# Poverty - Environment Initiative (PEI) Lao PDR







Assessment of Economic, Social and Environmental Costs and Benefits of Savan Vegas Casino & Hotel: Case Study in Savannakhet Province



Photo: NERI

Prepared by:

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The National Economic Research Institute (NERI), Ministry of Planning and Investment of Lao PDR

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Data used in this research is obtained from official statistics, published literature and field surveys carried out between May and December 2010, with reasonable efforts to ensure that these are factually correct.
The views expressed in this report are those of the authors and do not necessarily reflect the view of the Ministry of Planning and Investment of Lao PDR.

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#### **Acronyms and Abbreviations**

**ECC:** Environmental Compliance Certificate

**ESIA**: Environmental and Social Impact Assessment

FDI: Foreign Direct Investment
GDP: Gross Domestic Product
GoL Government of Lao PDR

**Ha** Hectares

**IUCN**: International Union for Conservation of Nature

Km Kilometer LAK: Lao Kip

Lao PDR: Lao People's Democratic Republic

MAF: The Ministry of Agriculture and Forestry

MOU: Memorandum of Understanding

MPI: The Ministry of Planning and Investment
NERI: The National Economic Research Institute

NGO: Non Government Organization
NTFP: Non Timber Forest Product
PA: Participatory Assessment

**PAFO**: Provincial Agriculture and Forestry Office

PDIC: Provincial Department for Industry and Commerce
PDPI: Provincial Department for Planning and Investment

**PLMO**: Provincial Land Management Office

**PWREO**: Provincial Water Resource and Environment Office

**UNDP**: United Nations Development Program

**USD**: United States Dollar

WREA: Water Resources and Environmental Administration

#### 1. Introduction

### 1.1. Background and rationale

Because of the favorable natural conditions and infrastructure development of Savannakhet Province, it has received significant investment flows during the last decade. Reaching a total of USD 2.123 billion over 2004-2008, investment in Savannakhet is significant nationally, accounting for 21.8% of all investment in the country during the same period. The larger share of investment in the province, 59.3% is from foreign countries (FDI). About 2% of FDI comes from India; 23% comes from China; 16% from Australia; about 9 % comes from Vietnam; 7 % from Thailand; and the remaining 16% of the FDI comes from other countries. The natural resource sectors attract the most investment in the province, with most FDI occurring in the agriculture and forestry sector (about 66%, followed by electricity and mining at 23%). The service and processing sectors account for the remaining 6% and 5% respectively.

There has been research related to investment in Savannakhet Province in the past, including a study on impacts of regional economic integration conducted by NERI in 2007. In addition, in 2008, NERI carried out a study focusing on benefit sharing from infrastructure development and transportation links. However, these previous studies did not provide sufficient information and understanding about how investment projects create economic, social and environmental impacts at the community level. Therefore, IUCN Lao PDR, NERI and the Savannakhet provincial authorities, with support from the Poverty Environment Initiative (PEI) in Lao PDR, conducted case studies focusing on evaluating the economic, social and environmental impacts of investment at the community level in villages surrounding two key investment sites. These case studies provide local-level information to support the overall assessment of the costs and benefits of investment in Savannakhet Province, carried out by IUCN Lao PDR and NERI in 2010. The two case studies selected are:

- Mitr Lao Sugarcane Plantation and Sugar Factory, located in several districts of Savannakhet Province (but with the case study focusing on three villages in Xayburi District);
- Savan Vegas Casino & Hotel, located in Kaisone Phomevihane District, close to the Savannakhet provincial town center.

The findings of the second case study are presented in this report, which examines the economic, social and environmental costs and benefits associated with the Savan Vegas Casino & Hotel complex, with a focus on three villages: Nong Den, Oudomvilay and Phonesavang Nua.

<sup>3</sup> Estimated by research team by using data provided by Savannakhet IPD (data sheet)

<sup>&</sup>lt;sup>1</sup> Savannakhet Provincial Investment Promotion Department (IPD). Five Year Plan 2011-2015 [Draft)

<sup>&</sup>lt;sup>2</sup> Estimated by research team by using data provided by Savannakhet IPD (data sheet)

#### 1.2. Research objectives and parameters

The case study aims to examine the following impacts of the investment:

**Economic impacts:** this section aims to clarify how the Casino & Hotel creates employment and income generation activities for local people, both directly and indirectly, as well as how it contributes to community development and to government revenues;

**Social impacts:** this section examines how Casino & Hotel investment contributes to community development, as well as social risks for people living around the development;

**Environmental impacts:** this section explores the Casino & Hotel's impacts on the surrounding environment, including pollution and noise.

### 1.3. Research methodology and activities

To achieve the research objectives outlined above, as well as to promote local involvement and inter-agency cooperation in the project, a research team was formed in Savannakhet Province, comprising researchers from NERI and representatives from the key provincial departments and agencies involved in investment promotion and management, including PDPI, PAFO, WREO, PLMO, PDIC, the Governor's Office, and so on. While the research conducted in the province was led by NERI, the team worked together to gather all the necessary data from various sectors in the province, as well as to carry out the case studies. The second case study of Savan Vegas Casino & Hotel was carried out by the provincial team with supervision by NERI and included the following activities:

- Literature review: This was carried out to collect secondary data and information. The research team analyzed relevant publications and documents including previous related research publications, financial reports, regulations and laws related to the Casino & Hotel management, and government statistics on the socio-economic conditions of the area, among others.
- Observation: During the case study, the research team observed villages and customers around the Casino & Hotel in Savannakhet as well as at the Lao-Thailand Mukdahan International Border Gate.
- Focus group discussions: These were carried out to collect primary data. The team organized focus group discussions with: (1) the Savan Vegas Casino & Hotel management team; (2) village authorities and organizers in each sampling village; (3) respected

people<sup>4</sup> in each village; and (4) women in each village. Each group consisted of between 7 and 10 people. Three villages around the Casino & Hotel were selected for study: Nong Den, Oudomvilay, and Phonesavang.

