



**MINISTRY OF EDUCATION, YOUTH AND SPORT
BUILD BRIGHT UNIVERSITY
SCHOOL OF DOCTORAL STUDIES**

ANG SOKUN

**EXAMINING THE IMPACTS OF THE MANAGEMENT OF
THE ANGKOR WORLD HERITAGE ON
NOKOR KRAV COMMUNITY VILLAGE, SIEM REAP
PROVINCE, CAMBODIA**

**THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

**SPECIALIZATION
MANAGEMENT**

SIEM REAP, 2023



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PROF. DR. KENNETH KEE KIA HIONG**

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DECLARATION

I do hereby declare that except otherwise stated the thesis **“Examining the Impacts of the Management of the Angkor World Heritage on Nokor Krav Community Village, Siem Reap Province, Cambodia”** is based on my original research work. This research study was carried out by using both primary and secondary data collected during the study period from 2018 to 2020, and this research study has not been submitted either in part or in full for the award of any other degree of any other University.

ANG SOKUN



**BUILD BRIGHT UNIVERSITY
SCHOOL OF DOCTORAL STUDIES**

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CERTIFICATE

This is to certify that the thesis entitled "***Examining the Impacts of the Management of the Angkor World Heritage on Nokor Krav Community Village, Siem Reap Province, Cambodia***", written and submitted by Mrs. Ang Sokun towards the fulfillment of the requirements of the Degree of Doctor of Philosophy in Strategic Management to the Build Bright University is a record of genuine research work carried out under my guidance and supervision.

To the best of my knowledge, the thesis or a part thereof has not been submitted to any other University/Institution for any research degree.

**KENNETH KEE KIA HIONG
(Supervisor)**

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LIST OF ABBREVIATIONS

ACHA	Angkor Community Heritage and Economic Advancement
ADB	Asian Development Bank
AIAI	Angkor International Airport Investment
AKP	Agence Kampuchea Press
AMP	Angkor Management Plan
APNRM&L	Angkor Participatory Natural Resource Management & Livelihood Program
APSARA	Autorité pour la Protection du Site et l' Aménagement de la Région d' Angkor
BSCT	Banteay Srei Community Tourism
CDPP	Community Development Participation Project
CLT	Community Liaison Team
COMPACT	Community Management of Protected Areas Conservation
COVID	Coronavirus Disease
EFEO	École Française d'Extrême-Orient
EIB	European Investment Bank
EPSR	Empowerment of the Poor in Siem Reap
ESRC	Economic and Social Research Council
FKC	Future of Khmer Children
GDP	Gross Domestic Products
GIZ	German Agency for Technical Cooperation
HEF	Health Equity Fund

HMF	Heritage Management Framework
ICC	International Coordination Committee
ICOMOS	International Council on Monuments and Sites
ICCROM	International Center for the Study of the Preservation and Restoration of Cultural Property
IDPoor	Identification of the Poor Household
IFAD	International Fund for Agricultural Development
ILO	International Labor Organization
IUCN	International Union for Conservation of Nature
JCC	Japanese Community Center
JASA	Japanese-Apsara for Safeguarding Angkor
JST	Joint Support Team for Angkor Community Development
KHIC	Khmer Habitat Interpretation Center
Laos PDR	Laos People's Democratic Republic
MoEYS	Ministry of Education Youth and Sports
NGOs	Non-Governmental Organizations
NFUAJ	National Federation of UNESCO Association in Japan
NHS	National Health Service
OECD	The Organisation for Economic Co-operation and development
OUV	Outstanding Universal Value
RGC	Royal Government of Cambodia
SAAMBAT	Sustainable Assets for Agriculture Markets, Business, and Trade
SCA	Service Centre's APSARA
SPPF	Social Protection Policy Framework

SPSS	Statistical Package for the Social Sciences
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNTAC	United Nations Transitional Authority in Cambodia
USA	United State of America
WMF	World Monuments Fund
WTTC	World Travel & Tourism Council
YIHL	Yunnan Investment Holdings Ltd.
UFW	Unaccounted for Water
UNDP	United Nations Development Programme
UNWTO	United Nations World Tourism Organization
USAID	United States Agency for International Development

ABSTRACT

Angkor is the heart of Cambodia, the symbol of the Khmer nation, and an indication of Khmer civilization. It is a group of temples with a total area of 401 square kilometers. It was nominated on the list of UNESCO on 14th December 1992 as the World Heritage in Danger. Later, due to the commitment of the Royal Government of Cambodia, APSARA Authority was created in 1995 to manage and conserve the Angkor Region. Zoning was created with different levels of functional protection. Achievements have been made, starting from the success of the restoration of the temples to sustainable tourism development. With the facilitation of ICC, Angkor has finally taken off the list of World Heritage in Danger and became a Cultural World Heritage in 2004. Driven by a clear mission and administration system, the APSARA Authority has set clear guidelines for the procedural management for the conservation of Angkor and procedural management for community participation and sustainable development. In 2020, the APSARA Authority has been re-named as APSARA National Authority under the Royal Government of Cambodia.

For this research study, Nokor Krav Community Village was selected as the study area because it is located in zone one of the Angkor protected zones and also part of the Angkor Park, which is under the protection and conservation by the APSARA National Authority. Nokor Krav Community Village is a poor community but recently has been challenged with the application of legal policy

from the government to meet the requirements of UNESCO in conserving the Angkor World Heritage for not allowing the locals living in this area to sell land to outsider residents, to build new houses or other constructions, to operate any commercial activities, to collect firewood or raisin from the forest of the Angkor Park. Moreover, the designation of Angkor as a UNESCO World Heritage is believed to bring about advantageous benefits to the local communities in the country, particularly through the development of tourism that is supposed to benefit them economically. However, provided the resultant impact from tourism is positive, it will also benefit the local communities of the surrounding area of Angkor Park, especially the Nokor Krav Community Village. This particular village had been studied once in 2006 for a project on the Mekong Sub-region by the researcher. As such, a modest attempt is now being made in the present study to investigate how much it has progressed economically after a lapse of 14 years. In addition, the study aims to examine how the management of the World Heritage of Angkor has adverse positive and negative impacts on the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia. Five study indicators have been selected: *(1). Local employment opportunity; (2). Level of local involvement in the conservation of the site; (3). Housing condition; (4). Education improvement; and (5). Physical and mental healthcare support* to measure the positive impacts. Similarly, another five indicators: *(1). Availability of infrastructure development; (2). Level of local awareness on the conservation of the World Heritage Site; (3). Employment accessibility; (4). Poverty rate; and (5). Affordable access to*

quality healthcare and education has been selected to measure the negative impacts. Finally, the study looks into the main constraint factors that are challenging the locals and identifies the strategies for improving the living standard of the locals in the Nokor Krav Community Village.

Based on the problem statements and the need for research, the present study has been undertaken to provide answers to the following research questions:

- i. Why is the management of the Angkor World Heritage of significant importance in Nokor Krav Community Village in Siem Reap Province, Cambodia?
- ii. What are the present challenges of the locals living in the Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iii. What are the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iv. What are the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?
- v. What are the key strategies of the government towards the improvement of the livelihood of the locals living in the study the area affected by the management of the Angkor World Heritage?

The study has been undertaken with the following objectives:

- i. To examine the significant importance of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- ii. To find out the present challenges of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.
- iii. To examine the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- iv. To examine the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- v. To find out the key strategies of the government towards the improvement of livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.
- vi. To provide recommendations for further improvements of the the livelihood of the locals living in the study area that is affected by the management of Angkor World Heritage.

The study has tested the null hypotheses as follows:

Ho₁: There are no positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

Ho₂: There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

To achieve the objectives and test the hypothesis, the study employed several methods and techniques for data gathering and analysis, and it was based on two sources of data, both primary and secondary. The primary data have been collected from the personal direct interview of 400 respondents selected from Nokor Krav Community Village and in-depth interviews of five key informants from the APSARA National Authority and Local Authorities. To select the target samples, Yamane Equation (1967) has been used as the formula to determine the target samples for this study. Within the total population of 3,764 people in Nokor Krav Community Village, the calculation was only 361 samples. However, to be more accurate, the study considered choosing 400 samples for this study. To select each sample, the number of populations in the village census published by the local administration of Sangkat Koukchork in 2020 was used as the sampling frame, and the villager's household was used as a sampling unit. One person in each household was used as a sample to represent each household. Those samples were selected randomly based on the house

structure in the village by choosing one out of every three houses. Moreover, to select the five key informants, restricted and purposive sampling has been used as methods because they are based on the judgment of the researcher. The secondary data have been collected from reports, documents of the APSARA National Authority, statistics documentation of the local administration, ministries, UNESCO website, libraries, tourism journals, previous research studies, and other relevant publications both in hard copies and in electronic ones. To test the two hypotheses, the Multiple Regression Analysis Model was used for the F test statistic and the P-value test for overall significance. Both, SPSS (Statistical Package for the Social Sciences) and Microsoft Excel were used as a tool for accessing, preparing, analyzing, reporting, predicting, counting, presenting, and testing the statistical model.

The study has analyzed the collected information and has come up with the following results as given below:

First, the study discusses the profile and information of respondents in Nokor Krav Community Village to be original and have a family size of five to six members. They are very family-oriented and prefer to marry the Khmer locals of the same region because they can live close to their parents and share the same culture. The majority of the housewives have no education and stay at home to take care of their children and aged parents.

Second, the study further discusses the significant impacts of the management of the Angkor World Heritage by APSARA National Authority on Nokor Krav Community Village to be spiritually significant. These include the survival of whlocal culture and pride, the protection from the invasion of migration of outsiders, the security and safeguarding, and the enhancement of local awareness and education.

Third, the study also discusses the significant impacts of the management of the Angkor World Heritage by the APSARA National Authority related to the economic benefits to locals in the Nokor Krav Community Village. These include the opportunity for making incomes from tourists, job employment in APSARA National Authority, jobs in the tourism industry of the Siem Reap-Angkor, receiving support for their basic needs from tourists, and receiving a piece of land in Run Ta-EK Eco-village from the Royal Government of Cambodia.

Fourth, the study has also found that Nokor Krav Community Village, in particular, has been challenged with five main factors which cause them to be a poor community. These factors are as follows:

- (1) Low level of education;
- (2) More jobless people in each family;
- (3) Less economic activity problems;
- (4) More sickness and debt problems;
- (5) The constraints of the law of protection of Angkor Park include

the limitation of new construction, land selling, land use, specific business activities, and the prohibition of some forms of traditional works.

Fifth, regarding the local employment opportunity in Nokor Krav Community Village, the first indicator for measuring the positive impacts of the management of the Angkor World Heritage, found that 64 percent of the 400 respondents surveyed have gained the opportunity to benefit from the tourism industry in Siem Reap-Angkor. These include 36.5 percent that have direct jobs in tourism, 13.3 percent gained induced jobs (any jobs resulting from the development of the tourism industry), and 14.2 percent received indirect jobs in tourism (any jobs indirectly created by tourism, arising from the spending of money by residents from their tourism incomes).

Sixth, the result of local involvement in the conservation of the site, the second indicator, was found to be more positive because 77 percent of the respondents support the regulation of not allowing locals to sell land to outsider residents, and 73.8 percent agreed that not having new residents in their village is good. However, only 28.3 percent supported the government strategies by willing to move live in Run Ta-Ek Eco-village.

Seventh, the result of the second indicator also revealed negatively regarding the willingness to respect the construction law because it was revealed that 33.8 percent of the respondents attempted to respect the law as an obligation,

and 55 percent of the respondents pretended to respect the law with dissatisfaction. Though, the majority of the locals in Nokor Krav Community Village believed that the conservation of the Angkor World Heritage is compulsory. However, they complained to APSARA National Authority that the application for receiving admission to the construction seemed to be too strict, unfair, and less transparent.

Eighth, the third indicator to measure the positive impacts of the management of the Angkor World Heritage was housing condition. The result found that the living standards of the locals in Nokor Krav Community Village are still low because 76.5 percent of the 400 respondents were living in cottages and small wooden houses, and 22.5 percent of the respondents were living in brick and wooden houses, which are classified to be in the medium living standard. While only 1 percent of the locals were living in a big house with a garden, which was categorized as a higher class. However, regarding the ability for building house construction in this village, the results seemed to indicate a good sign of economic improvement since 78.75 percent of the respondents were able to construct their houses after 1993 after Angkor became a World Heritage. However, with their low-paid income, the majority of the locals in Nokor Krav Community Village still received some loans from micro-finances to rebuild and maintain their houses.

Ninth, education and development must go hand in hand. In this study, improvement in the quality of education is the fourth indicator to measure the

positive impacts of the management of the Angkor World Heritage. The study found that 74.5 percent of the respondents indicated that the quality of education in Nokor Krav Community Village has improved. Moreover, the level of children's enrollment has increased from 57.2 percent based on the study by Sokun. A, in 2006 to 76.5 percent in 2020 as revealed by the findings of the present study. Similarly, the number of children having access to high school and higher education has also increased from 2.3 percent based on the study by Sokun, A. in 2006 to 16 percent in 2020 as revealed by the findings of the present study.

Tenth, the last indicator in measuring the positive impacts of the management of the Angkor World Heritage was related to the physical and mental health care support. Based on the survey, it was found that 43.3 percent of the total 400 households received funding support from the Cambodian Government while 20.5 percent partly received physical health care facilities such as water filters, well, and toilet construction. Nevertheless, only 36 percent did not receive any support.

Eleventh, the study has also focused on other five indicators to measure the negative impacts of the management of the Angkor World Heritage by APSARA National Authority on Nokor Krav Community Village. The first indicator was infrastructure development. Nokor Krav Community Village is in the protected area of Angkor Park. However, there is a regulation gap for the construction of public buildings and infrastructure. Due to the survey on 400 respondents, 20

percent of them indicated that the road construction in their village was good, and 33.8 percent mentioned that it was good only at some specific points. Another 6.5 percent felt acceptable, while 39.8 percent requested the authority to enlarge the road. Regarding the development of public buildings and infrastructure, 33.8 percent of the respondents requested a health care center, 32.5 percent suggested a high school and more vocational training centers in their village, 17.3 percent of them asked for a bank and the other 16.5 percent requested a least one community market to sell local products to tourists.

Twelfth, the second indicator in measuring the negative impacts of the management of the Angkor World Heritage was related to the level of local awareness of the conservation of the World Heritage. The result showed that only 26 percent of the total 400 respondents knew clearly about the duty and responsibility of the APSARA National Authority. Though 71.3 percent of them knew that Angkor became a World Heritage, they do not know when it was listed and even the size of the Angkor Park to be protected. Moreover, only 18 percent of them knew the meaning of the word "World Heritage". Overall, this low level of local awareness of the World Heritage reflects the ignorance of local participation in the conservation of Angkor World Heritage.

