

ORIGINAL ARTICLE



The Regulatory Impact Analysis of the Golf Driving Range in Thailand

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ABSTRACT

Background. There were so many incidents that the people who lived near the golf driving range received the negative impacts which need to have some laws and regulations for regulating in this matter. **Objectives.** To analyze the regulatory impact of the golf driving. **Methods.** This study utilized a qualitative design using semi-structured interviews based on the theory of the social determinants of health (SDH) and the sustainable development goal (SDGs) in three steps; 1) Formulation of the problem 2) Goal setting and 3) Formulation of alternative actions. The researchers collected the data from 62 people which consisted of 15 people who lived near three golf driving ranges, 15 people who worked in the three golf driving ranges, 13 relevant law users, 8 entrepreneurs, and people who worked in the three golf driving ranges, 8 community leaders and people who lived nearby those golf driving ranges, and the three policymakers. **Results.** The result of the formulation of the problem found that the biggest problem was the issue of the golf ball dropped into the nearby community that caused damage to the property and the life security of those people who lived nearby. The result of the goal setting found that there was no standard for the golf driving range in terms of structure, noise control, and location. The result of the formulation of alternative actions found that the best option was to improve the law by amending some parts of the law. **Conclusion.** To set the new standard for the golf driving range in Thailand in the method the regulatory impact analysis (RIA).

KEYWORDS: *Regulatory Impact Analysis (RIA), Golf Driving Range, Social Determinants of Health (SDH), Sustainable Development Goal.*

INTRODUCTION

Regulatory Impact Analysis (RIA) is a process to assess the possible impacts of issuing a law. RIA has two main objectives. Firstly, it aims to improve the process of making rules and regulations by the state. Secondly, RIA helps improve the quality of laws because it encourages participation from stakeholders to share and exchange information with the state agency that wishes to introduce a new law. As a result, laws that went through RIA would receive fewer objections since they had been more or less accepted by stakeholders (1, 2). A driving range in golf is a fascinating facility designed

explicitly for golfers to practice their hitting techniques and improve various aspects of their game. It is a wide-open space with several designated teeing areas where golfers can focus on honing their skills by taking numerous shots into an expansive field (3).

Nevertheless, there were plenty of problems from the driving range to the nearby community, such as the noise level. Specially, during the peak golf season, people who live nearby hear the noise since golfers may practice from dawn until dusk. Another biggest concern was a golf ball landing on the property nearby. While small,

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golf balls can cause big damage (4). For example, the Saugus Board of Selectmen will hear from residents on Applewood Lane tonight about a reported problem with golf balls flying over the nets at the Golf Country driving range on Route 1. "One neighbor has holes in the back of his house," said Selectman Stephen Horlick (5).

In Singapore, a flying golf ball could threaten lives and properties as it could hit someone in the sea or deviate and head towards the shore. According to the National Parks Board website, users of parks in Singapore should keep all facilities clean and take care not to endanger the safety of others (6).

In Thailand, there was a lot of news about the impact of the golf driving range on the nearby community. For example, news that residents complained about having golf balls from a golf driving range nearby the village that had only been open for about a month and had fallen on the residents in the village several times. Injured and damaged the roofs of several houses (7, 8).

Most of the previous papers focused on many areas in this issue, for example, the first one, Hwang and Won studied in the title "A conjoint analysis regarding influencing factors of golfers' preferred driving ranges in Korea". This study was to investigate what Korean golfers prioritize when choosing an outdoor driving range. The results revealed that Korean golfers put more weight on facility conditions, followed by range size, travel distance, and monthly fee, when choosing an outdoor driving range (9). The second one, Kose et al., studied the title "Developing an Environmental Impact Assessment Methodology for Disc Golf Courses". This research aimed to address the existing environmental problems with disc golf in Estonia and elaborate on the methodology for assessing the environmental impact of disc golf courses and using it as a teaching tool for raising the environmental awareness of the students (10). The third one, Brown and Fry studied the title of "Golf course condition and playability beyond the greens". Golf course standards were an important element to enable effective performance-based management, which can optimize resource efficiency, and attain player satisfaction. It was important, therefore, to establish the current knowledge and awareness of what criteria exist for optimum golf course management. This paper drew together the

relevant academic and industry research undertaken in the area to establish the current level of understanding (11). The last one, Doytchev studied the title "Golf courses and their impact on the environment". This article discusses golf courses and their impact on the environment. This required the construction of golf courses in accordance with environmental norms and policies, as well as with the development of the ecological culture of society (12).

The current study attempts to fill this gap in the literature by focusing on the regulatory impact of the golf driving range for the sustainable development of the golf driving range.

MATERIALS AND METHODS

This study utilized a qualitative design using semi-structured interviews in three steps.

Formulation of the problem.

Participants. 15 people who lived near the three golf driving ranges, 15 people who worked in the three golf driving ranges, and 5 relevant law users.