- Interviews: were carried out to collect information and statistical data to support the analytical work of the case study. The research team interviewed 34 casino visitors using the questionnaire attached to this report (Appendix 1). In addition, the team interviewed four local people who suffered as a result of gambling, who were selected during the study in order to get more in-depth information related to the casino and gambling. However, the research team was not able to interview people who benefited from gambling as the team was not able to find anyone of this nature in the area.
- Village profile surveys: were carried out to collect information and statistical data on the community level. Three villages around the Savan Vegas Casino & Hotel were surveyed. This was done primarily through speaking with village organizers and asking them to fill out the information collection form attached to this report (Appendix 2) and collecting information and statistical data recorded in several documents related to these villages, including village notes, socio-economic reports of the villages, and so on.
- Business survey: was also conducted. The research team interviewed a total of 25 businesses related to the Casino & Hotel, including guest houses, restaurants, and entertainment places. The survey used the questionnaire attached to this report at Appendix 3.

In order to provide a comprehensive picture of the economic, social and environmental impacts of the Savan Vegas Casino & Hotel, this report will review the socio-economic situation of the case study area (the three sampling villages located around the Casino & Hotel), provide background information on the complex, and then assess its economic, social and environmental impacts based on the findings of the research.

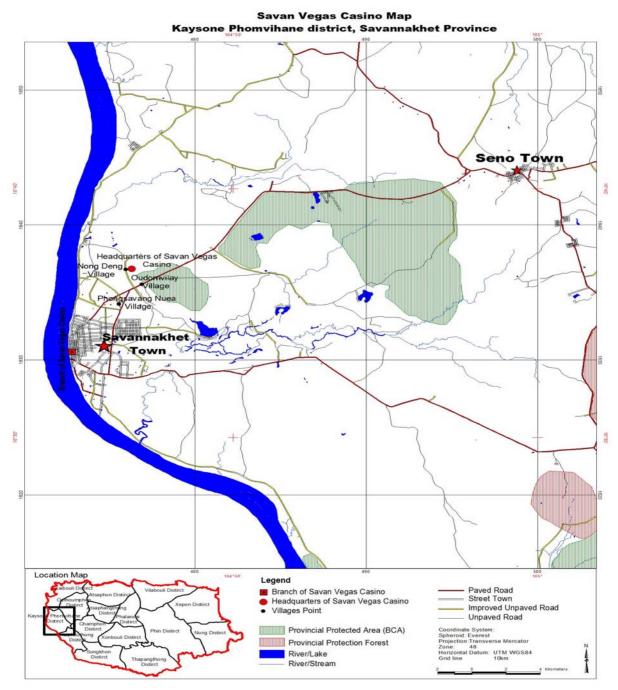
#### 2. Socio-economic situation of case study area

**Geographical location:** The case study area is three villages (or suburbs) located around the Savan Vegas Casino & Hotel in Savannakhet Province. They are:

- Nong Den Village (N16\*36'45.0", E104\*46'28.7", elevation 141m);
- Oudomvilay Village (N16\*36'09.4", E104\*47'06.0", elevation 145m); and
- Phonesavang Nua Village (N16\*35'22.0", E104\*46'15.6", elevation 154m).

<sup>&</sup>lt;sup>4</sup> Respected people are those people who are respected by the villagers, but do not take any political or administrative functions in the village. They include highly educated people, elderly people who have a lot of experience, etc.

The three villages cover a total land area of about 2,512 hectares (ha), and are located in urban areas about 9 km north of the Savannakhet provincial town centre and about 3 km from the second Lao-Thai Friendship Bridge at the border. The three villages vary greatly in size, from the largest, Nong Den, with 2296 ha, to the smallest, Oudomvilay, with only 15 ha. The maps and table below provides more details on the geographical location and land area of the case study.



Map 1: Location of case study area

Source: Developed by NAFRI using data gathered during case study

Table 1: Area of case study villages

Villages	Area (ha)
Nong Deng	2,296
Oudomvilay	15
Phonesavang Nua	201.6
Total	2,512

Source: Village profile surveys, July 2010

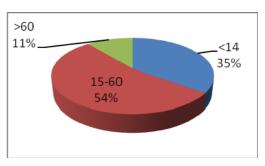
**Population and labor force:** The case study villages are identified as urban areas with a relatively high population density of about 350 persons per square kilometer<sup>5</sup>, which is much higher than the population density of all of Savannakhet Province and Lao PDR (whose population density is 38.7 and 25.3 per km<sup>2</sup> respectively).<sup>6</sup> In total, the area has a population of 8,797 people. Over 54% of the population is of working age (between 15 and 60 years old), over 35% are under 15 and only about 11% are in their old-age (over 60 years old). Table 2 and Figure 1 below provide more information.

Table 2: Population of case study villages, 2010

Villages	Number of people	Density (persons/Km²)
Nong Deng	2,069	0.90
Oudomvilay	3,538	235.87
Phonesavang Nua	3,190	15.82
Total	8,797	84.2 (average)

Source: based on data obtained during village surveys

Figure 1: Age structure of population in case study area, 2010, by percentage



Source: based on data obtained during village surveys

<sup>6</sup> Estimated by research team using data provided in the Statistical Yearbook for Lao PDR, 2008

<sup>&</sup>lt;sup>5</sup> Calculated by research team using population size with total land area, which was determined by village surveys.