Thirteenth, the economy of Siem Reap has been transformed from agriculture as the primary sector to secondary (labor-intensive) and tertiary (service) industries over the past 20 years, since the listing of Angkor as a World Heritage in 1992. In this study, employment accessibility was selected as the third

indicator to measure the negative impacts of the management of Angkor World Heritage on Nokor Krav Community Village. The commune census for development and planning in 2020 indicated that agriculture remains a dominant sector with 62.1 percent, followed by the tourism sectors that ranked number two with 37.9 percent. Moreover, the results of the survey of the 400 respondents found that 58.9 percent of them can only have access to low-paid jobs of below USD150 per month, and 29.52 percent can have access to medium-paid jobs of between (USD150 to USD300) per month, and only 9.48 percent can have access to higher-paid jobs of between (USD301 to USD450) per month. The findings also reveal that only a small minority of 2.1 percent have access to better-paid jobs of more than USD 450 per month. The contributory factors may be related to the locals' education and experience required in the tourism industry. In the case of the locals in Nokor Krav Community Village, the findings indicated that low education with less experience in the tourism and hospitality businesses among the locals meant that they can only have access to low-paid jobs that do not require technical skills and fluency in foreign languages.

Fourteenth, the poverty rate is the pressing issue, and it is the fourth indicator for measuring the negative impacts of the management of Angkor World Heritage. Nokor Krav Community Village was a poor community even before Angkor became the World Cultural Heritage and has continued to remain poor even though the village has now been designated as part of Angkor. This is

because the law of protection became one of the constraints for the economic development of this community. However, the findings of the present study indicated that the locals in this area have also benefited from job employment in the tourism industry and APSARA National Authority, though the majority of the jobs are low-paid. The findings of the survey revealed that 43.5 percent received IDPoor (support for the identification of poor household program, executed by the Ministry of Planning of Cambodia by giving an equity card to the household indicating its status) when compared to the national poverty line in 2007 of 47.8 percent, Nokor Krav Community Village's poverty rate has decreased by 4.3 percent in 2020.

Fifteenth, the last indicator for measuring the negative impacts of the management of the Angkor World Heritage is the affordable access to quality education and health care. The result has shown that only 31.3 percent of the 400 respondents surveyed, can afford to send their children to school in Siem Reap city and quality health care services. While the other 42 percent, cannot support their children to higher education in the city and 26.8 percent are not sure whether they can afford to send their children to higher education in the city. Pragmatically, this group of people seems to understand that education is necessary for their children, but because of poverty, they do not know how much they can patiently still support their children in school but ironically want to request some support.

Sixteenth, to assess the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village quantitatively, a Multiple Regression Model was used to test the first hypothesis. $\hat{Y} = a + \beta x_1 + \beta x_2 + \dots + \beta x_k + \varepsilon$ or $\hat{Y} = a + \beta x_1 x + \beta x_2 + \beta x_3 x + \beta x_4 x + \beta x_5 + \varepsilon$; where $\hat{Y}$ = Male and Female is a dependent variable that represents the locals impacted positively by the management of Angkor (PI); X_1 = Local Employment Opportunity (EO); X_2 = Level of Local Involvement in Conservation of the site (LC); X_3 = Housing Condition (HC); X_4 = Education Improvement (EI); X_5 = Physical and Mental Healthcare Support (HS); a = Intercept term; and ε = Error term. The regression result was found to be significant at a 5 percent level of significance ($F = 4.428$, $\text{Sig.} = 0.001$). The ($R^2 = 0.053$) revealed a 5.3 percent variation in the dependent variable, $\hat{Y}$ = Male and Female is a dependent variable was due to the independent variables are X_1 = Employment Opportunity (EO), X_2 = Level of Local Involvement in the Conservation of the Site (LC), X_3 = Housing Condition (HC), X_4 = Education Improvement (EI), and X_5 = Physical and Mental Healthcare Support (HS) had significant impacts on the local people in Nokor Krav Community Village. Though the Education Improvement and Physical and Mental Healthcare Support had no significance on the dependent variable, overall, the first null hypothesis "*Ho₁: There are no positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

Seventeenth, to assess the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village quantitatively, a Multiple Regression Analysis was also used to test the second hypothesis: $\hat{Y} = a + \beta x_1 + \beta x_2 + \dots + \beta_k + \varepsilon$ or $\hat{Y} = a + \beta x_1 + \beta x_2 + \beta x_3 + \beta x_4 + \beta x_5 + \varepsilon$, where $\hat{Y}$ = Male and Female is a dependent variable was due to the independent variables X_1 = Infrastructure Development (ID), X_2 = Level of Local Awareness on the Conservation of the Site (AC), X_3 = Employment Accessibility (EA), X_4 = Poverty Rate (PR), and X_5 = Affordable Access to Quality Healthcare and Education (HE). The regression result was found to be significant at a 5 percent level of significance $F = 9.33$, $\text{Sig.} = 0.001$. The $R^2 = 0.110$ revealed that 11 percent variation in the dependent variable $\hat{Y}$ = Male and Female is a dependent variable due to the independent variables X_1 = Infrastructure Development (ID), X_2 = Level of Local Awareness on the Conservation of the Site (AC), X_3 = Employment Accessibility (EA), X_4 = Poverty Rate (PR), and X_5 = Affordable Access to Quality Healthcare and Education (HE). Though Infrastructure Development and Poverty Rate had no significant impact on the dependent variable; overall, the second null hypothesis "*Ho₂: There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

Eighteenth, based on the above results, the two null hypotheses have determined that there were both positive and negative impacts of the management of Angkor by APSARA National Authority on the locals in Nokor

Krav Community Village. The positive impacts were related to “Local Employment Opportunities, Level of Local Involvement in the Conservation of the Site, and Improvement of the Housing Conditions”. While the negative impacts were related to “Level of Local Awareness on the Conservation of the Site by APSARA National Authority, Employment Accessibility, and Affordable Accessibility to Quality Healthcare and Education”.

Nineteenth, to improve the livelihood of the locals living in Angkor Park, the APSARA National Authority has built and maintained more infrastructures. These include roads, bridges, sluices, mechanic boxes, drainage dams, dykes, and canals, stations of solar power chargers, and West Baray irrigation systems in the different parts of Angkor Park. The APSARA National Authority has focused on improving the living standards of local villagers as well as safeguarding the Angkor World Heritage to be sustainable by enhancing the natural environment and reducing the poverty of Angkor Park communities. It has established the Khmer Habitat Interpretation Centre (KHIC), Banteay Srey Community Tourism (BSCT), Community-Based Tourism Development in Baray Reach Ta-dark, and Run Ta-Ek Eco-development Project, Angkor Community Heritage and Economic Advancement (ACHA), a cooperation project between APSARA National Authority and New Zealand Foreign Affairs & Trade Aid Program, and Kut So Community-based Tourism. However, the contribution works of APSARA National Authority have not yet responded to the needs of the locals in Nokor Krav Community Village due to the massive size of 401

square kilometers of Angkor has put a burden on APSARA National Authority to carry. Therefore, the contribution works of the APSARA National Authority are like a few drops in a big container.

Twentieth, in the democratic context of society, the voice of the locals is considered to be one of the dominant factors to report to the government. In this regard, the findings revealed that the majority of the respondents in Nokor Krav Community Village are not satisfied with APSARA National Authority. They requested APSARA National Authority to make some reforms to the protected laws to have clear guidelines with applicable procedures. The regulations must not be too strict but fair and transparent.

Twenty-first, to improve the living standard of the Nokor Krav Community Village, the locals in this study village have requested the Royal Government of Cambodia to:

- establish more public buildings inside the village such as high schools, vocational training centers, health care centers, and community markets;
- provide training skills on the computer, international languages, handicrafts, and modern agriculture;
- reformulate clear guidelines with its procedure for land use of (housing, farming, and plantation land) inside Angkor park; and
- improve the local administration to be more transparent and provides fair and just treatment for everyone.

Based on the research, the recommendations given by the present study are as follows:

- i. APSARA National Authority should regulate a standard model for space management of the housing land inside Angkor Park by turning the model of the Khmer Habitat Interpretation Center into practice. Nokor Krav Community Village is part of Angkor Park, so the locals' houses are also part of the Angkor Monuments, and they are attractive to tourists.
- ii. APSARA National Authority should allow locals living in Angkor Park especially, the Nokor Krav Community Village to offer services in their own homes to tourists in such a way that is not harmful to the image of Angkor by following the technical guidelines of the APSARA National Authority.
- iii. APSARA National Authority should regulate the standard guidelines for plantation land use in which the identical trees are well preserved, but the locals can still use the allocated land to grow wild fruits or even vegetables. To preserve the existing identical trees of Angkor forest, APSARA National Authority should do tree inventory and set the penalty regulation for tree cutting. The locals should be encouraged and supported with technical assistance to grow new wild fruit trees for conservation as well as for economic benefits to earn extra income from selling these wild fruits.

- iv. To avoid the conflict of interest, APSARA National Authority should expedite the land-use mapping of the Angkor Park Project to be completed as soon as possible. More practical guidelines and advanced monitoring systems should be applied. The land title should be coded in such a way to provide freedom for economic activities to locals who reside in this particular village but under the specific monitoring guidelines of the APSARA National Authority.
- v. APSARA National Authority has limited some of the local's economic activities and new constructions due to the law of protection. In return, to compensate for the loss and enhance the living standard of locals in the protected area of Angkor Park, APSARA National Authority should provide more training courses and skills for the locals related to tourism and services to enable them to earn some additional income from the tourists.
- vi. APSARA National Authority has already employed many locals from Angkor Park as workers in the temples, both permanent and temporary. However, most of the jobs were only low-paid and temporary. APSARA National Authority should therefore prioritize promoting local's education and employing them for higher-paid jobs to work permanently both in the office and on the site of Angkor Park.
- vii. The Royal Government of Cambodia, through APSARA National Authority, has spent so much money and effort to conserve and

restore the temples of Angkor (the Tangible Cultural Heritage). Similarly, the locals living inside Angkor Park, especially the Nokor Krav Community Village, are also (the Living and Intangible Cultural Heritage), whose living standards needed improvement. Therefore, the Royal Government of Cambodia should pay more attention to these locals, by enforcing APSARA National Authority to regulate the applicable guidelines of the law of protection in such a way responding to the real needs of the locals in the Nokor Krav Community Village. These include the irrigation system for rice cultivation and plantation, the promotion of education, the integration of the technology and communication network, health care facilitation, and public infrastructure development.

- ix. The Royal Government of Cambodia should upgrade the quality of education for the locals in Nokor Krav Community Village to minimize the parents' spending on transportation for their children. It is envisaged that a junior high school, a high school, and vocational training centers be built inside the village for this aforesaid purpose.
- x. The Royal Government of Cambodia should provide free basic training courses to children and adults in Nokor Krav Community Village on international languages, computer, and business skills in tourism and hospitality for obtaining jobs in the tourism industry more easily. Similarly, training in handicraft skills should be given to

elderly women and housewives to help them earn extra income for the family by selling their handicrafts to tourists.

- xi. The Royal Government of Cambodia should establish one community market for Nokor Krav Community Village so that the local people can have the opportunity to sell their products such as local fruits, wild fruits, vegetables, meats, handicrafts, and other local products directly to tourists who visit and or pass through their village. The one-community market will also act as a wholesale distribution center for supplying fresh vegetables, fruits, and other local produce to the tourism industry in the city.
- xii. The Royal Government of Cambodia should establish one health care center inside the Nokor Krav Community Village so that the locals can have access to it easily, as this will save time, money, and life in the case of an emergency.

To conclude, the present study is a modest attempt to examine the impacts of the management of Angkor on Nokor Krav Community Village. It aims to support academics, researchers, planners and policymakers, key stakeholders, and other governmental relevant bodies to use it as guidelines to formulate regulations, implementation, as well as for decisions making. It is also feedback to report to the APSARA National Authority as this particular study area, Nokor Krav Community Village is part of Angkor Park, there are potential benefits to further improve the livelihood of the locals in this area. Thus, it is believed and

hopeful that the APSARA National Authority and all relevant stakeholders will put in their concerted efforts in a coordinated way to ensure conservation is made for sustainable development and the standard of living of the locals of Angkor Park especially, Nokor Krav Community Village has been enhanced. In other words, People, Temples, and Nature are safely living together in peace and harmony.

CHAPTER I

INTRODUCTION

This chapter presents the introduction of the research study. It is subdivided into nine sections. The first section is an introduction to the background of the research study. The second section describes the statement of the research problems. Five research questions are listed in the third section, followed by six objectives of the research study in the fourth section. The fifth section specifies the two hypotheses of the study and detailed reasons and significance of the study are given in the sixth section. The seventh section describes the scope and limitations of the study, followed by a summary layout of the study in the eighth section. Finally, a conclusion remark is given.

1.1 Background of the Study

Angkor is a unique Cultural Heritage, a living testimony of our past, and the foundation of our identity as a nation. Angkor continues to contribute to Cambodia's evolution. Cultural Heritage could be defined as the inherited symbolic and non-symbolic aspects of people's ways of life. Where there is a well-harnessed Cultural Heritage, the existence of museums is facilitated. The museums, on the other hand, serve as the repositories or custodians of either archaeological or products of the historical past with their associated non-material values. Cultural Heritage by implication attracts cultural tourism,

creates job opportunities, cultural awareness, and social and economic benefits. Cultural Heritage is inherited from past generations, is maintained in the present, and for the benefit of future generations, and is the legacy of physical artifacts and intangible attributes of a group or society¹.

Angkor, the Cultural Heritage of Cambodia, had been admitted by the International Committee of UNESCO as the World Cultural Heritage in December 1992 in Santa Fe, New Mexico, USA, and later became the **World Heritage in Danger** in 1994². To get registered as a Cultural World Heritage, UNESCO required the Royal Government of Cambodia to establish an Authority called "**APSARA**, an Authority for the Protection and Management of Angkor and the Region of Siem Reap" in 1995³ and later amended to **APSARA National Authority** in 2020. Strictly protected zones have been registered with a total area of 401 square kilometers to conserve temples, environment, water, forest, and culture of the park region.

¹ GIG Global (n.d). What is Cultural Heritage? Retrieved on 21st January 2020 from: <https://www.igi-global.com/dictionary/espaa-verde/6392>

² UNESCO World Heritage Centre (n.d). Angkor- UNESCO World Heritage Centre. Retrieved on 19th March 2020 from: <https://whc.unesco.org/en/list/668/>

³ APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree NS/RKT/0295/12 dated 19 February 1995, regarding the establishment of APSARA Authority.

