initiate the Sport Hall? What is initiator purpose?
<p>Mayors of these two villages initiated the sport hall. Because, Sport hall of high school in Bayandalai has insecure situation. Inspector of building proficiency organization denied to use this sport hall for public activity. Also, mayor of Khankhongor village represented that they need to build a new sport hall in order to improve professional sports in the village. He already had drawn design of the building and calculate construction cost. Thus, these two mayors, both have a crucial purpose to build a new sport hall that develop their village community integration, supply sport facilities to who want to improve sport abilities.</p>
2. What kind of impacts will you expect the sport hall in Bayandalai, and Khankongor villages?
<p>It may produce a lot of benefits to the community. For example: first, health benefit, people who have lack of movement, and doing office work can increase their frequency of mobility through the sport facility in order to prevent heart attack, high blood pressure, and other kind of disease. Second, research, according psychology research, productivity is depended by human lifestyle. In other word, people who work out at least 30 minutes per day are more creative in their working place. Third, it directly improves youths professional sport abilities.</p>
3. How do you think about alternative places?
<p>Of course, the province is separated by 15 villages. Then, 33 members of the local representative committee are elected by the villages in order to represent all of 68 thousand population in the high authority organization in the province. They have different opinions and efforts that develop their home town through the provincial budget. However, the province government cannot simultaneously build this kind of sport facilities in all village of the province. As budget of public investment is limited to constructing it. Thus, we choose this two villages for constructing the sport facilities which are early represented by the mayor of the village.</p>

<p>4. Which is more important community impact and economic impact of Sport Hall? Why?</p>
<p>Economic of our province deeply depends mining production as coal, copper, and gold. Servicing sector of the mining industry has been rapid growth in recent years. Thus, the economic policy of the local government focuses on produce goods that supply to the mining industry. But, the local government must equally relocate tax revenue of the mining industry into a whole community of the province. For the sport facilities, government supply needs and demands of all of citizens through budget. Mayor's 4 year action plan devotes to develop a living environment of the citizens. Indeed, the sport facilities have more significant community impacts than economic impacts. According to operating Sport hall of Dalanzadgad, there are not any direct economic benefits that revenue of the sport hall does not enough to finance their operating expenses. But, it contributes to human other social needs.</p>
<p>5. How does the Sport Hall consist the Development Policy of the province?</p>
<p>I mentioned it. The action plan is devoted to human development that including physical and knowledge. Thus, I think that it could contribute to the development of the province.</p>
<p>3. Effects of High Level Managers</p>
<p>1. How does your manager respond to the project?</p>
<p>Mayor of the province directly gives the order that builds a new sport hall in specific villages. I think that he had not choice that refuse it. Because mayors of the two villages are both members of the same party with him and also members of the local representative committee. Thus, they support to each other's projects in the committee when committee approves the annual budget of the province government.</p>
<p>2. If the project is inefficient in your consideration, how will you respond to the order of high level manager? How does your manager receive your response?</p>
<p>We did not check the cost and benefit of alternatives in planning phase. But we check some required law regulation of initiating projects. Practically, we see only one side that how to build the infrastructure. In other word, we don't check risk of the public investments. Because all of these public investments rose from society, and citizens. Mayor and representatives devote to achieve citizen's needs. Thus, we don't have the opportunity to refuse their initiative public investments through reason of cost and benefits. Because cost and benefits are various understandings to us. Benefits are explained by everyone's self-understanding and</p>

self-interest. If we argue the cost and benefits to a representative or mayors, it becomes a very serious topic of political party.

3. Effects of Politician

1. What is local committee representative's point of view of Sport hall?

Representatives are separated to interest groups by their self-interest or collective interest. These interest groups have powerful relationships with high level officials of the province government who can support to their required public investment would be part of the local government public investment projects. Also, some of the groups assist to each other for their projects are passed by local representative committee. Therefore, cost and benefit is not important to them, whereas people who can get funding for their projects from the budget are quite important to them. They see that if competitor party's representatives invest to electoral villages through the government budget, that representative would have a greater chance to reelect in the next election campaign. Therefore, practically, ruling and opposite parties always argue allocation of public investment budget. In other word, representatives compete to get funds from the local government budget for developing their electoral village.

2. What will the representative respond if your department doesn't support their initiative?

I mentioned that they have a powerful relationship with the government officials. If our department doesn't support their initiated projects, probably we meet several issues in working performance. The officials also influence to the decision making process of public investment. In other word, they suggest the projects to our department with a way that can solve some of implementation process issues. Representatives always may find out execution way for projects.

3. How does the representative contribute to plan public investment projects?

I explained some of their behaviors that projects how become part of the government public investment. They have significant contribution to the planning process of the investment. In my opinion, the mayor of the villagers who member of ruling party, or member of the local representative committee aggressively influence to the department duty, and demonstrate their required public investment despite its how affect to the development of the whole province. Voters actually more like who can develop their utilities. For example: herdsman wants pump water from well through solar energy in order to alleviate their duties that water livestock. If the well is equipped by local government budget through the representative's initiated project,

the herdsman support to him without doubt. Therefore, most of them act creative people who can solve all problems of voters.

4. Effects of Citizens

1. How did villagers receive the decision that builds Sport hall in their home village?

In my experience, they are happy for constructing the projects in their village. But they don't know the cost and benefit of the sport hall. Because it can increase their opportunity that receive public services in the home villages, and they do not have enough understanding of the cost and benefit. Thus, public social investment that have not negative effects of their environment are always supported by them.