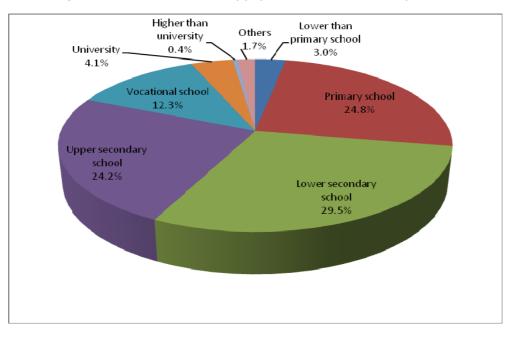


Figure 2: Education structure of population in the case study area

Source: based on data obtained during village surveys

The population in the case study area also has a higher educational level in comparison with Savannakhet Province and Lao PDR on average. Over 60% of the population over 15 years old in the area has completed primary school or higher; only about 3% of the population has an educational level lower than primary school. About 5% of the population in the three villages has completed a university education or higher. No one in the case study area is unable to read and write. The population age structure and educational level constitute important factors for attracting investment in the area.

*Main occupation structure:* The larger share of the population in the case study area remains working in subsistence agriculture (crop farming and livestock production); this employs about 35% of the labor force in the area, followed by general labor<sup>7</sup> employing about 22% of labor force. Work in trade and the construction sector are the next most important area for employment, employing 14 and 9% of total labor force respectively. Figure 3 below shows the occupational structure in the case study area.

<sup>&</sup>lt;sup>7</sup> They are laborers who have no fixed job in fixed sector. They are sometimes construction workers, sometimes they are employed as drivers or sometimes as workers in agriculture production, etc, depending on demand in the labor market.

General labor 22%

Service 6%

Trade 14%

Construction 9%

Transportation 2%

Figure 3: Occupational structure of population in the case study area, by percentage

Source: based on data obtained during village surveys

**Income and income sources:** The case study area is an urban area with relatively higher socioeconomic development status in comparison to the average for Savannakhet Province as a whole. The per capita income in the area is estimated to be about USD 1,100 per person per year, about 25% higher than that of the whole province.<sup>8</sup>



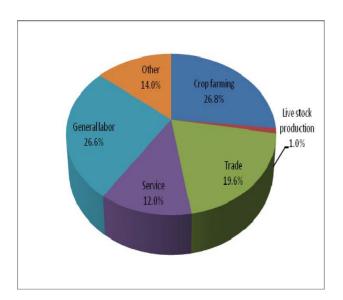
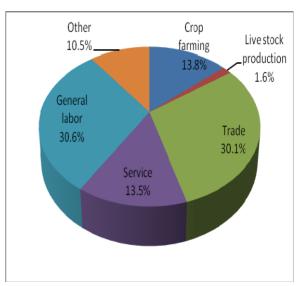


Figure 5: Income structure in case study area in 2010



Source: village profile surveys

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 $<sup>^{\</sup>rm 8}$  Average income for the area is based on information provided by village authorities.

The main income sources are trade and general labor, accounting for 30.1% and 30.6% respectively of the income earned in the case study area. The service sector (which includes work at the casino) provides the next biggest source of income, contributing to about 13.5%. Although the largest share of labor force (about 35%) is employed in the agricultural sector (crop farming and live stock production), agricultural production is a relatively small income source, contributing about 15.4% of total income in the case study area. There are no poor households in the case study area.<sup>9</sup>

An important observation from this data is the change in income structure over time. According to the Figures 4 and 5, the role of agriculture has been declining rapidly from about 26.8% (crop farming) five years ago to about 13.8% at present, while the share of trade, services and general laboring has been gradually increasing from 19.6%, 12% and 26.6% five years ago to 31.1%, 13.5% and 30.6% respectively in 2010. 10 The recent change in income structure in the three villages indicates that the socio-economic situation of the area is becoming more industrialized and modernized.

Transportation, communications and information infrastructure development: The case study area is an urban area with excellent road, communications and information infrastructure. The area is located only about 9 km from the Savannakhet provincial town center and 3 km from the Second Lao-Thai Friendship Bridge. Good paved roads connect the area with the town center and Bridge. Mobile phone networks cover the entire area, and internet services are also available. Television, radio and newspapers from Lao PDR, Thailand and Vietnam are important information sources and are easily available in the case study area.

Access to education: Educational indicators in the three villages are relatively high in comparison to Savannakhet Province as a whole and Lao PDR. There are three kindergartens (school for children between 3 and 5 years old), three primary schools, three lower secondary schools and two upper secondary schools. The school attendance rate is estimated to be 95% in primary school, 60% in lower secondary school, and about 35% in upper secondary school. To compare, school attendance rates for Savannakhet Province on average are estimated to be 86.7% in primary school, 45.1% in lower secondary school and 24.3% in upper secondary school. The table below provides more detail.

<sup>&</sup>lt;sup>9</sup> Village profile surveys.

<sup>&</sup>lt;sup>10</sup> The share is estimated by research team by using data from several sources, including records in several documents related to villages and the participatory assessment.

Table 3: School attendance in the case study area, 2010

Description	Target group (persons)	No. of school children (persons)	Attendance rate (%)
Kindergarten	904	206	25
Primary school	1,239	1,176	95
Lower secondary school	640	384	60
Upper secondary school	633	221	35
Total	3,416	811	23.7

Source: based on data collected during village surveys

Access to health services: The case study area also has relatively good access to health care services. The area is close to the Savannakhet Provincial Hospital and Kaisone Phomevihane District Hospital. In addition, there are four drugstores and one hemorrhagic fever treatment center. Further, the location of the villages close to the Lao-Thai border provides easy access to healthcare services in Thailand.