With strong commitment, the Royal Government of Cambodia has carefully monitored the work of the APSARA National Authority and implemented the guidelines on the protection of the Angkor Heritage. This work was crowned with success, as a result, **Angkor** was taken off the list of World Heritage in Danger and fully became a **World Cultural Heritage** in 2004. The valuation of the Angkor Site would not be completed if conservation actions were not accompanied by development projects that highlight intangible cultural heritage so bound to the identity of the region and an essential element to the self-fulfillment of the population. Primarily concerned about the well-being of the people living in the protected zones, despite the difficulties, continue to follow their traditions while arranging necessary resources for their livelihood, despite constraints imposed by heritage norms. At Angkor, the population is firmly bound to the land and it was always so – long before the inscription of the site on the World Heritage List. For this population, community development is a categorical imperative, besides compliance with the ethics of the 1972 convention. As soon as Angkor was listed on the UNESCO World Heritage list in 1992, its universal value is widely known to be one of the wonders of the world. Since then, it became one of the main attractions in Cambodia attracting millions of visitors to Cambodia. Similarly, Luang Prabang was listed as UNESCO World Heritage Site in 1994 which also drew international attention to the town and sparked a tourism boom. Since 1988, tourist arrivals into Laos People's Democratic Republic (Laos PDR) have increased from a few hundred intrepid backpackers to more than 600,000 in 2003, with Luang Prabang being Laos

PDR's second most popular destination after Vientiane, the capital (UNESCO, 2004). It has been estimated that tourism contributed about 12.5 percent of the country's total GDP (Hach S. et al 2001). From a positive perspective, tourism has been claimed to bring about money to the locals. Gee, Y. C et al, (1989) also agreed that tourist expenditures increase the general level of economic activity in the host area in numerous ways, directly and indirectly, the two most visible being new jobs and income, however, the influx of tourists to a destination has brought not only the impacts on the host but also threaten the historic temples. It is found that tourism generates 11 percent of gross domestic product, 200 million jobs, 8 percent of total employment, and 5.5 percent of new jobs has been increased per year until 2010, WTTC, (2000). Tourism is globally growing rapidly and is expected to continue expanding. In Southeast Asia where Cambodia is located, it has become the fastest-growing tourism area and will continue to grow, National Tourism Development Plan for Cambodia, (2001). Arguably, Fox, 1976 claimed that "Tourism is like the fire that can cook food for, or burned house of people". Similarly, Hawkins, E. & Khan, M. (1998) also claimed that "Tourism is a goose that not only lays a golden egg but also fouls its own nest". Hall, C. M. (1991), Van Harssel, J. (1994), and Dickman, S. (1989), strongly emphasized the socio-economic impact of tourism on the local economy and society as well. Goeldner, (1990)'s study on the power of the local elite, claimed that the promise of much higher wages in the tourism industry draws people away from farming. Agricultural output declines as a result, just when the demand for food is increasing due to the influx of tourists. Again, if tourism does

as positive as has been mentioned earlier, it will bring about income to the local community especially, for those who lived in or the surrounding area. For this reason, Norkor Krav Community Village in Siem Reap Province, Cambodia was selected for the study because it is one of the communities located in the strictly protected zone of Angkor Park which needs to be well preserved and conserved by the APSARA National Authority. Some specific regulations and law of protection of this protected zone were established⁴ with the detailed meaning as below:

1. The villagers, who have homes and live there for a very long time, can continue to live without being forced to leave the village.
2. The villagers can demolish old houses or build new ones with a request to get permits from APSARA National Authority.
3. The villagers have the right to manage their lands such as: giving land possession to their relatives – parents to children or selling it to the neighbors to get some money for living. However, it is forbidden on buying and selling to make a profitable business for companies or individuals to build hotels, restaurants, KTVs, etc.

As mentioned above, to preserve the local culture and conserve World Heritage, the park regulations were created to maintain the site for sustainable development. However, the regulations seemed to frustrate the local villagers because it limits

⁴ APSARA Authority, Land Use Planning of Angkor Park, (2000).

the opportunity for business development. The main purpose of this study is to examine the positive and negative impacts of the management of the Angkor World Heritage which affects the locals living in the Norkor Krav Community Village of the protected area.

It has always been perceived that tourism was conditioned to have positive impacts on the community. It has so often been commented as making a healthy and positive contribution to the world economy, peace, and friendship among nations. Most of the tourists may have echoed this idealism. Many positive impacts can be categorized as economic advantages of the tourism industry. As highlighted by Leiper, N., (1989): p.160, these include foreign exchange earnings, business income, personal incomes, government incomes, employment, etc. by creating jobs and generating income, tourism is therefore said to promote a level of economic development conducive to increased social well-being and stability. Though the above perspective sounds positive to benefit the local people of the destination country, Siem Reap ranks second among the poorest provinces in Cambodia even though it has Angkor as the main attraction site for tourism development, Kang. C., and Chan, (2003). One case study of the Nokor Krav Community Village in 2006 found that 64 percent of the locals living in Nokor Krav Community Village are very poor, 19 percent are average, and 16 percent are above average, Sokun A., (2006). The education of local children in Nokor Krav Community Village was revealed to be very low. It was found that among 200 households surveyed, only two children

were found to have access to the university level while the other 19 children can only attain high school. Since it was still in the early stage of tourism development, the study also found that 6.5 percent of the respondents have benefited from direct low-paid jobs and the other 5.5 percent have benefited from indirect low-paid jobs in the tourism industry. While 88 percent of the villagers are not receiving any benefit from the development and management of the Angkor by the APSARA National Authority. It was also found that the host communities living in the strictly protected zone of Angkor Park were notified to be poor not in terms of food, income insecurity, lack of financial assets, lack of social and educational assets, but also faced several challenges with the restricted regulation of the Royal Government of Cambodia managed by APSARA National Authority. Another case study of the Pradak Village, a by-pass community by tourists, located inside Angkor Park also found that 47.5 percent of the respondents obtained no benefits from tourism development in Angkor and only 21.3 percent received direct jobs and 31.2 percent obtained indirect jobs from tourism, Sokun. A, (2003).

As mentioned in the tourism literature, the continuous increase of tourists to one destination brings about cross-cultural interaction but this can also be problematic if there is a lack of cultural awareness or understanding of heritage on the part of visitors. The inappropriate presentation of local heritage has combined to alter intangible heritage resources. In response to this situation, all stakeholders must determine the value of their heritage and adopt measures

that will allow the community to realistically deal with the pressures of tourism as well as the ongoing process of social change within the community. In the case of Luang Prabang, many visitors are not aware of appropriate behavior in terms of local social norms or how to use sensitively the unique heritage resources that they are privileged to share. Without this knowledge, it is difficult for the visitor to appreciate the value of Luang Prabang's heritage or respect local lifestyles and traditions. Also, it is difficult for visitors to understand that they need to fairly remunerate the local community for the use of their heritage and in the purchase of their craft, UNESCO 2004. A study of the Pradak Village, one of the communities inside Angkor Park in Cambodia also found that 85 percent of the respondents agreed that local culture has changed a lot after tourism development started in their area, Sokun. A., (2003:45). Hartmann, K. D. (1982), also found that among the Swiss Mountains, the locals were asked what the development of tourism had brought them over the past twenty years. About half the people felt the changes had been positive; the other half thought they had been rather negative. The search for information about host population attitudes to tourism is hampered by another difficulty. Opinions about and expectations of tourism can be very different, depending on which population or occupational groups are considered; Hartmann, K. D. (1982) has a classified population with economic interest dominates into five categories. The first group includes people who are in continuous and direct contact with tourists. The second group of locals is the proprietors of tourist businesses unless owned by outsiders. The third group consists of a population who is in

direct and frequent contact with tourists but who derive only a part of their income from tourism. They live in or near tourist centers and engage in various activities, mostly farming. The fourth category comprises the large group of locals who have no contact with tourists or see them only in passing. Variety of attitudes is possible: approval, rejection, interest, or indifference. The latter being the most common, politicians call it a "lack of tourism consciousness". The fifth group is politicians and political lobbyists. They like to raise their fellow countrymen's living standards and not least their own. There are hardly any politicians who do not either openly advocate or quietly support tourism both for economic reasons. Concerns over the impacts of tourism development on the socio-economic impacts, the cultural consequences, the local involvement and participation, the local awareness for heritage management and conservation, and the environmental impact of the site are still questioned without deeper study. Murthy (1985) believes that tourism is a community industry, where the community forms part of the attraction for the tourists, and the community also becomes the provider for tourists in the destination area. A community approach to planning, he argues a fundamental for a successful, sustainable tourism industry and the equitable continuity of the host community.

1.2 Statement of the Problem

In comparison to what has been uncovered in the review of literature, Nokor Krav Community Village was selected for this study primarily for the following five reasons:

- It is located in the surrounding area of Angkor Archeological Park.
- Nokor Krav Community Village was officially registered as a village located in a very strict protected zone when the Royal Government of Cambodia requested to register Angkor as a Cultural World Heritage in 1992. Therefore, zoning was created and Nokor Krav Community Village has automatically become part of Angkor Park.
- Nokor Krav Community Village is a poor community and challenged by the application of legal policy from the government to meet the requirements of UNESCO to conserve World Heritage, that is the reason that this research study is attempting to examine how the management of the World Heritage of Angkor has adverse positive and negative impacts on the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.
- Listing a heritage as a UNESCO World Heritage is believed to bring about advantageous benefits to the locals of the state country, especially through the development of tourism. However, provided the resultant impact from tourism is positive, it will also benefit the local communities of the surrounding area of Angkor Park, especially the Nokor Krav Community Village.
- This particular village had been studied once in 2006 for a project on the Mekong Sub-region by the researcher. As such, a modest

attempt is now being made in the present study to investigate how much it has progressed economically after a lapse of 14 years.

Hence, the study aims to examine how the management of the World Heritage of Angkor has adverse positive and negative impacts on the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.

1.3 Research Questions

The present study is intended to provide answers to the following questions as set out in the research questions stated below:

- i. Why is the management of the Angkor World Heritage of significant importance in Nokor Krav Community Village in Siem Reap Province, Cambodia?
- ii. What are the present challenges of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iii. What are the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iv. What are the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?

- v. What are the key strategies of the government towards the improvement of the livelihood of the locals living in the study area?

1.4 Objectives of the Study

To answer the above research questions, six main objectives have been set for the present study as follows:

- i. To examine the significant importance of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- ii. To find out the present challenges of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.
- iii. To examine the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- iv. To examine the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- v. To find out the key strategies of the government towards the improvement of livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.

- vi.** To provide recommendations for further improvements of the livelihood of the locals living in the study area affected by the management of the Angkor World Heritage.

1.5 Hypotheses of the Study

The present study seeks to test the following hypotheses:

1. H_{01} : There are no positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
2. H_{02} : There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

1.6 Significance of the Study

The present study would be useful in helping to further improve the livelihood of the locals in the study area. It would also provide recommendations, which can be used as guidelines for policymakers, planners, and particularly the key stakeholders like the APSARA National Authority who have been involved in the site management of the study area. Further, the Royal Government of Cambodia today is also seeking up-to-date information to formulate the policy for the new authorities, for example, Preash Vihear, Sambo Prey Ku, and Tonle

Sap Authority, hence the findings of this research study would be useful for the government in implementing better practices and guidelines for formulating future policies and regulations for the management of the Angkor World Heritage and in turn would benefit the livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia. In addition, the academic community will benefit considerably from this study. Other research scholars can make use of this research to further examine the issues about the management of the Angkor World Heritage and its impact on the local communities in the surrounding areas in Siem Reap Province, Cambodia.

1.7 Scope and Limitations of the Study

The scope of this research is to examine the impacts, both positive and negative of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia. Specifically, the study attempts to examine the challenges faced by the locals and the strategies of the relevant government agencies or authorities that have been implemented in improving their livelihoods in this particular village community.

The scope of the study is further limited to the inclusive selection of only five main indicators to measure the positive impacts due to the management of the Angkor World Heritage, on Nokor Krav Community Village. These indicators are *(1) Local Employment Opportunity; (2) Level of Local Involvement in the*

Conservation of the Site; (3) Housing Condition; (4) Education Improvement; (5) Physical and Mental Healthcare Support.

Similarly, another limitation is the inclusive selection of only five main indicators in measuring the negative impacts which are: *(1) Availability of Infrastructure Development; (2) Level of Local Awareness on the Conservation of Angkor, the World Heritage; (3) Employment Accessibility; (4) Poverty Rate; (5) Affordable Access to Quality Healthcare and Education.* However, the present study is not entirely free from limitations, and therefore, in the course of the research, the following are identified as the limitations of the study:

- i. In examining the positive and negative impacts, the study has been confined to data collection from 2018 to 2020 only.
- ii. As mentioned above, the measurement of the positive impacts is mainly based on these five main indicators: (1) Employment Opportunity; (2) Level of Local Involvement in the Conservation of the Site; (3) Housing Condition; (4) Education Improvement; (5) Physical and Mental Healthcare Support.
- iii. As a result of the management of the Angkor World Heritage on Nokor Krav Community Village, in Siem Reap Province. Likewise, the measurement of the negative impacts is also mainly based on five main indicators: (1) Availability of Infrastructure Development; (2) Level of Local Awareness of the Conservation of the Angkor World

Heritage; (3) Employment Accessibility; (4) Poverty Rate; and (5) Affordable Access to Quality Healthcare and Education.

- iv. To analyze both the positive and negative impacts, the study has also used secondary sources of information based on the availability of data. Therefore, the known limitations applicable to the secondary resources are quite applicable to the present study.
- v. The present study is a case study rather than a country-wide representative study, as it predominantly covered only one specific Nokor Krav Community Village, the only village bordered by Kouk Tachan village in the South, Kouk Kreoul village in the North, Plung village in the East, and Kouk Beng village in the West in Siem Reap Province, Cambodia for the study. Hence, the study has considered only 400 respondents as the sample population selected from the entire population of 3764 people in Nokor Krav Community Village. The selected respondents have represented the study area of Nokor Krav Community Village only. Therefore, this in itself is another limitation.
- vi. A further limitation can be attributed to the fact that the present study had only measured the level of local employment based on the various types of jobs related specifically to tourism, that is, jobs that the villagers' livelihoods are dependent predominately on tourism and excluding other types of jobs that are not related to tourism. Hence,

it is a limitation as the study did not measure all types of jobs that might provide a more accurate perspective of the villagers' employment in the study area.

- vii. Another limitation is that the main coverage of the data for analysis was based on the qualitative and quantitative data collected from the 400 personal direct interviews and the in-depth interviews of the five selected respondents for this study. It did not attempt to cover all any aspects of APSARA National Authority's management tasks but rather to study only the key data related to the legal framework for site protection, their operational task regarding the conservation of the site, the procedure to apply the law of protection on locals in Nokor Krav Community Village and intervention for improving the livelihood of the living standard of the locals in the protected area, especially the local people of Nokor Krav Community Village only.
- viii. A final limitation is that the present study aims to find out the negative impacts attributed by the management for the conservation of the Angkor World Heritage governed by the APSARA National Authority. However, due to the insufficiency of the primary data collected as a result of the COVID-19 pandemic, the data collection period from February 2020 to 2021 was disrupted. Due to the sudden emergence of this pandemic, the questionnaire survey and the interviews conducted are somewhat affected by the pandemic as the respondents are reluctant to meet with the researcher and her team.

Particularly, the interview was carried out with the selected respondents who have met with a rather considerable low rate of turnouts. This is a limitation as the data collected during the aforesaid period may affect the overall findings of the present study.

However, keeping the effort, time, data availability, and other constraints in mind, although the present study is limited in its scope and coverage, Nevertheless, the entire research but a modest attempt in its desired direction to examine the positive and negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

1.8 Layout of the Study

The study consists of seven chapters, starting from the background of the research study to the end. It reviews the general theoretical and conceptual debates on the management and conservation of the World Heritage Site, the sustainable development of tourism, and the impacts on the host community both positive and negative by drawing numerous international and local cases then narrowing it down to the historical profile of conservation and development and its impacts in the target area of study and this study, Nokor Krav Community Village was selected as a case study.