Instrument. The semi-structured interviews on the issue of the impact of the golf driving range on the nearby community based on the Social Determinants of Health (SDH) and Sustainable Development Goals (SDGs), and this research also was approved the ethics by the Office of the Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University.

Analysis. Content analysis.

Goal setting.

Participants. 8 entrepreneurs and people who worked in the three golf driving ranges, 8 community leaders and people who lived near those golf driving ranges, and 8 relevant law users.

Instrument. The semi-structured interviews which was created from the research question in the previous step including with the Public Health Act, B.E. 2535 (A.D. 1992), amended by the Public Health Act (No. 3), B.E. 2560 (A.D. 2017), Ministerial Regulation Control of Places of Business Hazardous to Health B.E.2560 (A.D. 2017), and Notification of the Ministry of Public Health on Businesses Hazardous to Health, B.E. 2558 (A.D. 2015) amended by, Notification of the Ministry of Public Health on Businesses Hazardous to Health (No. 3), B.E. 2562 (A.D. 2019).

Analysis. Content analysis.

Formulation of Alternative Actions.

Participants. The three policymakers who had the experience and the background knowledge about the golf driving range.

Instrument. The semi-structured interviews that were created from the result in the previous step for formulating the alternative action.

Analysis. Content analysis.

RESULTS

The result can be divided into three steps explained in the form of the content analysis table which were as follows;

Step 1- The results of the interviews with 15 people who lived near the three golf driving ranges, 15 people who worked in the three golf driving ranges, and 5 relevant law users in [Table 1](#) are shown.

Step 2- The results of the interviews with 8 entrepreneurs and people who worked in the three golf driving ranges, 8 community leaders and people who lived near those golf driving ranges, and 8 relevant law users in [Table 2](#) have been shown.

Step 3- The result of the formulation of alternative actions.

The three alternative actions guideline which was consisted of 1) The first guideline: Do Nothing, which means not taking any action in response to the problems encountered and still applying the same laws. 2) The second guideline: How to improve the law by amending some parts of the law? and 3) The third guideline: How to draft the laws by creating the new laws? All of the key informants in this step agreed that improving the law by amending some parts of the law was the best option for selecting in the process of regulatory impact analysis which was issuing a Notification of the Ministry of Public Health regarding the golf driving range operations through the mechanic of publishing a Notification of the ministry of public health by virtue of the provisions of Section 6(1) and 31 of the Public Health Act, B.E. 2535 (A.D. 1992), amended by the Public Health Act (No. 3), B.E. 2560 (A.D. 2017) and the Ministerial Regulation Control of Places of Business Hazardous to Health B.E.2560 (A.D. 2017) Clause 4 rather than adding to the ministerial regulations.

Table 1. Step 1- The result of the formulation of the problem

Research questions	Key informants
The impact of the golf driving range towards the nearby community in the aspect of the society	
1. How did the golf driving range affect toward the nearby community in the aspect of the society?	Most of the key informants said that having the golf driving range in the nearby community resulted of an increasing of employment, such as the relevant law users said that "It was a stimulus for labor, welfare, and economy and brings prosperity".
2. How did the golf driving range in the nearby community cause conflicts in the opinions of people in the community?	Most of the key informants said that having the golf driving range in the nearby community caused problems. The golfer wanted to have the golf driving range, but those who didn't play golf, they didn't want the golf driving range, such as the people who lived nearby said that "People who don't play golf around here had a lot of problems. A golf ball fell onto the roof of the house and the roof need to be repaired".
The impact of the golf driving range towards the nearby community in the aspect of health	
3. How did the golf driving range affect toward the nearby community in the aspect of health?	All of the key informants said that having a golf driving range in a nearby community is a health benefit that made people to exercise more, such as the people who worked in the three golf driving ranges said that "Encourage people to exercise".
The impact of the golf driving range towards the nearby community in the aspect of the environment	
4. How did the golf driving range in the nearby community cause environmental problems?	All of the key informants said that having a golf driving range in a nearby community causes light and noise pollution problems, such as the people who lived nearby said that "The spotlight that dazzles the eyes and sometimes the sound".