### 3. Savan Vegas Casino & Hotel

**Location:** The headquarters of the Savan Vegas Casino & Hotel is located in Nong Den Village, Kaisone Phomevihane District, Savannakhet Province (ELUE149m, N16°36′47.0″, E104°46′40.2″); this is about 9 km north of the Savannakhet provincial town center and about 3 km from the Second Lao-Thai Friendship Bridge. The headquarters<sup>11</sup> covers an area of 50 ha which were given as a concession to the company by the Government of Lao PDR (GoL) at the central level in 2006. In addition, the Casino & Hotel has established a branch casino at the Savannakhet-Mukdahan former international border gate<sup>12</sup> in the center of Savannakhet town (N16°33′25.7″, E104°44′41.7″, elevation 12m).

The photo below and Map 1 above shows the geographical location and main complex of the Casino & Hotel.

 $<sup>^{\</sup>rm 11}$  Its administration and management team works in this building.

<sup>&</sup>lt;sup>12</sup> After completing the Second Friendship Bridge, the border gate at this location on the Mekong River became a local border gate administrated by the provincial authority; only border pass holders are allowed to cross the border at local border gates. The international border gate is administered by the central government; both passport holders and border pass holders are able to cross at the international border gate.

Picture 1: Savan Vegas Casino & Hotel main complex

Source: Photographed by NERI during survey

*Investment and business activities:* The Savan Vegas Casino & Hotel is one of the largest investment projects in Savannakhet Province. The project has a total investment cost of about USD 18.5 million. The Sanum Investment Limited Company (an international investment company, which has its headquarters in Macau) holds 60% of the shares, the GoL holds 20% of shares, and two Lao investors hold the remaining 20% of shares. The figure below presents more details on the structure of share holders of the project.

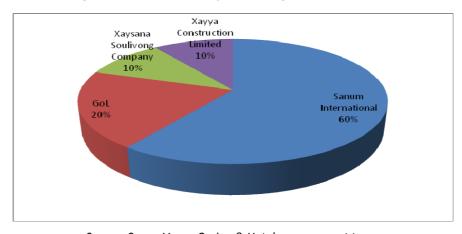


Figure 3: Share holders of Savan Vegas Casino & Hotel

Source: Savan Vegas Casino & Hotel management team

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 $<sup>^{\</sup>rm 13}$  Information sheet provided by the managers of Savan Vegas Casino & Hotel

Construction of the project started in 2007 and was completed in 2009. Since April 2009, the Savan Vegas Casino & Hotel started to provide its services officially, including casino, hotel and entertainment services. The Casino & Hotel currently plans to develop a golf course and to establish several night clubs in the concession area.

Currently, the Casino & Hotel employs a total of 1,480 people, of which 1,301 are Lao nationals; of this 160 are local people from Savannakhet Province. The remaining 179 people are foreign experts undertaking skilled employment including management, accounting, training and other technical work. According to discussions with the Casino & Hotel management team during the case study, the company pays a minimum wage of USD 150 per person per month to local people. This is about twice as high as the standard minimum wage fixed by the GoL. 14

Based on this, we can assume that considerable sums of money flow into the local area each month, helping to stimulate economic growth and reduce poverty. In addition, through the payment of income tax, profit tax, concession fees and dividends, the Savan Vegas Casino & Hotel makes a significant contribution to government revenues. According to the Casino & Hotel management team, the project is the second largest source of government budget in Savannakhet Province, after the Sepon Gold & Copper Mine. From 2008 until November, 2010, the Casino & Hotel contributed over LAK 17,038.9 million (USD 2.1 million) to the government budget through income tax, business tax and lump sum tax payments. This corresponds to about 1% of the total budget of Savannakhet Province and about 0.08% of total GoL budget during the same period. The sum excludes the dividend, which accounts for 20% of the total profits made by the Casino & Hotel. However, the exact sum of the company's profits and dividends are not publicly available.

The Savan Vegas Casino & Hotel has also contributed to some community development activities, including:

- Construction of a primary school in Nong Den Village, comprising 11 classrooms, two
  offices, one library and two bathrooms; the construction cost was around USD 180,000;
- Construction of a 2.3 km road connecting the main Casino with Route 9. This newly built road also serves as the main access to Nong Den Village; construction of the road cost around USD 682,000;

<sup>&</sup>lt;sup>14</sup> The minimum wage in Lao PDR is LAK 569,000 or about USD 71.1 per month, in accordance with *Arrangement No 1450/MLSW*, dated on April 30, 2009.

<sup>&</sup>lt;sup>15</sup> It is important to note that these fees and revenues go directly to the central government. Funds are then allocated to the provinces through the Ministry of Finance.

<sup>&</sup>lt;sup>16</sup> Savannakhet Provincial Department of Finance. *Tax Database Information Sheet*.

<sup>&</sup>lt;sup>17</sup> Estimated by research team using data provides in Savannakhet Province's *Five Year Plan 2011-2015* [Draft] and MPI's *Socio-Economic Development Plan, 2009-2010*.

- Contribution to Savannakhet Stadium's development: Savan Vegas Casino & Hotel built 40 new shower rooms, dug two new water ponds, improved 18 bathrooms and renovated 30 stadium rooms; the total contribution was around USD 50,000. The company also donated two air-conditioning units, and 30 beds and lockers sets, with total value of around USD 10,000 to the Savannakhet Sports Committee;
- In addition, the Savan Vegas Casino and Hotel has supported a number of traditional festivals and cultural events in Savannakhet Province.<sup>18</sup>

Profiles of customers of Savan Vegas Casino & Hotel: A large share of customers of the Savan Vegas Casino & Hotel travel from Thailand. The Casino & Hotel provides transportation between the Savannakhet–Mukdahan International Border Gate free of charge. According to observations and informal discussions with shuttle bus, taxi, Tuk Tuk and Jumbo drivers operating at the border gate, around 1,500 people cross the border for gambling at Savan Vegas Casino & Hotel every day, excluding people visiting the branch casino established at the local border gate.