Chapter I: Introduction

The first chapter presents the introduction to the research study including the background of the research, statement of the problems, research questions, objectives of the research study, hypothesis, significance of the study, scope, and limitations of the study, and layout of the study.

Chapter II: Review of Literature

This chapter attempts to carry out an extensive review of the relevant literature, both conceptual and empirical concerning the impacts of the management of the World Heritage Site. The first part covers the conceptual review of the impacts of UNESCO designation which includes the meaning and type of "World Heritage Site", the procedure of listing a heritage as a UNESCO

World Heritage Site, and the positive and negative impacts of UNESCO designation. The second part provides an empirical review of the impacts of the management of the World Heritage Site on the local community by explaining the meaning and type of impacts of the management of the World Heritage Site on the local community both in developing and developed countries and reviews the key indicators in measuring the positive and negative impacts of the management of the site on the local community. Finally, a concluding remark is given.

Chapter III: Research Methodology

This chapter attempts to explain in detail the methodology employed in the present study. It covers the explanation of the type of analysis, the types and

sources of data, the procedure of collecting data, the sample design, statistical tools used, the coverage of the study, and the procedure of analyzing data respectively. At the end of the chapter, a concluding remark is given.

Chapter IV: Profile of the Study Area

First is the historical background of Angkor, its significance, the symbolic character of the Khmer nation, and how Angkor becomes a Cultural World Heritage. Second is the profile of APSARA Authority, its administration, mission, procedural management for conservation of Angkor, and procedural management for community participation and sustainable development. The third is to describe the living conditions of the local people in Nokor Krav Community Village, which includes the population and socio-economic activities, local culture, tradition, customs, religion, education, health care, housing condition, infrastructure development, and potential resources for tourism development. Finally, a concluding remark is given.

Chapter V: Data Analysis and Discussion of Findings

This chapter presents all findings of the research study, which respond to the research objectives as follows:

First, the presentation of the significant importance of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

The second is to identify the constraint factors for poverty and the current issues which affect the living standard of the local people in Nokor Krav Community Village in Siem Reap Province, Cambodia.

Third, the presentation of data related to the five indicators is designed to measure the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia along with the testing of the hypothesis H_{01} .

Fourth, additional presentation of the data related to another five indicators to measure the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village along with the testing of hypothesis H_{02} .

Fifth, key strategies of the government and or APSARA National Authority towards the improvement of livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.

Sixth, presentation about local perception and suggestions towards the improvement of the livelihood of the local people in Nokor Krav Community Village and their requests to the government and or APSARA National Authority. Finally, a conclusion remark is given.

Chapter VI: Conclusion and Recommendations

This chapter attempts to highlight a summary of the main findings of the study along with its conclusion. Finally, recommendations are given to APSARA

National Authority and the Royal Government of Cambodia to improve the management of the Angkor World Heritage, as well as to improve the livelihood of the local people in the Nokor Krav Community Village.

1.9 Conclusion

To sum up, the chapter has introduced the background of the research study which described in detail the statement of the research problem with an indication of the research questions of the study. Six objectives of the research study have been included followed by two hypotheses of the study. More reasons for highlighting the significance of the study have been given with the inclusion of the scope and limitations of the study. Finally, a summary layout of the study and a conclusion remark is given.

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CHAPTER II

REVIEW OF LITERATURE

The present chapter has attempted to carry out an extensive review of the relevant literature, both conceptual and empirical concerning the impacts of the management of the World Heritage Site. For this purpose, the chapter is broadly divided into three main parts. The first part covers the conceptual review of the impacts of UNESCO designation. It is further sub-divided into three sections. The first section explains the meaning and type of "World Heritage Site". The second section gives a quick review of the procedure of listing a heritage as a UNESCO World Heritage Site, and the third section reviews the positive and negative impacts of UNESCO designation. Whereas, in the second part, efforts have been made to do an empirical review about the impacts of the management of the World Heritage Site on the local community and is further sub-divided into three sections. The first section explains the meaning and type of **"impact"**. The second section presents the empirical review of the impacts of the management of the World Heritage Site on the local community both in developing and developed countries. The third section reviews the key indicators in measuring the positive and negative impacts of the management of the site on the local community by focusing on the five indicators: *1. Local Employment Opportunity; 2. Level of Local Involvement in the Conservation of the Site; 3. Housing*

Condition; 4. Education Improvement; and 5. Physical and Mental Healthcare Support to measure the positive impacts and another five indicators: *1. Availability of Infrastructure Development; 2. Level of Local Awareness on the Conservation of the World Heritage Site; 3. Employment Accessibility; 4. Poverty Rate; and 5. Affordable Access to Quality Healthcare and Education* to measure the negative impacts of the management of the Angkor World Heritage for this study. At the end of the chapter, a concluding remark is given.

CONCEPTUAL LITERATURE REVIEW

2.1 Impacts of the UNESCO Designation

2.1.1 Meaning and Type of the World Heritage Site

The term “**Heritage**” refers to features belonging to the culture of a particular society, such as traditions, languages, or buildings, which come from the past and are still important.⁵ Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage are both irreplaceable sources of life and inspiration.⁶ Heritage is about

⁵ Cambridge English Dictionary (n.d). *Meaning of Heritage in English.*

Retrieved on 20th January 2021 from:

<https://dictionary.cambridge.org/dictionary/english/heritage>

⁶ UNESCO World Heritage Centre (n.d). World Heritage. Retrieved on 20th

January 2021 from: <https://whc.unesco.org/en/about>

the things from the past which are valued enough today to save for tomorrow.⁷

Jimura, T. (2011) heritage is the contemporary use of the past and heritage not only for economic but also cultural purposes and the current status is assessed as a cultural value of heritage, as most of the newly opened tourist attractions are ancient heritage. United Nations Educational, Scientific and Cultural Organization (UNESCO) defined the term "World Heritage" as the designation for places on earth that are of Outstanding Universal Value (OUV) to humanity and as such, have been inscribed on the World Heritage List to be protected for future generations to appreciate and enjoy. Places as diverse and unique as the Pyramids of Egypt, the Great Barrier Reef in Australia, the Galápagos Islands in Ecuador, the Taj Mahal in India, the Grand Canyon in the USA, the Acropolis in Greece, and Angkor in Cambodia, are examples of the World Heritage Sites. There are 1,121 World Heritages list to date and they were classified into three different categories, including 869 cultural, 213 natural, and 39 mixed properties which exist across 167 countries. With 55 selected areas, China and Italy are the countries with the most sites on the list of UNESCO.⁸ The term "Cultural Heritage", UNESCO has classified into two main categories, tangible and intangible. Tangible cultural heritage is specifically divided into three types:

⁷Heritage Perth Education (n.d). *What is heritage?* Retrieved on 22nd January 2021 from: <https://heritageperth.com.au/>

⁸ Wikipedia (2020, June) World Heritage Site. Retrieved on 23rd January 2021 from: https://en.wikipedia.org/wiki/World_Heritage_Site

- Movable cultural heritage (paintings, sculptures, coins, manuscripts)
- Immovable cultural heritage (monuments, archaeological sites, and so on)
- Underwater cultural heritage (shipwrecks, underwater ruins, and cities)

While the intangible cultural heritage refers to oral traditions, performing arts, and rituals. For Cambodia, there are three properties were listed as World Cultural Heritage Sites such as Angkor in 1992, the temple of Preah Vihear in 2008, the temple zone of Sambo Prei Kuk, Archeological Site of ancient Ishanapura in 2017. Today, there are eight more properties that are in the tentative list process to consider for nomination. These include the site of Angkor Borei and Phnom Da (2020); The Archeological Complex of Banteay Chhmar (2020); Beng Malea Temple (2020); Koh Ker: Archeological Site of Ancient Lingapura Or Chok Gargyar (2020); Ancient City of Ondong (2020); Phnom Kulen: Archeological Site, Ancient Site of Mahendraparvata (2020); Former M-13 prison or Tuol Sleng Genocide Museum (former S-21) or Choeung Ek Genocidal Centre (former Execution Site of S-21) (2020); and The ancient complex of Preah Khan Kompong Svay (2020).

“Natural Heritage Site” is defined by UNESCO as natural sites with cultural aspects such as cultural landscapes, and physical, biological, or geological formations. Cambodia has not yet listed any natural heritages in the list of UNESCO, even though there are so many fabulous natural sites to be protected nationally by the Royal Government of Cambodia. However, H.E. Neth Pheaktra, Secretary of State and spokesperson at the Ministry of Environment, recently

reported in Khmer Time that the Ministry of Environment and relevant ministries are preparing documents for the submission in a list containing five natural sites in Cambodia, which are targeted to register in UNESCO's World Heritage List as Natural World Heritage; those five Natural Heritage Sites are Phnom Tbeng Natural Heritage Park; Prek Kampi Mekong River Dolphin Management and Protected Area; Phnom Nam Lear Rock located in Phnom Nam Lear Wildlife Sanctuary; and Prek Prasab Wildlife Sanctuary and Southern Cardamom National Park.⁹

2.1.2 Procedure for Listing a UNESCO World Heritage

Heritage sites and buildings can have a very positive influence on many aspects of the way a community develops. Regeneration, housing, education, economic growth, and community engagement are examples of how heritage can make a very positive contribution to community life. Since heritage is an important community asset, it is, therefore, there are so many submissions of requests to UNESCO to list it as a World Heritage. However, only countries that have signed the World Heritage Convention, pledging to protect their natural and cultural heritage, can submit nomination proposals for properties on their territory to be considered for inclusion in UNESCO's World Heritage List.

⁹ Dara, V. (2020, September 6). The Phnom Penh Post. *Ministry wants dolphin areas on the UNESCO list*. Retrieved on 17th January 2021 from: <https://www.phnompenhpost.com/national/ministry-wants-dolphin-areas-unesco-list>

UNESCO has technically designed five-step of the nomination process procedure as briefly described below:¹⁰

- Step one: The inventory list

A country must make an 'inventory' of its important natural and cultural heritage sites located within its boundaries.

- Step two: The nomination file

A state party can plan when to present a nomination file. The World Heritage Centre offers advice and assistance to the state party in preparing this file, which needs to be as exhaustive as possible, making sure the necessary documentation and maps are included.

- Step three: The advisory bodies

A nominated property is independently evaluated by two Advisory Bodies mandated by the World Heritage Convention: the International Council on Monuments and Sites (ICOMOS) and the International Union for Conservation of Nature (IUCN), which respectively provide the World Heritage Committee with evaluations of the cultural and natural sites nominated. The third Advisory Body is the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), an intergovernmental organization that provides the Committee with expert advice on the conservation of cultural sites, as well as on training activities.

¹⁰UNESCO World Heritage Centre (n.d). The criteria for selection. Retrieved on 23rd January 2021 from: <https://whc.unesco.org/en/criteria/CulturalHeritage>

- Step Four: The world heritage committee

Once a site has been nominated and evaluated, it is up to the inter-governmental World Heritage Committee to make the final decision on its inscription. Once a year, the Committee meets to decide which sites will be inscribed on the World Heritage List. It can also defer its decision and request further information on sites from the States Parties.

- Step Five: The criteria for selection

To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. These criteria are explained in the Operational Guidelines for the Implementation of the World Heritage Convention which, besides the text of the Convention, is the main working tool on World Heritage.

2.1.3 Positive and Negative Impacts of the UNESCO Designation

2.1.3.1 Positive Impacts of the UNESCO Designation

Significance Benefits of becoming a World Heritage

Once a country signs the World Heritage Convention and has sites inscribed on the World Heritage List, the resulting prestige often helps raise awareness among citizens and governments for heritage preservation. Greater awareness leads to a general rise in the level of the protection and conservation given to heritage properties. A country may also receive financial assistance and expert advice from

the World Heritage Committee to support activities for the preservation of its sites.¹¹ Countries are always ambitious about entering the World Heritage List with their cultural heritage zones. The application process is a difficult and long journey but the monetary edges it brings are not always the reason for this ambition. Shackley (2000) indicated that being on World Heritage Site doesn't bring regular funding however it brings recognition, status, and thus easy accessibility to conservation funds from UNESCO or other associations. Moreover, Amanda (2018) briefly declared three main benefits of a UNESCO World Heritage Site¹². First, it benefited from press and popularity, these are all about tourism. Once a site has been recognized, it becomes more attractive to travelers, and therefore travel writers and other news organizations will help spread the word. The site suddenly has a certain status that it didn't have before, and for many countries, this could help bring new economic benefits. The second benefit is funding; the site is eligible to receive funds for its protection and conservation. Since it is declared something of historical significance, it is understood worldwide that it needs to be preserved. The site will also have access to global project management resources if a repair is

¹¹ UNESCO World Heritage Centre (n.d). *What does it mean for a site to be inscribed on the World Heritage List?* Retrieve on 23rd January 2021 from:

<https://whc.unesco.org/en/faq/20>

¹² Amanda (2018, September 7). What does it mean to be a UNESCO World Heritage Site? Retrieved on 24th January 2021 from:

<https://discovercorps.com/blog/mean-unesco-world-heritage-site>

needed or if more options for tourism are needed to ensure the site's protection. The Fund for the Protection of the World Cultural and Natural Heritage of Outstanding Universal Value, called "the World Heritage Fund", was established in 1977 under Article 15 of the World Heritage Convention. The World Heritage Committee makes decisions on the amount of the budget of the World Heritage Fund as well as on its use. Third, the heritage receives protection during a war; once declared, the site becomes protected under the Geneva Convention against destruction during a war.

A bit more detail about the benefit of becoming a UNESCO World Heritage Site. Arunachala World Heritage Site Initiative has specified the eight advantages of being a World Heritage Site such as it brings international attention to the need for the preservation and conservation of the site; it brings tourism to the site, with its accompanying economic benefits to the host country and local area; it can provide funds for restoration, preservation, and training; it promotes national and local pride in the natural and man-made wonders of the country; it promotes close ties with the United Nations system and the prestige and support it provides; it provides access to global project management resources; it facilitates creating partnerships between government, the private sector, and NGOs to achieve conservation goals; and the site is protected under the Geneva Convention against destruction or misuse during wartime. Al-Bqour, N. (2020) indicated that the designation of a World Heritage Site promotes local identity, unites the spirit of the community, and increases local pride and that access to the World

Heritage Site enhances national, regional, and local political support, and can become a center of nationalism through the promotion of identity which leads to increase the interest of the local population in the city that has entered the World Heritage List.

UNESCO Designation is Significant for the Conservation of the Site

World Heritage Site is seen as an avenue for increased revenue, notably not only from tourism but also from various agencies that provide much-needed funds to poorer nations for restoration or conservation processes. The conservation and protection of World Heritage Sites wouldn't be possible without the financial resources to meet World Heritage needs. Sources of income include the World Heritage Fund, which receives most of its income from compulsory contributions from countries (States Parties) and voluntary contributions. Other sources of income include profits derived from sales of World Heritage publications, or funds-in-trust that are donated by countries for specific purposes.