2. How do villagers contribute to make decisions on public investment projects?

Our government hard work on the getting their opinion on social issues in order to know what they want, and what should we do. Because Mongolia is a democratic country that everyone has equal rights and liabilities to be supplied by public utilities. We have to don't leave issues of specific areas where has a low population, market capacity, and far away from the central village. As citizens of the province live in there, and they have rights to get public services through our activities. Thus, all of citizens have equal rights that directly or indirectly contribute to the decision making process of public investment. For direct way, they can demonstrate their needs and demands to all level bureaucracies. Another way is representative that citizens can express their problems to the high authority organization by their representatives who elected from the village.

INTERVIEW 4

1. Information of Respondent

Name:	Naranbaatar, N.	Occupation:	Mayor of the province
Organization:	Department of Investment and Development policy planning	Date:	2019.08.29 13.30-14.30

3. Proposed project

1. Who initiate the Sport Hall? What is initiator purpose?
Vision our party based on public opinion that we take surveys, and heard public opinion in order to prepare electoral action plan in election campaign 2016. Then, our party won the campaign that become the ruling party of the province. Thus, we always hear public opinion for make decision about the development of the province. Also, sport hall based on the villagers opinion, which expressed by the mayor of the village. We have to supply voter's needs and demands in order to achieve electoral action plan. Moreover, the sport facilities have important social impacts that increase well-being, utility, health condition of the villagers. It also renews high school sport hall in the villages which damaged by an earthquake, and abandoned by the construction professional inspector.
2. What kind of impacts will you expect the sport hall in Bayandalai, and Khankongor villages?
Since 2016, coal price has been raised in the global market. Thus, tax revenue of our province, and the amount of budget both have been increasing for recent 4 years. We have to equally allocate the revenue to the community in order to supply social demands and needs. Also, we have focused to resolve social infrastructure since 2016 as school, kindergarten, public park, hospital, etc. Thus, noneconomic impacts of the sport hall are quite important to villagers. For example: well-being, people who work out in the sport hall, or play sports have well-being for productivity, health, kindness, and have good relationship between communities.
3. How do you think about alternative places?
I mentioned that our budget revenue is higher than previous years. For example: we planned to spend approximately 60 billion MNT for public investment. Most of the projects devote to improve public infrastructure in order to people may live in health and safety environment. The sport halls are one of them. You know that we have 15 villages that are alternatives. But

we cannot build a sport hall in all of villages because we have to fix other critical issues. Mayors request a lot of problems which are solved by the provincial budget. But it impossible to solve all of the problems in this time. Thus, we obtain list of public investment that sorted by significance of the project. But, law environment does not enough to obtain the order without complain of other factors. Also, human resource is quite important to calculate alternatives. Because we have to predict consequences of the projects for comparing the cost and benefits of alternatives. It requires a specific technique, ability, and knowledge. In this case, only these 2 villages demonstrated their needs of the sport hall. Others requested another kind of infrastructure in order to develop public utilities.

4. Which is more important community impact and economic impact of Sport Hall?
Why?

Of course, community impact is more important to us. It can produce social benefits through government funds that I mentioned before. Also, It cannot directly earn operating revenues from the market. Whereas, it indirectly influences economic productivity through collective impacts.

5. How does the Sport Hall consist the Development Policy of the province?

I mentioned it previously that action plan of the ruling party is oriented public opinion. The sport hall is depended by villager demands. Thus, it adopts to Development Policy of the province without doubt.

4. Effects of High Level Managers

1. How does your manager respond to the project?

I did not ask this question. Because he is top authority people in the province.

2. If the project is inefficient in your consideration, how will you respond to the order of high level manager? How does your manager receive your response?

I did not ask this question. Because he is top authority people in the province.

3. Effects of Politician

1. What is local committee representative's point of view of Sport hall?

Of course, opposite party seeing that the sport hall is waste government funds. Because their government policy is quite different from us. But voters chose us for governing the province in the last election campaign. We have to reach our electoral promise in order to reelect next election campaign. Thus, we have to continuously execute action plan that is public opinion oriented. Also, some of the opposite party's representatives who mayor, or high officials of

villages support our policy with their self-interest that develop their home village. Although we have different political interest, but we have to understand each other, and go with them for future of the province. In other word, we have to support each other initiative public investment.

2. What will the representative respond if your department don't support their initiative?

Managing their purpose of their initiated projects is difficult to mayor of the province. The real purpose of their initiated projects is different from public opinion, which devote to increasing initiator self-utilities. We have to differentiate self-interest or public interest of initiating projects. If there is obviously representative's self-interest, we should refuse it to implement. But it brings deadlock in local committee when representatives discuss the budget of the fiscal year. Thus, we have to compromise each other's initiated projects in order to avoid the deadlock.

3. How does the representative contribute to plan public investment projects?

There is something becomes trend in social media. If you follow some representatives in social media, you can easily read post that public investments are approved to our village or district by my participation in the committee. Then, a lot of people wrote comment below the post that support to representative's participation. According this phenomena, it illustrates that representatives want to make a good image to society that he or she always work for them. Therefore, they aggressively push public investment projects to government departments that could improve their political dignity. Then, contribution of them in the decision making of public investment has been rapidly growing for recent years. If their creation of public investment is devoted to public interest, it contributes significant positive effects to the development of the province. Otherwise, it will bring a lot of issues in the future.

4. Effects of Citizens

1. How did villagers receive the decision that builds Sport hall in their home village?

In my opinion, Villagers would like to thank for representatives who initiated and approved the projects in the committee. Also, they happy for training and work out in new comfortable sport hall, and they believe that it positively influence to their children's physical and knowledge ability.

2. How do villagers contribute to make decisions on public investment projects?

High development of information technology gives an opportunity to people that they directly

express their problems and public opinion to government and officials. Our party wants to improve participation of people in the decision making process in order to effectively allocate the resources of natural to society. Because their opinion is important to the local government. Thus, we have to explore what people want, and what we should do.