According to the research team's observations, no less than 100 people visit the branch casino every day. Most of them are local Lao people from Savannakhet. According to our observations and discussions with those people, almost 100% of customers in the branch located at the local border gate were Lao nationals. Though it is theoretically illegal for Lao people to gamble, in reality this prohibition is not being enforced.

Picture 2 shows people coming from Thailand on the Casino's shuttle bus while queuing at the border. The long queue suggests that a large number of people cross at the Savannakhet-Mukdahan International Border Gate for in order to visit the Casino every day.



Picture 2: People crossing the border to visit Savan Vegas Casino & Hotel

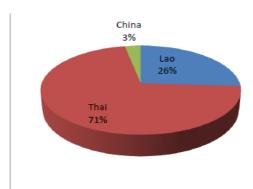
Source: Photographed during case study

<sup>&</sup>lt;sup>18</sup> Savan Vegas Casino & Hotel. *Information Sheet*.

However, according to observations and informal discussions with casino customers and people living around the location, about one quarter of the casino customers at the Savan Vegas main casino complex are also Lao nationals.

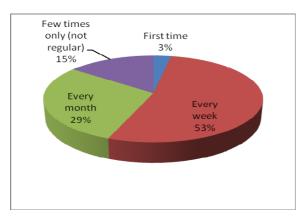
During the case study, the research team interviewed 34 players<sup>19</sup>, including 24 Thai people, nine Lao people and one person from China. The tables and figures below present the survey findings. According to these findings, 53% of the interviewees were men and 47% were women. The biggest share of them (53%) visit the casino (either the main casino and in its branch) every week; 29% visit every month; about 15% of them gamble irregularly and infrequently; and about 3% of interviewees were gambling for the first time. Around 76% of them mentioned that they usually lose while about 24% stated that they generally win.

Figure 4: Nationality of interviewed casino customers



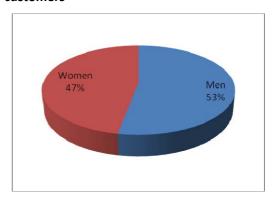
Source: Case study interviews

Figure 6: Frequency of visiting casino for interviewees



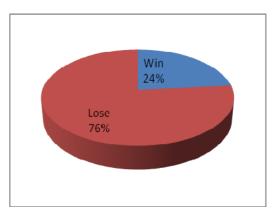
Source: Case study interviews

Figure 8: Gender of interviewed casino customers



Source: Case study interviews

Figure 7: Proportion of wins and losses



Source: Case study interviews

<sup>&</sup>lt;sup>19</sup> The research team was not permitted by management to interview customers inside the Casino & Hotel so interviewed this number of people around the casino and at the border gate.

Table 4: Average win - lose calculation (USD/person/time)

Description	Mean	Standard Deviation (SD)	Coefficient of variation (V)
Win	277	259	93.4
Lose	1,161	2,871	247.4

Source: based on information obtained from interviews during case study

The average amount of money lost on each trip to the casino is estimated to be about USD 1,161 per person while the average win (mean) per time is estimated to be about USD 277 per person. Based on these findings, the Savan Vegas Casino & Hotel gets an average revenue (mean) of USD 812.2 visitor/time. Based on the number of visitors, the total revenue of Savan Vegas Casino and Hotel is broadly estimated to be about USD 36.5 million per month or about USD 438.6 million per year, excluding revenue from its hotel and entertainment services. These estimates indicate that the Casino & Hotel may be making a large profit off of gamblers' losses. A concerning finding from the survey is the opinion of the casino customers themselves - 100% of the interviewees stated that they will come back to gamble at the casino in hope of getting their money back. Unfortunately, as the findings suggest, this is more likely to result in further losses.

### 4. Economic, social and environmental impacts of Savan Vegas Casino & Hotel

This section will further examine how the Savan Vegas Casino & Hotel has brought about economic, social and environmental change at the community level.

#### 4.1. Economic impacts of Savan Vegas Casino & Hotel

As mentioned above, the Savan Vegas Casino & Hotel creates a large movement of people coming into the area. Every day, an estimated 1,500 people cross the border to visit the Casino as well as take part in other activities in Savannakhet Province, especially in the area near the Casino. This includes visiting clubs and restaurants, staying in the hotel or in nearby guesthouses, buying souvenirs, and so on. The investment, with the large movement of people it generates, has contributed to economic growth in the area by creating direct employment at the Casino & Hotel and stimulating related business activities including hotels, guesthouses, beer gardens, restaurants, entertainment places, shops and so on. Thus, the most important economic impact of the Savan Vegas Casino & Hotel for the case study area is the creation of employment and income generating opportunities.

Based on findings from the village surveys, more than 130 people in the case study area are employed in the Casino & Hotel, which corresponds to about 9.2% of the total number of employees in the Casino & Hotel and about 2.5% of total labor force in the case study area. However, due to the relatively low educational and skill level of the local workers, most are employed in low skill jobs, including cleaning, security, cooking, etc. According to a discussion with these people during the case study, their average earnings are estimated to be around USD 200 per person per month. This is lower than the average wage rate of Savan Vegas Casino & Hotel, but higher than the company's minimum wage. Based on the findings, the total wages of local people in the case study area is estimated to be about USD 26,000 per month. This is not very high in comparison with the overall revenues flowing into the Savan Vegas Casino & Hotel (i.e. estimated at about USD 36.5 million per month).

The Savan Vegas Casino & Hotel also stimulates economic growth in the case study area indirectly by attracting investment and business activities in related sectors, including hotel and guesthouse services, beer gardens, restaurant, and entertainment places, among others. Based on findings from the village profile surveys, there are about 60 of these local businesses in the three villages. Most of these establishments are household businesses and have an estimated total combined initial capital of about USD 380,000 and total combined revenue of USD 70,000 per month.<sup>21</sup> These businesses employ around 200 local people, corresponding to about 3.8% of the total labor force in the case study area. Thus it is evident that Savan Vegas Casino & Hotel contributes significantly to economic growth in the case study area through indirect means.