Positive Impacts of the UNESCO Designation related to Positive Impacts of Tourism

UNESCO (2010) declares that there are significant economic benefits to obtaining a World Heritage Designation, through an increase in tourism and

global awareness, local economies surrounding cultural and natural sites should benefit from having a designation.¹³ Chuck y. Gee et. al, (1989), tourist expenditures increase the general level of economic activity in the host area in numerous ways, directly and indirectly, the two most visible being new jobs and income. Leiper N., (1989), the positive impacts of tourism can be categorized as economic advantages, which include foreign exchange earnings, business income, personal incomes, government incomes, employment, etc. By creating jobs and generating income, tourism is therefore said to promote a level of economic development conducive to increasing social well-being and stability. Goeldner (1990), tourism has grown to be an activity of worldwide importance and significance and ranks among the top three industries, and rapidly become a major social and economic force in the world. Edward Inskeep (1991), tourism can be a major stimulus for the conservation of important elements of the cultural heritage of an area because their conservation can be justified, in part or whole, by tourism as tourist attractions. It also can promote the cross-cultural exchange of tourists and residents learning more about one another's cultures. It creates a sense of pride by residents in their culture that can be reinforced or even renewed when they observe tourists appreciating it. Hach S. et al (2001), tourism has been claimed to bring about money to the locals. Kang C. and Chan S., (2003), tourism plays an important role in the

¹³ Kayahan, B. (2012). CORE. *Cost-Benefit Analysis of UNESCO World Heritage Site Designation in Nova Scotia*. Retrieved on 5th February 2021 from: <https://core.ac.uk/download/pdf/270171962>

development and economic growth, not only in developing countries but also in developed ones. Hence, the Cambodian government considers tourism to be the second most important sector for stimulating national economic growth after the garment sector. Mark J., (2004), "It can foster global peace by reducing world poverty and promoting cross-cultural understanding". Chheang (2008), tourism has become not only the country's engine for economic growth but also the political legitimacy and the national and cultural identity of Cambodia. Chheang (2011), tourism not only contributes to economic development but also to peace, security, and the preservation of the environment. In conclusion, if tourism does as it was claimed, so UNESCO designation is brought back positive impacts on the local community of the designated country.

2.1.3.2 Negative Impacts of the UNESCO Designation

Negative Impacts of the UNESCO Designation related to Negative Impacts of Tourism

No matter if tourism is positively viewed to benefit the local people, however, the big number of tourist arrivals to one destination doesn't translate into big money. It is depended on the different patterns and characteristics of tourists visiting that country. It is, therefore, Fox (1976) argued that "Tourism is like the fire that can cook food for, or burned house of people" and Hawkins, E. & Khan, M. (1998) "Tourism is like a goose that not only lays a golden egg but also fouls its own nest". While, Van Harssel, J. (1994) and Dickman, S. (1989) strongly emphasized the socio-economic impacts of tourism on the local

economy and society. Goeldner (1990) claimed the promise of much higher wages in the tourism industry draws people away from farming. As a result, agricultural output declines just when the demand for food is increasing due to the influx of tourists. Moreover, a high level of foreign ownership may also limit the transfer of skills and technology to local communities, especially where the top management positions are filled by expatriates. The booming of tourists to one destination brings about cross-cultural interaction and this can be problematic if there is a lack of cultural awareness or understanding of heritage on the part of visitors. The inappropriate presentation of local heritage has combined to alter intangible heritage resources. In response to this situation, all stakeholders must determine the value of their heritage and adopt measures that will allow the community to realistically deal with the pressures of tourism as well as the ongoing process of social change within the community.

Negative Impacts of the UNESCO Designation related to the Level of Local Awareness on the Conservation of the Site

Cultural Heritage is inherited from ancestors in the form of human thoughts and behavior in the past. Sodangi et al., (2014), the conservation of cultural heritage is necessary so it can be useful for future generations. Astuti E Y, (2017) the concept of cultural heritage conservation is not only about architecture but also about people (community) who are related to cultural heritage. Local communities and indigenous peoples are and have been for

centuries, the custodians of many World Heritage Sites. Thus, they should be recognized as key actors in the process of identification, management, and sustainable development of a property.¹⁴ Babić D., (2015) the level of awareness of a person can influence the participation of that person in carrying out the conservation of cultural heritage. Rafika et al., (2016) defined the term "awareness" as the attitude or behavior of the people who can recognize and understand the existence of cultural heritage around them. The community is expected to be able to control or regulate their activities and behavior so as not to threaten the existence of Cultural Heritage Sites. Kamaruddin S. M, et al., (2016) found that someone who has a high awareness of the conservation of the heritage if they have basic knowledge about cultural heritage areas and can find information related to conservation plans and rules set by the government. Firmansyah F. & Fadlilah K. U. (2016), the local community is one of the actors who play a role in the conservation of cultural heritage areas. However, community behavior can cause damage to cultural heritage. Therefore, Bakri A F, et al., (2015), the community is necessary to have an awareness of the existence of cultural heritage so that they can carry out conservation. The Community Management of Protected Areas Conservation (COMPACT) initiative is an innovative model for engaging communities in the conservation and shared governance of World Heritage Sites and other protected areas. It is

¹⁴ UNESCO World Heritage Centre (n.d.) World Heritage Centre-COMPACT.
Engaging Local Communities in the Stewardship of World Heritage.

Retrieved on 8th May 2021 from <https://whc.unesco.org/en/compact/>

based on the proposition that community-based initiatives can significantly increase the effectiveness of biodiversity conservation in World Heritage Sites while helping to improve the livelihoods of local people.¹⁵ Here are the best practice site published by UNESCO, 2012 as follow: (1) Acropolis, Athens; (2) Angkor; (3) Archaeological Ensemble of Mérida; (4) Boyana Church; (5) Coffee Cultural Landscape of Colombia; (6) Cueva de las Manos, Río Pinturas; (7) Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai, and Environs; (8) Gros Morne National Park; (9) Historic and Architectural Complex of the Kazan Kremlin; (10) Historic Areas of Istanbul; (11) Historic Centre of Oaxaca and Archaeological Site of Monte Albán; (12) Historic Monuments of Ancient Kyoto (Kyoto, Uji, and Otsu Cities); (13) Historic Town of Vigan; (14) Jiuzhaigou Valley Scenic and Historic Interest Area; (15) Land of Frankincense; (16) Le Morne Cultural Landscape; (17) Mogao Caves; (18) Old Havana and its Fortifications; (19) SGang Gwaay; (20) Sacred City of Caral-Supe; (21) San Marino Historic Centre and Mount Titano; (22) Shiretoko; (23) Škocjan Caves; (24) Sundarbans National Park; (25) Teide National Park; (26) Wet Tropics of Queensland.

¹⁵ World Heritage Centre (n.d.). Activities. *Engaging local communities in the conservation of the Maloti-Drakensberg Park World Heritage Site.*

Retrieved on 7th February 2021 from:
<https://whc.unesco.org/en/activities/982/>

Negative Impacts of the UNESCO Designation related to Local Attitude and their Participation in Conservation of the Site

Local communities have significant overlap, effect, and influence on tourism development by setting a World Heritage Site. These community formations have important roles in local tourism and management of World Heritage Sites, through community participation and complementarity of interests between local and international agencies to maintain the prestige of these heritage sites and their emergence as attractions.¹⁶ Community perspectives are the key element in identifying, measuring, and analyzing the variables of tourism development by setting a World Heritage Site. The examination of the attitudes of the local population is important in the design of local tourism, planning, and management as a response to tourism development and determining the extent of public support for these processes. The local population has a positive view of tourism because of its potential to create jobs, generate increased incomes and strengthen the infrastructure of the community. On the other hand, their views may be negative because of social cultures and environmental costs, balancing these two sides based on benefits and costs. Bryant and Napier (1981) claimed that there was very little difference in perceived tourism impacts by socio-demographic characteristics,

¹⁶ UNESCO (2012). World Heritage Centre-Document. *Community Development through World Heritage*. Retrieved on 8th February 2021 from [file:///C:/Users/CTT/Downloads/publi_wh_papers_31_en%20\(12\).pdf](file:///C:/Users/CTT/Downloads/publi_wh_papers_31_en%20(12).pdf)

that the perceived impacts of tourism decrease as the distance between the individual's home and the tourism sector of the community increase, and that the overall favorability of tourism impact perceptions increase with the individual's economic dependency on tourism. Jimura, T., (2011) the most prominent example of factors influencing the view of local people on World Heritage Sites is their place of residence and the level of contact with tourists. For example, in some cases where people live near tourist centers, the views are positive compared to those who live far from the area near the tourist centers, and some cases find the opposite, and previous studies have found that the most sought after is the economic dependence on tourism and economic renaissance. Previous studies have suggested that local people can view the status of the World Heritage Site as a disturbance that can disrupt the tranquility of their past lives. Shackley, M. (1998) these problems can be avoided by combining the restriction of the number of forced visitors and the education of visitors on how to deal with World Heritage Site. Milman and Pizam (1988); Murphy (1983); Pizam (1978) also concluded that those people who benefit from tourism perceived greater economic and less social and environmental impacts from tourism than those who do not benefit. Similarly, Krippendorf J. (1987) indicated that the types of residents who earn money directly from tourists have much more positive attitudes towards tourism than those who get few benefits and those who never get benefits from tourists. Hartmann, K. D. (1982) has a classified population with economic interest dominates into five categories as follows:

1st group: includes people who are in continuous and direct contact with tourists such as the personnel in the catering trade, in transport, in shops, travel agencies, etc. He also criticized their attitude in welcoming the visitors as one which is not a kind of inborn hospitality or the joy of being of service, as is often claimed but rather by a simple desire to earn money. If without any clear regulation, those people would gain a lot of benefits or even cheat the visitors and then leave nothing but waste for the community.

2nd group: are the proprietors of tourist businesses; for them, tourism is a purely commercial matter.

3rd group: consists of those who are in direct and frequent contact with tourists but who derive only a part of their income from tourism. Members of this group do see the advantages resulting from tourism and their attitude is much more critical.

4th group: comprised the large group of locals who have no contact with tourists or see them only in passing. Their attitude toward tourism can be approval, rejection, interest, or indifference the latter being the most common.

5th group: politicians and political lobbyists. They like to raise their fellow countrymen's living standards, and not least their own. There are hardly any politicians, who do not either openly advocate or quietly support tourism both for economic reasons.

Tourism is a prominent industry with the capability to generate income

for developed as well as developing countries. Perdue, Long, & Allen (1990); Ritchie (1988), the members of the community who are likely to receive the greatest benefits from hosting the event often favor and support hosting the event more than those who receive fewer or no benefits. Another example is Sokun. A, (2003) found that the local community of Pradak village, a village located as a by-pass of Angkor attraction, has a positive perception of the tourism impacts rather than a negative. It was found that there were changes in the host culture just because of tourism development in Pradak village but the majority of the host can appreciate the level of those changes as the larger proportion of the respondents indicate that they want more tourists to visit their village. Similarly, Chheang V. (2008) found that the general perception of the local people living in the Angkor protected area of tourism's economic impact on the region is positive. They think that tourism provides employment, investment, and business opportunities and it helps to improve local infrastructure and local governance. However, they perceived employment opportunities to be higher than other economic interests. Murthy (1985) believes that tourism is a community industry, where the community forms part of the attraction for the tourist, and the community also becomes the provider for tourists in the destination area. A community approach to planning, he argues, is fundamental for a successful, sustainable tourism industry and the equitable continuity of the host community. Nicholas (2009) indicated that community attachment positively influences their support behavior, and environmental attitudes indirectly influence the support

behaviors, if lack of involvement of residents, there would be presented critical implications for the sustainability of the sites.

EMPIRICAL LITERATURE REVIEW

2.2 Impacts of the UNESCO Designation on the Local Community

2.2.1. Meaning and Types of Impacts

We cannot just try hard and hope for the best. People want to know whether their time, money, and efforts are making a difference. Studying the impacts both positive and negative can help us figure out what is working to change our communities and what needs to be improved. It is somehow, the term “impact”, is to be clarified here. Colin Chandler, (2014) defined it as the influence of research or its effect on an individual, a community, the development of policy, or the creation of a new product or service. It relates to the effects of research on our economic, social, and cultural lives.

The impact is important because it helps keep us focused on the overall purpose, rather than the process of research. United Nations, (2020) defined impact as changes in people's lives. This might include changes in knowledge, skill, behavior, health, or living conditions for children, adults, families, or communities. Such changes are positive or negative long-term effects on identifiable population groups produced by a development intervention, directly

or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, technological, or other types. European Commission [EU], (2020) officially describes "the impact" as all the changes which are expected to happen due to the implementation and application of a given policy option or intervention in an impact assessment process. Such impacts may occur over different timescales, affect different actors and be relevant at different scales (local, regional, national, and EU). It is, therefore, the Economic and Social Research Council (ESRC) defined "research impact" as 'the demonstrable contribution that excellent research makes to society and the economy. This can involve academic impact, economic and societal impact, or both.¹⁷ A World Heritage Designation means that a site belongs to what is a "globally recognized top tier of heritage sites".¹⁸ The search for a World Heritage Site seems to be on the rise as both developed and developing countries compete for this global prize. Al-Bqour N., (2020) the enthusiasm of the various countries for inclusion in the World Heritage List has many reasons for it to bring recognition and hope of the ability to reap the benefits of the mark in terms of greater media coverage, gained prestige through association

¹⁷ Economic and Social Research Council (n.d.). *What is the impact?* Retrieved on 22nd January 2021 from: <https://esrc.ukri.org/research/impact-toolkit/what-is-impact/>

¹⁸ Lekaota, L. (2018). *Impacts of World Heritage sites on local communities in the Indian Ocean Region*. Retrieved on 13th January 2021 from: <https://www.researchgate.net/publication/327766679>

with UNESCO and other prestigious properties already included, and local development through the future development of international tourism. Thus, Jimura, T. (2011) stated that there is a rational expectation that a World Heritage label will benefit an area by raising the profile of a World Heritage Site. Its status is seen as an enormous place at the global and national level, as well as influencing future planning decisions at a local level, the designation of a World Heritage Site tends to mean that the site will be able to change, usually leading to increased publicity and an increase in the number of visitors, but the noticeable increase in the number of visitors is not inevitable, however, depends on the marketing of the site and its approach to access, which will later affect the effects of the designation of a World Heritage Site. The generalization of the perceived impacts of debate is difficult given the diversity of locations and the complex set of geographical, political, social, and cultural factors that can affect their management. However, there are several common impacts for all World Heritage Sites, these include some practical, physical, and symbolic advantages, such as political and financial support, improved conservation and visitor management, and enhanced destination image. On the contrary, sites are vulnerable to the increasingly negative effects of visits, gentrification, and commoditization. If so, Josephine C. and Marilena V., (2017) raised the question "is UNESCO World Heritage recognition a blessing or burden?". In some cases, granting a World Heritage Site score can be regarded as a two-edged sword. Jimura T., (2011) also agrees that the designation of World Heritage Sites in both developing and developed countries is a double-

edged sword both positive and negative. It is, therefore, more debate on the impacts of UNESCO Heritage on the local community is a vital part of this literature review.