Table 2. Step 2- The result of the goal setting

Research questions	Key informants
The creation of the standard golf driving range for decreasing the impact towards the nearby community in aspect of the society	
1. Do you agree with the problem of insecurity among residents in the area due to the diversity of users of the golf driving range?	Most of the key informants said that disagreed because most of them were people in the community who were already familiar with each other, such as the entrepreneurs and people who worked in the three golf driving ranges said that "I did not agree. Most of the people who came to practice have the same faces and could remember each other".
The creation of the standard golf driving range for decreasing the impact towards the nearby community in the aspect of health	
2. Do you agree with the problem of golf balls falling into the nearby community causing damage to life, body, and other property?	All of the key informants said that agreed because there were still problems at present, such as the entrepreneurs and people who worked in the three golf driving ranges said that "Agree, there have been some complaints".
The creation of the standard golf driving range for decreasing the impact towards the nearby community in the aspect of the environment	
3. Do you agree with the noise pollution problems from the golf driving range?	Most of the key informants said that agreed because there have been complained about the noise which have been corrected, such as the entrepreneurs and people who worked in the three golf driving ranges said that "We used to have received a complaint of noise from golf ball cleaning machines".
4. Do you agree with the problem of light pollution, such as the direction of the spotlights on the golf driving range which disturbs nearby residents?	Most of the key informants said that agreed because there was a complaint before, but it was corrected by adjusting the angle or turning it on and off for a time, such as the community leaders and people who lived nearby said that "There was the matter of spotlights".

DISCUSSION

The findings of this study are consistent with the previous research which was as follows;

1) The result of the formulation of the problem.

Most of the key informants said that having the golf driving range in the nearby community resulted in increased employment of workers. It is in line of Raharja et al. This study revealed that the presence of sports facilities economic impact by creating jobs both permanent and temporary so that the economy can increase incomes and reduce unemployment and poverty (13).

Most of the key informants said that having the golf driving range in the nearby community caused problems. The golfer wanted to have the golf driving range, but those who didn't play golf didn't want the golf driving range. It is in line of Chankuna. This study assessed the socioeconomic impacts of the FIFA World Cup Qatar 2022 on Chon Buri Sports City residents. The results found that negative impact dimensions are Traffic Problems, Security Risks, Economic Costs, and Environmental Concerns (14).

All of the key informants said that having a golf driving range in a nearby community is a health benefit that makes people exercise more. It is in line with Chen and Liu. The empirical results show that constructing public sports facilities significantly increases participation in community sports and decreases the risk of getting ill (15).

All of the key informants said that having a golf driving range in a nearby community causes light and noise pollution problems. It is in line with Atere. It was found that noise is a necessary and unavoidable byproduct of sports arenas (16). Moreover, it is also relevant to Ntoutsos et al. The results revealed that the aiming of the pitch lighting in municipal football fields, without taking into account the dense urban environment in the surroundings, causes light pollution. Obtrusive lighting in most cases is the rule and not the exception (17).

2) The result of the formulation of alternative actions.

All of the key informants in this step agreed that improving the law by amending some parts of the law was the best option for selecting in the process of regulatory impact analysis which was issuing a Notification of the Ministry of Public Health regarding the golf driving range operations through the mechanic of publishing a Notification of the ministry of public health by virtue of the provisions of Section 6(1) and 31 of the Public Health Act, B.E. 2535 (A.D. 1992), amended by the Public Health Act (No. 3), B.E. 2560 (A.D. 2017) and the Ministerial Regulation Control of Places of Business Hazardous to Health B.E.2560 (A.D. 2017) Clause 4 rather than adding to the ministerial regulations. It is in line of Tanjung et al. The findings indicated that the best option is

Alternative Action 3, namely The Revision of the Governor's Decree in 2017. The arguments of this election are 1) In terms of benefits, Option III provides higher benefits 2) In terms of cost, there is a difference in cost implications, but the magnitude is not too significant 3) Better guarantee the sustainability of the Lake Toba management program and 4) In terms of time, option III requires additional time to revise Governor's Decree, but not too significant because the revised regulatory product is Governor's Decree which is relatively faster than revising the regulation (18). It is also relevant to the Impact Assessment Agency of Canada as found in the provisions of the Impact Assessment Act (19).

CONCLUSION

The best method to set the new standard for the golf driving range in Thailand was to publish the regulation by using the regulatory impact analysis (RIA) for fixing the existing problems with sustainability by the framework of the social determinants of health (SDH). From the findings, it can be concluded that improving the law by amending some parts of the law was the best action in this matter.

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APPLICABLE REMARKS

- Using the regulatory impact analysis (RIA) for creating and improving the new rules and regulations was the best option for fixing the problems, and improving the regulation regarding the golf driving range. The relevant organizations should consider the result of this research, and effort to be concrete and applicable in the future.

AUTHORS' CONTRIBUTIONS

Study concept and design: Navaporn Chanbanchong, Oam To-aj. Acquisition of data: Navaporn Chanbanchong. Analysis and interpretation of data: Navaporn Chanbanchong, Saowalee Kaewchuay. Drafting the manuscript: Navaporn Chanbanchong, Oam To-aj. Critical revision of the manuscript for important intellectual content: Oam To-aj, Saowalee Kaewchuay. Statistical analysis: Navaporn Chanbanchong. Administrative, technical, and material support: Oam To-aj, Navaporn Chanbanchong. Study supervision: Oam To-aj, Saowalee Kaewchuay.

CONFLICT OF INTEREST

There is no conflict of interest in this study.

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