#### 4.2. Social impacts of Savan Vegas Casino & Hotel

Most of the people living around Savan Vegas Casino & Hotel are Buddhist, and according to Buddhist beliefs, gambling is an immoral action and strongly prohibited. As such, the increase in gambling can be seen as a deterioration of traditional values and Buddhist beliefs.

Gambling existed in the area before the establishment of Savan Vegas Casino & Hotel. However, only a limited number of people were involved in this activity.<sup>22</sup> The establishment of Savan Vegas Casino & Hotel changed gambling in the area radically. It allows a large number of people to gamble openly. The significant number of local people who gamble at the Casino indicates not only the poor enforcement of Lao law but as mentioned above, deterioration in traditional mores among local people in the case study area.

<sup>&</sup>lt;sup>20</sup> According to discussions with the management team, the biggest share of employees in the Savan Vegas Casino & Hotel receives a monthly salary of between USD 250 and 3000. The lowest wage is about USD 150 per person per month.

<sup>&</sup>lt;sup>21</sup> Estimated by multiplying the number of business establishments with the average revenue, which is estimated by using data from the surveys.

<sup>&</sup>lt;sup>22</sup> Finding from focus group discussions.

Although the GoL has enacted a regulation that prohibits Lao people from gambling at casinos, the regulation seems to have no effect and is not enforced. According to the team's observations, informal discussions with customers at the Casino and focus group discussions, a significant number of Lao people visit the Casino, particularly at its branch located at the local border gate. Based on these findings, almost 100% of people visiting the branch casino are Lao nationals, while focus groups stated that between 20 and 30% of the gamblers in the main complex are Lao.

As mentioned above, the gamblers generally lose money as well as time that could be spent on work and income generating activities. The loss of money and time for income generation frequently leads to economic problems, family conflicts and separation. The village focus group discussions during the case study reported that numerous people in the case study area have lost large amounts of money and assets (house, land, etc.) due to gambling; one person reported losing all his assets (all money, house, land, trucks, car, etc). In addition, the focus groups reported an increasing number of family conflicts and four separated families attributed to casino gambling and losses.

It is also evident (through both observations and reports during the focus group discussions) that the Savan Vegas Casino & Hotel attracts and stimulates investment in related sectors including in hotels, guesthouses, bars, karaoke venues and nightclubs. The Casino & Hotel and the related businesses that have sprung up around it attract an influx of people into the case study area and thus affect traditional livelihoods and lifestyles. Participants in the focus group discussions claim that alcohol consumption, and commercial sex services (and human trafficking associated with this), and other criminal behaviors have been increasing in the three villages.<sup>23</sup> These kinds of businesses, including commercial sex providers, are also observable in the area around the Savan Vegas Casino & Hotel.

#### 4.3. Environmental impacts of Savan Vegas Casino & Hotel

*Wastewater*: As mentioned above, the Savan Vegas Casino & Hotel is a large company with 1,400 employees and about 1,500 service users every day. The Casino & Hotel likely consumes a lot of water. However, it is evident that the company has no adequate wastewater treatment system. After use, the water flows immediately along an open wastewater channel located near the Casino in Nong Den Village, where many people live. The villagers say that the wastewater stinks and affects the physical and mental health of people travelling and living the area. Villagers have complained to the provincial authorities about the wastewater. The pictures below show the wastewater from the Casino & Hotel.

<sup>&</sup>lt;sup>23</sup> Finding from focus group discussions.

Picture 3: Wastewater from Savan Vegas Casino & Hotel, 2010

Source: Photographed by NERI during case study

Further, the wastewater flows into rice fields located nearby the Casino and is suspected to have damaged about 0.5 hectare of the rice field (the rice plants grow well but produces no rice). Thus, the area is not longer useable for growing rice. Responding to complaints from the villagers and orders from the GoL, as well as from the provincial authority, the Savan Vegas Casino & Hotel has promised to improve its wastewater treatment system.

**Noise**: As mentioned above, due to the establishment of the Savan Vegas Casino & Hotel and related businesses, the case study area has become a small entertainment center, in which a large number of people travel, stay, drink and sing. This generates noise late into the night and disturbs the rest of people living around the Casino, according to findings from focus group discussions.

#### 5. Conclusion and recommendations

Based on findings above, the establishment of the Savan Vegas Casino & Hotel has both positive and negative impacts on local communities. The most important positive impact of the Casino & Hotel is the creation jobs and income generation activities in both direct and indirect ways. According to findings outlined above, the Casino & Hotel provides work for over 130 local people, corresponding to about 2.5% of total labor force in the case study area. In addition, the Casino & Hotel has stimulated further investment of about USD 380,000 in related sectors. These investments create further jobs and income generation activities for over 200 local people. Thus, the Casino & Hotel provides direct and indirect employment to more than 330 people, corresponding to 6.3% of total labor force in the case study area. The case study area has experienced higher economic growth and poverty reduction in comparison with

#### Box 1. A family hit hard by gambling in Savannakhet

During the case study, participants from one village told us about a family that has suffered a lot because of gambling. The family was relatively well-off and owned a small construction company, as well as the family home, a car, trucks and a lot of land. This was before they started gambling in the Casino. After the establishment of the Savan Vegas Casio & Hotel, both the mother and father of the family visited the casino and gambled. In the beginning, they were able to win some money, and so they went back to gamble some more. But after that, they lost all their money and their car. However, they were not able to stop gambling. Instead, they gambled more, hoping to win their money back. They gambled continually and lost continually. Finally, the family lost all their assets, including their home, their business and their vehicles. The family split up, with father and mother sharing custody of the children, and they moved out from the village. At the moment, nobody in the village knows where the family now lives or what they do.