2.2.2. Impacts of the Management of the World Heritage on Communities in Developing and Developed Countries

Starting from developing countries such as Kenya in Africa to Laos People's Democratic Republic (Laos PDR) and Vietnam in South East Asia compared to the developed countries such as Macao, Canada, and Japan. Okech (2010) says that World Heritage Sites are usually used as a marketing tool in image creation. In Kenya, local people expect increased tourist flows bringing employment and income so the site managers attempt to preserve the quality of the given World Heritage Sites by avoiding negative impacts of visitation by restricting visitor numbers and educating visitors about appropriate behavior. In his study in 2010, he recommended that "the focus should be on the degree of involvement in tourism planning, management, and ownership of the World Heritage Sites as well as the socio-cultural impacts of tourism". In South Africa, Table Mountain World Heritage Site, Benfield (2013) asserted that three percent of South Africa's gross domestic product (GDP) is dependent on tourism and the Cape region, including Cape Town, with its World Heritage Site of Table Mountain, is the country's chief tourist draw. It is estimated that one in every ten jobs in the Western Cape are related to tourism and this is more than twice

the national average. Table Mountain, which is within the World Heritage property, with its aerial cableway and special views is a foremost destination, the celebrated Garden Route, in which unique plants such as fynbos live, is visited by more than a third of all tourists in South Africa.

In Southeast Asia, Luang Prabang World Heritage Site, in Laos People's Democratic Republic (Laos PDR) is a town of great charm and beauty. It was the region's ancient capital city in the Lan Xang Kingdom. It has UNESCO recognition as a major International Cultural Heritage Site in 1994. Notably, it drew international attention to the town and sparked a tourism boom. UNESCO, (2004) Tourist arrivals into (Laos PDR) have increased from a few hundred intrepid backpackers in 1988 to more than 600,000 in 2003, and become Laos PDR's second most popular destination after Vientiane, the capital. The emergence of tourism has provided many opportunities for economic diversification. While tourism is still not the main source of income for residents. It offers an alternative or supplement to farming which, like tourism, can be an insecure livelihood, given that crop failures can devastate entire communities (UNESCO, 2004). To preserve the integrity of the town of Luang Prabang, various regulations have been instituted so that new hotel development for instance does not compromise the physical attraction of the town. Hotel developments outside of the town itself (where most of them are) are designed in sympathy with the location so that they are not visually obtrusive and demonstrate an awareness of the beauty of the site. So, this also encourages

the visitor to appreciate the beauty of the entire location as well as the partial aspects of it. R Engelhardt, et al, (2004) the monasteries in the community are still very active and the local community is generally doing what it does and is seemingly not taken over completely by the demands of the tourists. While the tourists are invited to participate in the local customs and rituals, they are also warned everywhere that they should be sensitive and not intrude. it was already noted in 2004 that having UNESCO World Heritage status has enabled a major increase in tourism. Staiff and Bushell (2013) while acknowledging the rapid growth in development and change of use of traditional houses within Luang Prabang for tourist businesses, argue that these changes are part of an Eastern approach to change, which is different from a Western approach to conservation. R. Staiff and R. Bushell (2013) argued that modernity is welcomed by the local people and they wish to take advantage of the tourists and interest in their town in whichever way they can. The demands of tourists, the lack of building controls, and the inadequate implementation of existing regulations have begun to seriously change the essence of the Loung Prabang community's-built heritage. The lack of cultural awareness of visitors and the inappropriate presentation of local heritage have combined to alter intangible heritage resources, in response to this situation, all stakeholders must determine the value of their heritage and adopt measures that will allow the community to realistically deal with the pressures of tourism as well as the ongoing process of social change within the community. S. Strangio (2016) asserted that there are sufficient controls in place to protect the fabric of the

town because of the intervention of UNESCO, and the arrival of tourists is helping the local community economically. Nevertheless, there are concerns that the tourist invasion is commodifying local religious practices, while former residents are selling their historic houses in the old town to those in the tourism trade. D'Eramo, (2014) further argues that receiving UNESCO World Heritage status has caused Luang Prabang to become a tourist trap. Similarly, Hoi An Cultural World Heritage Site is located in central Vietnam near the port of Da Nang. Its architecture was excluded from the economic development that occurred elsewhere in Vietnam over the past 100 years.¹⁹ This is in itself a conundrum; the lack of economic development from trade protected it as a site of architectural and cultural significance; as an outcome, it has now become a site for cultural tourism development. Tourism to the town has increased by more than 10 percent over the period of one year (2014-2015). Hoi An is a place of great charm to the visitor and various measures have been instituted to enhance the visitor experience. Local traffic in the old town is confined to bicycles and pedestrians for much of the day. There is a regular rubbish collection and the town is well looked after in terms of keeping the site clean, tidy and welcoming to the visitor. To improve communication with tourists in Hoi An, an information Centre has been recently opened within the old quarter which, it is said, will support sustainable tourism by providing better information

¹⁹ UNESCO World Heritage Centre (n.d.). World Heritage Centre-Description. *Hoi An Ancient Town - UNESCO World Heritage Centre*. Retrieved on 23rd February 2021 from: <https://whc.unesco.org/en/list/948/>

to the tourists. However, this might be seen as better tourism servicing rather than an example of 'sustainable tourism. According to the UNESCO office in Vietnam, there are renewed efforts being put into harnessing the skills of the local craftspeople to produce saleable goods that keep their craft traditions alive as well as provide a new income flow.²⁰ While the awarding of International Cultural Heritage status serves to bring into the area, a rapid increase in economic wealth from the new tourists, it can also change the nature of the site. For example, instead of there being a variety of shops that serve the local needs of the community, the buildings in the old town of Hoi An have become cafes, galleries, and tailors. The town is then an 'ersatz' version of the original, as the 'original' no longer exists except in 'form'. The beautiful buildings of Hoi An remain but their function has completely changed. Everything then is in a sense 'Dignified'. People are 'fishing' in the river but they are not fishing; they are a photo opportunity for the tourist and expect payment as you pass them. The culture of the old town of Hoi An has changed irreversibly to become a locale that serves the needs of the visitor. Hoi An is an important cultural tourist destination. The buildings are preserved but what happens inside them and around them has changed. Josephine C. and Marilena V., (2017), the impact of tourism on Hoi An has been seen as an important issue to address by international commentators who are concerned about endangered Cultural

²⁰Caust, Jo. and Vecco, M. (n.d.). Academia. Article in Press G Model Science Direct. *Is UNESCO World Heritage recognition a blessing or burden? Evidence from developing*

Heritage Sites in the developing world. Not only the small developing countries mentioned above but also the giant country like China that branding the World Heritage to attract tourists to their country. Yang, Lin, and Han (2009) analyzed the role of World Heritage with international tourists' arrivals; the world heritage sites are significant in explaining the numbers of international tourists and have a greater tourist-enhancing effect. It was found that cultural, rather than natural sites, attract more interest among foreign tourists. Kim, Wong, and Cho (2007) revealed that the economic value of the World Heritage Sites to users or tourists is at levels exceeding their monetary benefits.

Not only the developing countries but also the developed ones as such Historic Center of Macao was inscribed on the World Heritage List in 2005 by UNESCO. Together with the liberalization of the city's gaming industry in 2002, Macao's tourism industry underwent rampant development. Statistics show that tourism contributes up to 87.6 percent of the city's GDP in 2014 while supporting 87.5 percent of total employment. Since the inscription on the World Heritage List, individual monuments have been carefully conserved by the Macao SAR Portal government with due respect to the resource. Most of the designated architectural monuments and local landmarks have either retained their original function or have been thoughtfully re-adapted for public interest since the World Heritage inscription. The World Heritage inscription has also increased awareness among local citizens of Macao's Cultural Heritage, including local

landmarks and properties that have the potential for greater recognition.²¹ Macao has abundant historic resources that are unique to the city. The stewardship of the city's cultural heritage hence requires strategic collaboration between the government and local citizens. Macao has made some major strides in its preservation efforts since its World Heritage inscription. These included enacting a new Heritage Law, drafting a management framework for the city's cultural heritage, and nominating additional sites to the city's list of landmarks. However, the case study reflected how ineffective participatory processes in management planning for heritage have stirred up public distrust in the city's governance. The three controversial cases encapsulated intense public awareness of local heritage, but community participation has never been well exploited in Macao's current preservation practice. It is also necessary to first apprehend the conditions of the participatory culture of a place before implementing any participatory mechanism. The social dynamics in Macao since the colonial period have given rise to the unique existence of local associations between the local grassroots and the authoritative government. Macao has a unique participatory culture in which local associations play an important intermediary role in maintaining social harmony. Direct communication between the government and the local public is seldom effective, hence public distrust in local governance has resulted. With regards to this, engaging local

²¹ Ung, A. (2010, May 25). Tandfonline. *A tourist experience of heritage tourism in Macau SAR, China*. Retrieved on 18th March 2021 from: <https://www.tandfonline.com/doi/abs/10.1080/17438731003668502>

associations as a medium in participatory processes for public policy is appropriate. As a long-established bridge between the local society and the government, there is potential to enhance the role of local associations in creating better community participation in Macao's heritage management. In terms of heritage management in Macao, on one hand, the government should make conscious decisions in engaging the public in the planning processes instead of merely consulting them on subject matters that are already decided. On the other hand, local citizens should acknowledge the legitimacy of their representational government in deciding; they cannot expect the government to produce their most intended outcome. Joint fact-finding is one of the options to be recommended. Heritage is closely associated with how local people self-identify. As a result, public participation is critical to the ethical performance of cultural heritage management. Effective community participation can reconcile the previous public distrust in the (MSARP) government's stewardship of the city's heritage, thus sustaining the legitimacy of its governance in the long run. Now, in Canada, Kayahan (2012) compared the economic benefits by defining visitor spending and costs of a UNESCO World Heritage designation by studying two sites in Nova Scotia; Old Town Lunenburg which was designated on UNESCO's list in 1995, and Grand Pré National Historic Site, which has applied for a World Heritage status. It was found that tourism in Nova Scotia has shown moderate growth over the last dozen years, with total visitation being 1.4 percent greater in 2008 than it was in 1996. Visitation has shown considerable variation through time, growing by over 5 percent between 1996 and 2000 but

falling by 0.6 percent between 2001 and 2008. While in Japan, as in the case of Shirakawamura, Jimura (2011) stated that positive and negative changes for local communities in and around World Heritage Sites were after World Heritage Sites listing. The three main factors behind these changes are extensive and rapid tourism development, high levels of appeal of a World Heritage Site status for domestic tourists, and local communities' attitudes towards conservation of the cultural environment. Limpho, L. (2018) recommended that a "Conservation plan should have a comprehensive tourism management plan for its successful future for World Heritage Sites and tourist destination. The changes that are taking place are seen through research in the development and maintenance of tourism and visitor management". Bianchi (2002) also supported that World Heritage Sites need to keep improving their management and conservation plan. Smith (2002) also added that encouraging the participation of local people in the preservation of their heritage is part of the mission of World Heritage Sites.

Apart from such positive aspects of conservation strategies for the adequate protection of World Heritage, there are also less-encouraging developments. UNESCO, 2012 recalls some examples in which such conflicts have become evident. The first example, the Old Town of Quedlinburg in the middle of Germany, describes a typical situation for most of our World Heritage-listed historic cities. Quedlinburg was inscribed in 1994 under criterion iv: In the Master Plan, a framework of measures for conserving and protecting the site was elaborated. All protection measures had to consider conservation criteria

due to the site's World Heritage status. They were thus expensive and not necessarily suited to attract private investors. The quality of life offered by the houses restored according to UNESCO standards did not meet the expectations of private investors. As a result, the number of residents in the city center is expected to decrease from 76,812 in 2002 to 60,934 in 2020. As a consequence, the city not only has to initiate development with less tax income, but it is also losing its attractiveness for tourism.²² In many cities nominated as historic, the same trend can be observed. People move away from the city centers because the houses do not meet the modern requirements expected by most people. Houses renovated according to the standards of World Heritage conservation are either no longer attractive or too expensive. The people move away and the historic town center loses its vital function. It is, therefore, not surprising that many historic town centers went through a change of the function. 'Inhabited' World Heritage cities were turned into visited or rather 'invaded' cities by tourists. The most striking example is the World Heritage Site of Venice and its Lagoon. World Heritage status turned the cultural asset of the city into a commodity that is exploited by tour operators at bargain prices – resulting in cities being visited by hundreds of thousands of visitors per year. How is a historic old part of town, which had in its time a few hundred inhabitants, supposed to deal with 100,000 visitors annually? Not at all, is the answer. To

²² UNESCO (2012) World Heritage Centre. *Community Development through World Heritage*. Retrieved on 10th May 2021 from:

http://whc.unesco.org/documents/publi_wh_papers_31_en.pdf

that extent, it is reconstructed as a Disneyland. Countless further examples illustrate that the 'C', Conservation, is still far from reaching its desired goal. To interpret this strategic goal in more detail, I would like to mention that World Heritage conservation needs to be aware of the conflicts between the suitability of cultural assets, the compatibility of musicality on one hand, and modernity on the other. These considerations would have to be formulated – if possible – as an addition to the strategic objective of conservation. Only out of these considerations can adequate strategies for World Heritage conservation emerge.

2.3. Key Indicators in Measuring the Positive and Negative Impacts

As reviewed in the previous section that most communities not only the developing or developed ones, the impacts of the management of the World Heritage Site have been measured and perceived positively more or less related to the economic benefits of tourism development, the level of local participation in protecting and conserving the site, as well as building pride to local concerning the World Heritage brand. While a majority of the negative impacts have been measured due to the varied type of employment accessibility, the level of local awareness on conservation of life and in general is mostly related to the quality of life have been destroyed or improved after heritage designation. No matter how often it has been said or measured, it is just only the literature review of each specific country and each one has its own specific

identity, value, and characteristics. It is, therefore, in this study, the author considered choosing five appropriate indicators to measure the positive impacts of the management of Angkor World Heritage.

The first indicator is *the Local Employment Opportunity*. Like most communities that are intimately connected geographically to a major World Heritage Site, the relationship is diverse and complex. While the Royal Government of Cambodia has set tourism to be the second prioritized sector after agriculture for economic development. Listing Angkor as a UNESCO Cultural Heritage can promote tourism and it helps to “increase employment opportunities and associated employment income, which may be of prime economic importance to local populations” (Cukier 1998: 51). Ly Korm, president of the Cambodian Tourism Service Worker Federation said, “The industry is now a major employer... about 660,000 people get jobs in tourism industry compared to 330,000 in factories”.²³ It provided 200,000 jobs in 2005 and 250,000 jobs in 2006. The contribution of travel and tourism to the employment of Cambodia increased from 13.3 percent in 2000 to 32.5 percent in 2019 growing at an average annual rate of 5.26 percent, (Ministry of Tourism, 2007). To study deeper, Jan Van Hassel, (1994) has categorized employment in tourism

²³ Rith, S. and Shannon, B. (2007, May 4). The Phnom Penh Post. *Hot growth in tourism continues to boost the economy*. Retrieved on 16th March 2021 from: <https://www.phnompenhpost.com/national/hot-growth-tourism-continues-boost-economy>

development into three groups such as direct, induced, and indirect jobs. In this study, the author has classified jobs into four different categories. First is direct which refers to jobs directly running the tourism industry such as tourist guides, drivers, hotel services, workers in restaurants, souvenir sellers, temple guards, workers in APSARA National Authority, cleaner at the temple, etc. The second is the induced which refers to jobs resulting from the development of the industry such as transportation, agriculture, banking, construction workers, food suppliers, handicraft makers, etc. and the third is indirect which refers to jobs indirectly created by tourism, arising from the spending of money by residents from their tourism incomes such as laundry, hairdressers, salon, seller, etc. Fourth is the jobs that are not related to tourism at all such as government worker, farmer, animal raiser, local seller, teacher, etc.

The second indicator is *the Level of Local Involvement in the Conservation of the Site*. Active local participation in planning processes and operations management is essential to achieve conservation and sustainable development. Bryan Farrell (1991) justified that some projects simply fail due to a lack of local control but Dallen J. Timothy (1999) argued that if residents are to benefit from tourism, they must also be given opportunities to participate in and gain financially from tourism. Sproule (1995) added that in many developing countries, tourism benefits are concentrated in the hands of a few at the expense of those with existing disadvantages such as small landholdings, low incomes, and poor housing. Brandon, K. (1993) concluded that lack of involvement in tourism means that tourism is much more likely to have negative

social and economic impacts. However, "there are also some difficulties which exist in involving the local community in tourism planning because the community lacks experience and knowledge in the industry, with community involvement in decision-making processes being a new concept and traditional practices are not easy to change" Dallen J. Timothy (1999). There are various ways in which people from communities can be encouraged to participate in tourism as Gartrell, N. & S.L, Wearing (2000) claimed that, "community members are involved in all aspects of management of the resources that are the focus of tourism, as well as management of their own life" that is so-called "community-based tourism". However, the mountain institute (2000) has warned that community-based tourism cannot be seen, and should not be planned, in isolation from sectors and stakeholders. Butler (1990) also claimed that most people are tolerant of and possibly actively supportive of the concept of sustainable tourism, even if they do not understand what it means. In this study, to measure the level of local involvement in the conservation, the author attempts to base on the perception of the locals' willingness to respect the law of the protection zone of Angkor. Followed by the extra questions relating to the conservation work of the Angkor Site.

The third indicator is *Housing Condition*. In the Cambodian cultural context, when valuing the social class of the people, even most people said don't judge the book by its cover but for Cambodians, it is clear that the type and condition of the house can indicate explicitly the level of the local social class and

everyone would understand how high or low quality of their living. D. Streimikiene also considered the housing dimension as one of the major issues affecting the quality of life.²⁴ The housing indicators reflecting the quality of life can be assessed by applying quality of housing, quality of housing environment, and housing cost burden indicators. In this study, the author has classified the housing condition into four different types to indicate the social class and quality of life of the local community in Nokor Krav Community Villages such as cottages for the very poor, small house for the poor, and medium houses with brick for medium and big brick-wooden house with garden for the rich.

The fourth indicator is *Education Improvement*. Cambodia is a developing country so education plays a vital role in poverty reduction. Lack of education causes poverty and slow economic development of a country. Some advantages of education are: that it boosts economic growth and increases the GDP of a country. It even reduces the infant mortality rate and increases human life expectancy. Education is an important investment in a country as there are huge benefits. Education guarantees lifetime income; it promotes peace and reduces drop-out rates from schools and colleges and encourages healthy competition. Many children drop out of college as they are not aware of the advantages of a college education. Education helps in making the right

²⁴ Streimikiene, D. (2015) International Journal of Information and Education Technology. *Quality of Life and Housing*. Retrieved on 2nd March 2021 from: <http://www.ijiet.org/papers/491-S10009.pdf>

decisions at the time of conflict. Education is very important for everyone. It's a primary need of any individual, every girl or boy child should have the right to a quality education so that they can have better chances in life, including employment opportunities, and better health.²⁵ However, in this In the study, the author does not attempt to explain the quality of education in Nokor Krav Community Village but rather seeks to find out if education in Nokor Krav Community Village has been improved compared to the past.

The fifth indicator is *Physical and Mental Healthcare Support*. Poor physical health can lead to an increased risk of developing mental health problems. Similarly, poor mental health can negatively impact physical health, leading to an increased risk of some conditions. Since the founding of the NHS in 1948, physical care and mental health care have largely been disconnected.²⁶ There is an increase in healthcare professionals considering psychological well-being when treating physical symptoms condition and vice versa. Health is the most important part, and it is the center of life. Every part of life relies on having good health both physical and mental. Without good health, things cannot

²⁵ Kudroli (2019, July 10). *The Importance of Education in Developing Countries*. Retrieved on 4th March 2021 from:

<https://www.kudroli.org/blogs/the-importance-of-education-in-developing-countries>

²⁶ Mental Health Foundation (n.d.). *Mental and Physical Health*. Retrieved on 25th April 2021 from: <https://www.mentalhealth.org.uk/a-to-z/p/physical-health-and-mental-health>

happen. In this study, the author did not try to go deeper into the quality of physical and mental health as Cambodia is a poor country but rather sought to identify whether there is support from the government or NGOs on this important aspect or not.

To measure the negative impacts of the management of the Angkor World Heritage on the local community in Nokor Krav Community Village, the study focuses on five indicators as follows: First is *the availability of infrastructure development*. Infrastructure serves as a social and economic indicator for measuring the quality of life.²⁷ Sum, M. (2008) believed that infrastructure is generally the backbone of any sustainable development of physical infrastructure: roads and bridges, railways, ports and inland waterways, airports, electricity generation and network, irrigation, telecommunications, etc. The infrastructure improvements will have a positive impact on both economic and social development, including education, health, tourism, and trade, as well as on a nation's integration with the region and the world. Cambodia is improving its lagging infrastructure and attempting to rise out of its lower-middle-income status. H.E. Ty Norin, Chairman of Electricity Authority

²⁷ Onothoja, U. and Asikhia, M. (2011, November). Research Gate. *Urban Infrastructure and Quality of life: A Case Study of Warri Metropolis*.

Retrieved on 28th April 2021 from:
<https://www.researchgate.net/publication/265999112>

Cambodia said “Cambodia has made rapid progress in increasing access to electricity for villages and consumers, but progress has been achieved at a cost. It is time now to turn our attention to strengthening the reliability and quality of electricity supply, which would enable families and businesses to flourish,”. While, Inguna Dobraja, World Bank Country Manager for Cambodia expressed that “Energy is critical for enhancing industrial competitiveness that creates more jobs, and improving public services that broaden opportunities – leading to a better quality of life for all Cambodians,”.²⁸ Since Siem Reap is the main attraction in Cambodia with the Angkor World Heritage as a brand, the demand for infrastructure development is compulsory to serve locals as well as tourists. In this study, the author attempts to find out how much effort the government has put into infrastructure development. Of course, it is somehow a kind of indirect effect on local people in the Nokor Krav Village Community but it is also one of the main important indicators for measuring the impacts.

Second is *the Level of Local Awareness on the Conservation of Angkor World Heritage*. The level of awareness of a person can influence the participation of that person in carrying out the conservation of cultural heritage (Babić D., 2015). The term “**awareness**” refers to the attitude or behavior of the people

²⁸ The World Bank (2018, March 22). Cambodia: *Electricity Access Increased, Reliability Needs Improvement*. Retrieved on 19th February 2021 from: <https://www.worldbank.org/en/news/press-release/2018/03/22/cambodia-electricity-access-increased-reliability-needs-improvement>

who can recognize and understand the existence of Cultural Heritage around them.²⁹ The community is expected to be able to control or regulate their activities and behavior so as not to threaten the existence of Cultural Heritage Sites (Rafika K., et al., 2016). It was found that someone who has a high awareness of the conservation of the heritage if they have basic knowledge about Cultural Heritage areas and can find information related to conservation plans and rules set by the government (Kamaruddin S. M, et al., 2016). Cultural Heritage is inherited from ancestors in the form of human thoughts and behavior in the past. The conservation of cultural heritage is necessary so it can be useful for future generations (Sodangi M. et al., 2014). The concept of cultural heritage conservation is not only about architecture but also about people (community) who are related to cultural heritage (Astuti E Y, 2017). The Community Management of Protected Areas Conservation [COMPACT], 2021 indicated that local communities and indigenous peoples are, and have been for centuries, the custodians of many World Heritage Sites. Thus, they should be recognized as key actors in the process of identification, management, and sustainable development of a property. The local community is one of the

²⁹ Dharmasanti, R. and Dewi, S P. (2020). IOP Conference Series: Earth and Environmental Science. *The Awareness Level of Building Owners to Conserve Cultural Heritage Area in Kotagede, Yogyakarta*. Retrieved on 12th February 2021 from: <https://iopscience.iop.org/article/10.1088/1755-1315/409/1/012025/pdf#>

actors who play a role in the conservation of cultural heritage areas. However, community behavior can cause damage to cultural heritage (Firmansyah F. & Fadlilah K. U., 2016). Therefore, the community is necessary to have an awareness of the existence of cultural heritage so that they can carry out conservation (Bakri A. F, et al., 2015). Considered the case of the Kotagede area shows that not all communities have a high level of awareness to conserve buildings. At present, there is 41,7 percent of the old Kotagede buildings are not maintained, damaged, and have been extinct (Hakim F. N, 2018). (COMPACT) the initiative is an innovative model for engaging communities in conservation and shared governance of World Heritage Sites and other protected areas. It is based on the proposition that community-based initiatives can significantly increase the effectiveness of biodiversity conservation in World Heritage Sites while helping to improve the livelihoods of local people, UNESCO (2014). In this study, the author is studying the level of local awareness by testing some questions to locals about the general knowledge of the conservation of the Angkor World Heritage. However, for data analysis, the author only based on the main questions relating to the local awareness of the obligation of the APSARA National Authority.

The third is *Employment Accessibility*. Though, tourism and travel created over 276 million jobs and generated 9.8 percent of the global GDP in 2014 (Aynalem et al., 2016). It is among the world's top creators of jobs requiring varying degrees of skills and allows for quick entry into the workforce for youth, women,

and migrant workers (International Labor Organization [ILO], 2011). The tourism and hospitality industries create millions of job opportunities in different areas. Therefore, the availability of skilled and trained manpower is a crucial element in the success of any tourism development plan or program, hence employees are a sine qua non of the tourism industry. In developing countries, (UNWTO, 2011) additional factors such as low level of education and training, widespread poverty, poor maternal health, and lack of sex education together with socio-cultural factors have prevented women from being empowered as economic actors. Moreover, Griffin T. and DeLacey T. (2002) mentioned that the tourism and hospitality sector is recognized by low hourly rates of pay, overtime work without extra money, long working hours of 50 hours per week, and little or no adequate breaks during peak season periods. The reason is that tourism employment is often challenged by one or more of the following factors: seasonality, part-time and or excessive hours of work; low-paid (or unpaid) family labor; and informal or sometimes illegal labor where measurement is notably more difficult. Not far beyond the literature review, Chheang V. (2008) found that there was a big gap in employment accessibility in tourism in Siem Reap. More than 50 percent of the people living in the city are involved in the tourism industry, while only about 6 percent of the local living in the protected area has jobs related to tourism. The majority of people living in Angkor Park are farmers, construction workers in the Angkor Conservation Site or Siem Reap city, and self-employed (selling souvenirs, food, and beverage in front of their houses, making handicrafts, raising animals, etc.), while the majority of the

people living in the city are self-employed, employees in private sectors, employees in the tourism industry, NGOs staff, and public servants. To make the gap smaller, Thomas Baum (2013) emphasized that the collaboration of all stakeholders including governments and intergovernmental bodies, local government sector, trade unions, local communities, and their different member groups, NGOs, community-based tourism initiatives through social dialogue and discussions can encourage equality of opportunity and treatment; reduction of wage and salary gaps between men and women for jobs of equal value. In this study, the author attempts to find out the level and type of jobs in tourism that the local community can access whether it is a kind of low-paid or higher-paid job and how the effect of that income changes the community's quality of life.

Fourth is *the Poverty Rate*. Siem Reap is the province of main tourist attractions in Cambodia because it has Angkor as the Cultural World Heritage Site. However, it is revealed by Kang, C., and Chan, (2003) in their National Strategy for Poverty Reduction Report in Cambodia 2003 that Siem Reap ranks second among the poorest provinces in Cambodia. Later in 2007, a study project called "Empowerment of the poor in Siem Reap (EPSR)", reported that 24 percent of the whole population of 713,109 in Siem Reap were classified as poor. According to ADB (2021), Cambodia has remained one of the fastest-growing economies since 2017, and poverty reduced from 48 percent in 2007 to 13 percent in 2018, which went along with Cambodia's fast growth rate in

the past two decades. However, the data does not interpret exactly the socio-economic situation of the people living in the protected area like Nokor Krav Community Village. Chheang V. (2008) found that there was a big gap between local people living in Siem Reap city and people living in the protected zone of Angkor Park. The local people of Angkor Park are still very poor and be poorer than those residents living outside or either in the city. The study tries to go deeper into the level of poverty in this study area and check how much it has been improved compared to the past year studied by Sokun.A. (2006).

Fifth is *Affordable Access to Quality Healthcare and Education*. The Royal Government of Cambodia (RGC) has recognized the critical role that social protection can play in reducing poverty, improving living standards, and providing a better future for the country. In 2017, the RGC published the Social Protection Policy Framework (SPPF), an ambitious vision for a social protection system in which a comprehensive set of policies and institutions operate in sync with each other and respond to the broader needs of society – both today and in the future. According to OECD (2017), Cambodia's current social protection system is at an early stage of development. The largest social protection intervention in terms of coverage is the Health Equity Funds (HEF), which provide access to healthcare and other benefits to at least 2 million poor and vulnerable individuals nationwide. By expanding the package of benefits offered by HEF, increasing their coverage of the informal sector, and improving coordination between the HEF and social health insurance,

Cambodia can make rapid progress towards universal health coverage. Though HEF aims to provide free healthcare for the rural poor. In this study, the author will try to find out how much the HEF projects are helpful for the poor people in Nokor Krav Community Village. Regarding education, Chheang V. (2008) found that the education of local people living in the protected area of Angkor Park is very low, 18 percent of the local people living in the protected area are illiterate (had never gone to school), 39.3 percent drop school at primary level, 14 percent drop school at Secondary school. Only 17.3 percent can access high school level, 2.7 percent got vocational training, and 8.6 percent can access university level. Another case study on Nokor Krav Community Village by Sokun A. (2001) found that most of the children did not attend school and or dropped school at a very low level mostly at secondary school, 19 children out of the 200 household respondents can access high school and only 2 children from the 200 households can access to university level. Though it sounds very negative recently, USAID announced that Cambodia has made significant improvements in education over the last several years. The Ministry of Education, Youth, and Sport (MOEYS) are close to achieving universal access to primary education; the country achieved a 97.7 percent primary net enrollment rate in 2016.³⁰ The study attempts not to check the quality of education but rather to physically measure based on

³⁰ USAID (2021, March 4). Education and Child Protection. Retrieved on 10th May 2021 from: <https://www.usaid.gov/cambodia/education>

the level of enrollment, the number of drops out of school, and the level of accessibility to higher education as well as to quality educational centers in Siem Reap city.