Savannakhet Province on average and Lao PDR. The area has a relatively high per capita income and a relatively low poverty rate (although it should be noted that, as an urban area, these indicators may have already been better than provincial averages).

However, this case study has also shown that the Savan Vegas Casino & Hotel has had a number of negative impacts on local people, including: increased financial losses because of gambling; increased social problems, such as family conflicts and alcohol consumption; increased criminal behavior,; increases in the commercial sex trade with its attendant risks; and increased water and noise pollution in the local area.

According to opinions expressed in the focus group discussions, the participants felt that the costs and benefits associated with of the Savan Vegas Casino & Hotel were approximately equal (i.e. the benefits brought about by the investment were cancelled out by its negative impacts). To increase the benefits and reduce costs, the villagers and other stakeholders have suggested:

- Strengthening controls to make sure that Lao people do not have access to the Casino for gambling; in particular, the branch casino at the local border gate, where many Lao people gamble, should be closed;
- The Casino & Hotel should endeavor to provide more jobs for local people, as well as training for local people so they can be employed in higher-paying jobs, especially for people living around the Casino & Hotel;
- The Casino & Hotel should make a greater contribution to community development, including the establishment of a community development fund to support community development programs, projects and activities. They would like to see more community development projects beyond building a school and improving the stadium (which the casino has already done).

- Improving the wastewater treatment system to make sure that wastewater from the Casino & Hotel does not negatively affect people living and staying around the Casino.
- The Casino & Hotel should improve its corporate social responsibility, such as providing information about the risks of gambling and unsafe sexual practices.

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# Appendices

# **Appendix 1: Casino player questionnaire**

# **Casino Player Questionnaire**

1.	Gender of respondents?
	Man Woman
2.	Where do you come from?
	Lao Thailand China lietnam limbodia hers
3.	Do you visit Casino?Yes/No (if Yes, continues asking the question 2; if No, end
	the interview)
4.	How often do you visit the Casino?
	First time Weekly Monthly Few time a year
5.	Average length of stay (describe number of day):days.
6.	Activities done during the stay in Savannakhet:
	- Casino playingYes/No
	- Visiting tourism other sites:Yes/No
	- Shopping souvenir and local products:Yes/No
	- Visiting friend or relative:Yes/No
	- Others activities:Yes/No (described if yes)
7.	Average expenditure activities:
	- Crossing borderUSD
	- Travelling in Lao PDR:USD
	- Food and beverage:USD
	- OvernightUSD
	- Casino playing (average per time):USD/win or lose:
	- Payment for other activities:USD
8.	Would you came back to play casino again?Yes/No

Thank you for your cooperation

# Appendix 2: Village information collection form

# INFORMATION COLLECTION FORM AT VILLAGE LEVEL

	Form ID:
General Information	
Province:	
District:	

#### **Interview Information**

No	Interviewee's name	Age	Ethnicity	Gender 1=Male 2=Female	Position	Duration of living in the village	If some position, describe year of begin
1							
2							
3							
4							
5							
6							
7							

### Interviewer

Interviewer's Name:
Signature:
Interview Date://2007 (dd/mm/yy)

# **Quality Control Record**

Supervisor's Name:	Signature:	Checking Date:			
Questionnaire needed to call back:					
Supervisor's remarks:					

1.1. Y	ear of establi	shment?				
		Before 197	5			
		After 1975	, what year?			
42.5						
	opulation and		T			
No	Ite		(	Current	Five	years ago
2	Number of v					
1	Number of H					
2	Number of p					
3	Number of n	nales				
4	Number of fe	emales				
1.3. A	ge group					
Δ.σ.	e/year	1	Лale	Female		Total
		IN	/iale	remale		TOLAI
< 1						
11-						
	<del>-</del> 60					
60	<del>-</del> 64					
65<	<					
1.4 Ed	ucation struct	ture of popula	ation aged 15 a	nd over		
No	E	ducation leve	I	Number of persons	5	Percentage
1	Illiteracy					
2	Lower than	primary schoo				
3	Primary scho	ool				
4	Lower secon	idary school				
5	Upper secon	ndary school				
6	Vocational t					
7	University					

I. General information related to socio-economic development status of in-depth study area

8	Higher education	
9	Other	
	Total	100

# 1.5 Main employment structure of population aged 15 and over

No	Areas	Employment		Production value		
		Number of persons	Percentage	Value/million LK	Percentage	
1	Crop production					
2	Livestock production					
3	Fishery					
4	Trade					
5	Construction					
6	Transportation service					
7	Hotel/restaurant service					
8	General worker					
9	Unemployment		0	0	0	
10	Other					
	Total		100		100	

### 1.6 Access to land

No	Items	Current (ha)	Last 5 year (ha)	No	Item	Current(ha)	5 year ago(ha)
1	Total land area			5	Irrigated area		
				_	_		
2	Residential area			6	Areas unused		
3	Agricultural production area			7	Other		
	7.g. realtar ar production area				(wetlands)		
4	Forestry area			8	Other		

# 1.7 Heavy agriculture production/equipment

No	Items	Current/num ber	Five year ago/number	No	Items	Current	Five year
1	Tractor			5	ຈັກຟາດເຂົ້າ		
2	Hand tractor			6	ຈັກກ່ຽວເຂົ້າ		
3	Rice mill			7	ເຄື່ອງດຳນາ		
4	Agri. Animal			8	Others		

### 1.8 Transportation equipment

No	Item	Current	Five year ago	No	Item	Current	Five year ago
1	Track			5	Bicycle		
2	Mini transporter			6	Boat		
3	Car			7	Other		
4	Motorcycle			8	Other		

### 1.9. Infrastructure connecting

N	Item	Distanc	Type of road connecting:	No	Item	Distance/	Type of road connecting:
0		e/Km, please describ e 0, if the item is located within the village	0=the item is within the village  1=Paved road  2=Non paved road, but accessible although the year  3=Non paved and not accessible although the year  4=No road access			Km, please describe O, if the item is located within the village	0=the item is within the village 1=Paved road 2=Non paved road, but accessible although the year 3=Non paved and not accessible although the year 4=No road access
1	Formal border gate			12	Electricity		
2	Informal border gate			13	Provincial hospital		
3	Local market			14	District hospital		

4	Provincial market	15	Clinic	
5	District center	16	Pharmacy	
6	Provincial center	17	Other health center	
7	Post	18	Primary school	
8	Bank	19	Lower secondary school	
9	Micro finance institution	20	Vocational training center	
10	Other financial institute	21	Other type of school	
11	Telephone service	22		

### 1.10 Source of use water:

No	Item	Current		Five year ago	
		Number of HH	Percentage	Number of HH	Percentage
1	Piped water				
2	Ground water				
3	Well				
4	Stream/River				
5	Other (specify)				
6					

### 1.11 Kind of house

No	Kinds of house	Current	Five year ago
1	Wooden house (two floors)		
2	Concrete house (one floor)		
3	Concrete house (two floors)		

4	Haft Wooden – Haft Concrete	
5	Villa house (one floor)	
6	Grass roof – bamboo wall	
7	Zinc roof – bamboo wall	
8	Others (specify)	
9	Total	

### 1.12. Income source of villagers

No	Economic activities	Currently (percentage)	5 years ago (percentage)
1	Agriculture		
2	Livestock production		
3	Fishery		
4	Trade		
5	Service		
6	General labor		
	Forest products		
7	Others		
8	Total	100	100

### II. Considering economic, social and environmental impacts of Savan Vegas Casino & Hotel

### 2.1. State following **possible positive i**mpacts of Savan Vegas in your location:

No	Statement on positive impacts of investment	Opinions 1=agree, 2=Do not agree, 3= Cannot say
1	Savan Vegas Casino & Hotel contributes significantly to creating jobs and income generation activities for local people	
2	Savan Vegas Casino and Hotel contributes significantly to improving live and economic well-being of local people	
3	Savan Vegas Casino & Hotel contributes significantly to reducing poverty in local area	
4	Savan Vegas Casino & Hotel transfers technology and builds up capacity/knowledge of local people	
5	Savan Vegas Casino & Hotel increases value of natural resources in your location	
6	Savan Vegas Casino & Hotel improves road or other transportation	

	infrastructure	
7	Savan Vegas Casino & Hotel contributes to community development by	
	providing financial resources	
8	Savan Vegas Casino & Hotel improves accessibility to information and	
	communication in your location	
9	Savan Vegas Casino & Hotel contributes to improving public administration	
10	Savan Vegas Casino & Hotel improves life quality of people in your location	
11	Other specifies	

# 2.2. State following possible negative impacts of Savan Vegas Casino & Hotel in your location:

No	Statement on negative impacts of labor migration	Opinions
		1=Agree; 2=Do not
		agree; 3= Cannot say
1	Savan Vegas Casino & Hotel increases pollution and noises in your location.	
2	Savan Vegas Casino increases criminality in your location.	
3	Savan Vegas casino & Hotel changes traditional livelihoods.	
4	Savan Vegas Casino & Hotel effects living quality of people in your location.	
5	Savan Vegas Casino & Hotel increases poverty in your location.	
6	Savan Vegas Casino & Hotel contributes to increasing alcohol consumption	
	and prostitution in your location.	
7	Savan Vegas Casino & Hotel effects physical and mental health of people in	
	your location.	
8	Savan Vegas Casino & Hotel effects education negatively in your location.	
9	Savan Vegas Casino & Hotel increases living cost in your location	
10	Savan Vegas Casino & Hotel effects negatively on family life in your location.	
11	Investment effects negatively on living quality of people in your location	
12	Other negative impacts	

### 2.3. Three main negative and positive impacts of Savan Vegas Casino & Hotel

Three positive impacts, please, describe three number	Three main negative impacts, please, describe three
from positive impact list	numbers from negative impact list.

2.4. Please, choose one of the three statements
1= Savan Vegas Casino & Hotel has more positive impacts than negative one on our local
community.
2= Savan Vegas Casino & Hotel has more negative impacts than positive one on our local
community.
3= the positive and negative impacts of Savan Vegas Casino & Hotel are equal.
2.5 Choose one of the three options:
1= Savan Vegas Casino & Hotel should be promoted.
2= Savan Vegas Casino & Hotel should be stronger controlled and limited.
3= Savan Vegas Casino & Hotel should be consequently glossed.
III. Comments for increasing benefits and limited negative effects of Savan Vegas Casino &
Hotel
1
2
3

Thank you for cooperation

# Appendix 3: Questionnaire for business establishment survey

# **Questionnaire for Business Establishment Survey**

1.	Name of responder:
2.	Year of establishment:
3.	Business activities:
	(1)
	(2)
	(3)
4. 7	Type of business (tick the correct one):
	(1) Household business
	(2) Private investment
	(3) Foreign investment
	(4) Join venture
5. I	nvestment capital:
	(1) Initial capital:LAK.
	(2) Working capital:LAK.
6.	Total number of regular employees:persons.
7.	Number of local regular employeespersons.
8.	Number of casual workers:persons.
9.	Number of local casual workerspersons.
10.	Total cost of material impute:LAK per month.
11.	Cost of material input bought from local producers:LAK per month.
12.	Revenue from business activities:LAK per month on average.
13.	Wage paid to employees:LAK.