2.4 Conclusion

To summarize, the review of both conceptual and empirical studies made in this chapter clearly shows that there are more claims on the positive impacts of designations in the heritage list of UNESCOs rather than the negative impacts of its management for the conservation and protection of the site on the local community. Most academic writers seemed to put more attention and consideration on the site by conserving the heritage for tourism development rather than caring about the constraints and pressures on the local community living in the protected area. It is often advocated by politicians that listing a heritage is to conserve the site as well as to build the local economy through tourism development. Therefore, it is the government's responsibility to conserve the World Heritage Site of Angkor and take care of the local communities of the surrounding areas. Cambodian people always said that "Angkor is like a chicken that can produce a golden egg every day, so we must not kill the chicken for just a soup for today"; To conserve the site, the government and UNESCO have enacted many laws on the protection of Angkor, which can affect the local's freedom and put more constraints on the locals of the protected areas of the Angkor Park. In its logical perspective, the local

community living around or in the protected area like Nokor Krav Community Village, selected for the present study, is supposed to obtain more benefits from the tourism development so that the quality of life for these locals would also be enhanced. However, the written papers can socially be interpreted differently according to the tone of language used. An important factor in protecting the sites and local cultures is the wealth of each country, where the destination is located. Many of the host countries of the Cultural Heritage Sites are economically poor and have limited capacity to protect or compensate for the impact of the visitors. They desire to encourage visitors because they need the tourist dollar to assist their economic development. But there may be a "sting in the tale"; while encouraging visitation, they may also be destroying the "golden eggs." Hence, it is imperative that in the absence of clearly evident systematic and comprehensive studies on the profound positive and negative impacts of these issues affecting the local community in Siem Reap Province, Cambodia, the present study aims to fill the gap in the literature. Thereby, it enables future researchers, academics, planners, policymakers, and government authorities to formulate guidelines and the applicable laws that can serve both the conservation of the World Heritage and the benefit of local communities surrounding the park.

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CHAPTER III

RESEARCH METHODOLOGY

This chapter attempts to explain the details of the methodology employed in the present study. Specifically, for the purpose mentioned, it is divided into eight sections. The first section explains the type of analysis carried out in the study, while in the second section, the types and sources of data are presented. The procedure for collecting data is given in the third section of this chapter. Subsequently, the remaining sections: four, five, six, and seven include detailed explanations of the sample design, statistical tools used, coverage of the study, and procedure of analyzing data respectively. At the end of the chapter, a concluding remark is given.

3.1 Type of Analysis

The type of analysis carried out in the present study is both qualitative and quantitative in nature. To form the background for data analysis in this study, the researcher attempts to use descriptive data to explain the historical background of Angkor, its unique value, and its process to be listed as a Cultural World Heritage. The study also further emphasized the management procedure of the APSARA National Authority to govern the Angkor World Heritage which includes, the mission, administration, and operational procedure for conservation of the protected area of Angkor Park. Theoretically, for the

concept of sustainable conservation and development, the study also put into debate the current situation and the demand for a living of local people in Nokor Krav Community Village and their perception of the management of Angkor. This includes socio-demographic profile, socio-economic activities, educational condition, religion, culture, customs and beliefs, opinions about World Heritage, and level of satisfaction, level of awareness for conservation of the site, to some extent, all of these data have to be presented in graphs, charts, and tables of frequencies, percentage, mean, average, and cross-tabulation.

Furthermore, for quantitative data analysis, the study attempts to use descriptive statistical data for detailed interpretation of each indicator in examining the positive and negative impacts of the management of the Angkor World Heritage by the APSARA National Authority. To test the two hypotheses, the Multiple Regression Analysis Model was used for the F test statistic and the P-value test for overall significance.

3.2 Types and Sources of Data

3.2.1 Sources of Primary Data

The primary data were collected from the direct personal interview by using a questionnaire-filled survey. It was mainly related to socio-demographic profiles: age, job, education, family member, sources of income, income pattern, view on tourism development in the Angkor World Heritage, the constraint for the law of site protection, and challenges for a living of the locals in Nokor Krav Community

Village. The most important data is the five indicators on (1). *Local employment opportunity*; (2). *Level of local involvement in the conservation of the site*; (3). *Housing condition*; (4). *Education improvement*; (5). *physical and mental healthcare support* to measure the positive impacts of the management of the Angkor World Heritage, and another five indicators such as (1). *Availability of infrastructure development*; (2). *Level of local awareness on the conservation of the World Heritage*; (3). *Employment accessibility*; (4). *Poverty rate*; (5). *Affordable access to quality healthcare and education* to measure the negative impacts of the management of the Angkor World Heritage on the locals living in Nokor Krav Community Village, Siem Reap in Cambodia.

To have a deeper understanding of the living situation of locals in Nokor Krav Community Village and their perception of the impacts of the management of the Angkor World Heritage, further data collection from the in-depth interview was carried out with five key informants. These include three respondents from APSARA National Authority and two respondents from local authorities such as the Village Leader and Sangkat Leader.

3.2.2 Sources of Secondary Data

The secondary data (both published and unpublished) for the present study have been collected from different sources, such as reports and documents of APSARA National Authority, statistics documentation of the local administration, ministries, UNESCO website, libraries, tourism journals, previous research

studies, and other relevant publications both in hard copies as well as electronic ones. It includes the procedure to list Angkor as a UNESCO World Cultural Heritage, and the documentary requirements demanding from UNESCO for the state party to follow inter alia, the government policy, the zoning of Angkor protected zone, the number of visitor arrivals, the local map, the Angkor management plan, and the regional development plan. Additionally, data on the level of local income, and the current socio-demographic statistics for the period from 2018 to 2020 have also been collected from the local authority for the present study.

3.3 Procedure of Data Collection

3.3.1 Procedure of Primary Data Collection

The primary data for this study has been collected primarily through direct personal interview methods by using a structured questionnaire. The questionnaire includes questions on several aspects relating to the theme of the research, such as age, sex, occupation, the origin of residence, local perception toward the management of Angkor, the local request for improving their living standard, and the level of their satisfaction for the management of APSARA National Authority. In addition, to identify the positive impacts, information on the five indicators such as local employment opportunity; level of local involvement in the conservation of the site; housing condition; education improvement; physical and mental healthcare, and other five indicators identify the negative impacts such as availability of infrastructure

development; level of local awareness on the conservation of the World Heritage; employment accessibility; poverty rate; affordable access to quality healthcare and education, have been gathered. Before finalizing the questionnaire for collecting the primary data from the selected respondents, the draft questionnaire has been pre-tested. Further, the detailed opinion and policy of the management of Angkor, and the management situation of the local authority in Nokor Krav Community Village, have been collected from the in-depth interview using a separate checklist for each interviewee. Below is the detailed procedure for primary data gathering:

Step 1: Questionnaire testing

Five respondents were selected randomly in different locations of the Nokor Krav Community Village for interview testing. And, also to ensure that all the questions in the questionnaires were understood correctly by the respondents and matched to the actual situation and culture of the local villager in Nokor Krav Community Village, Siem Reap in Cambodia.

Step 2: Conduct a respondent-filled survey of questionnaire part I

One village assistant was employed to help provide the questionnaire part (I) to all the 400 respondents at least three days before the date of the face-to-face interview. The village assistant was trained to select respondents randomly, one out of every three households and only one respondent in each household was allowed to participate in the interview. He or she in each family who volunteered to participate in the interview has to fill in the answer in the questionnaire survey part (I) by themselves before the face-to-face interview was conducted.

Step 3: Data checked and personal direct interview of questionnaires part II

Before starting the direct personal interview, the interviewer first checked the data filled by the respondents of the questionnaire part (I) and later the interviewer used the opened-ended questionnaires part (II) to do the interview. The interviewer will record all the responses and encourage the respondents to freely express their own personal opinions as much as possible during the interview. Therefore, it will take about 20-30 minutes for each interview. In the completion of this task, it took about 40 days to complete the total of 400 questionnaires as the researcher has planned to finish at least 10 interviews each day.

Step 4: In-depth interview preparation

The researcher has contacted five respondents and requested an appointment for doing an in-depth interview. The five key informants to be selected were a leader of Nokor Krav Community Village, a leader of Sangkat Koukchork, one official from the department of administration, personnel, and materials, one official from the department of public order and cooperation, and one official from the department of conservation of monuments in Angkor park and archeological prevention of APSARA National Authority.

Step 5: In-depth interview with key respondents

Five separate checklists were specifically used for each respondent during the interview. More flexible questions have been used to ask to get more detail and a deeper understanding of the case. Hence, each interview takes longer than usual which lasts about 45-60 minutes, and when accepted by the interviewee,

the researcher also does a voice record as well as photography shooting. It took about one week to complete this in-depth interview.

3.3.2 Secondary Data Collection

To collect the secondary data for this study, the researcher followed the basis of a structured format by classifying the relevant needed data into three groups. First, the relevant data for the literature review from both the conceptual and empirical literature are found electronically on the internet and in libraries. Second, the relevant administrative documents, census reports from a local authority, and or school libraries, are mostly in hard copies. Third, the relevant data such as actual reports, journal articles, and/or documents are mainly from APSARA National Authority and UNESCO. After grouping and drafting the data for searching, the researcher has set a planned schedule for data collection. Finally, citing and referencing them in the file format.

3.4 Sample Design

3.4.1 Sample or Universe Size

There is a total population of 3, 764 people in Norkor Krav Community Village based on the statistical data of Sangkat Koukchork, Siem Reap, Cambodia in 2020. To select the sample for the interview, the Yamane equation (1967)³¹

³¹ Tarleton State University (n.d) Determining Sample Size. Retrieved on 3rd February 2017 from:
<https://www.tarleton.edu/academicassessment/documents/samplesize.pdf>

had been used as the formula to determine the target samples for this study as shown in Table 3.4.1 (A) below:

Table 3.4.1 (A): Calculating the target samples

Yamane Equation (1967)	$n = \frac{N}{1 + N(e)^2}$	N = Number of populations = 3, 764 e = level of precision = 5 n = Sample size
	$n = \frac{3, 764}{1 + 3, 764 (0.05)^2}$	$n = \frac{3, 764}{1 + (3,764) \times (0.0025)} = 361.57$

Note: In order to ensure better accuracy, the study has considered choosing **400 samples** instead of 361 samples.

To further study the nature of the problem, in-depth interviews were carried out by selecting five key informants as listed in Table 3.4.1 (B) below:

Table 3.4.1 (B): List of five key informants for the in-depth interview

N*	Organization	Position/Responsibility/Departments	sample
1.	Local Authority	Leader of Sangkat Koukchork	1
2.		Leader of Nokor Krav Community Village	1
3.	APSARA National Authority	A government official from the department of administration, personnel, and materials	1
4.		A Government official department of public order & cooperation	1
5.		A Government official department of conservation of monuments in Angkor park and archeological prevention	1
Total:			5

3.4.2 Sampling or Census Methods

Theoretically in tourism literature, the distance of the village and the level of host interaction are the key factors to investigate the different patterns of tourism income of the households. Nokor Krav Community Village in Siem Reap Province, Cambodia is located in the heart of Angkor's protected zone where tourist-hosts can interact, it is in the area where tourists pass by Nokor Thom. The number of households available in the village census published by the local administration of Sangkat Koukchork in 2020 was used as the sampling frame. While the villager's household was used as a sampling unit. One person in each household was used as a sample to represent each household. Those samples were selected randomly based on house structure in the village by choosing one out of every three houses.

To obtain qualitative data on the real situation of local people living in Norkor Krav Community Village, level of awareness of on-site conservation, and their perception of the impacts of the management of the Angkor World Heritage, the in-depth interviews were conducted on the five key informants. For this purpose, restricted and purposive sampling has been used to select the five respondents. Since these methods of sampling are based on the judgment of the researcher. It is, therefore, that the village leader and Sangkat leader were selected for the in-depth interview because they both are leaders who worked closely with the Nokor Krav Community Village and know exactly about the real situation of the local people under their management. While

the other three key respondents were selected from three relevant departments of the APSARA National Authority because their duties are very much related to the topic under study and they were expected to be able to provide detailed information and documents about the management of the Angkor World Heritage.

3.5 Statistical Tools

Bearing the objectives in mind, the study has attempted to analyze data both qualitatively and quantitatively. For qualitative data analysis, only descriptive data has been presented in the study report. As for quantitative data analysis in examining each indicator to find out the positive and negative impacts of the management as well as to test the research hypothesis, the study used a Multiple Regression Analysis Model and F Test Statistic and P-value for overall significance.

In the present study, after the data have been collected, they have been coded and tabulated into the computer program, keeping the objectives of the study in mind, two computer software programs have been used as tools to analyze the data quantitatively. These include Statistical Package for the Social Sciences (SPSS), and Excel. In this study, SPSS was used as a tool for data access and preparing, analyzing, reporting, predicting, and testing the statistical model. The interrelationship among the data forms the basis for tabulation. Simple statistical calculations such as averages, frequencies, and percentages and

cross-tabulation, graphs, charts, and tables were carried out for the analysis, to some extent, Microsoft Excel has also been used as an optional tool for calculation.

To examine the positive impacts of the management of the Angkor World Heritage governed by the APSARA National Authority, Multiple Regression, a statistical technique that can be used to analyze the relationship between a single dependent variable ($\hat{Y}$) and several independent variables (X_1, X_2, X_3, X_4, X_5) where its formula is given below:

$$\hat{Y} = a + \beta X_1 + \beta X_2 + \dots \beta_k + \varepsilon$$

$$(or) \quad \hat{Y} = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where, $\hat{Y}$ = Male and Female is a dependent variable represents the locals impacted positively by the management of Angkor (PI);

X_1 = Local Employment Opportunity (EO);

X_2 = Level of Local Involvement in Conservation of the site (LC);

X_3 = Housing Condition (HC);

X_4 = Education Improvement (EI);

X_5 = Physical and Mental Healthcare Support (HS)

a = Intercept term; and

ε = Error term.

Again, to examine the negative impacts of the management of the Angkor World Heritage governed by the APSARA National Authority, a Multiple

Regression Analysis is carried out to analyze the relationship between a single dependent variable ($\hat{Y}$) and several independent variables (X_1, X_2, X_3, X_4, X_5) where its formula is given below:

$$\hat{Y} = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where, $\hat{Y}$ = Male and Female is a dependent variable represents the locals impacted negatively by the management of Angkor (NI);

X_1 = Availability of Infrastructure Development (ID);

X_2 = Level of Local Awareness on the Conservation of the world Heritage site (AC);

X_3 = Employment Accessibility (EA);

X_4 = Poverty Rate (PR);

X_5 = Affordable Access to quality healthcare and education (HE)

a = Intercept term; and

ε = Error term.

To test the research hypothesis, the F test has been used to test the overall significance as given below:

- Hypothesis

Hypothesis 1: $H_{01}: \beta_{p1} = \beta_{p2} = \beta_{p3} = \dots \beta_{pk} = 0$

Hypothesis 2: $H_{02}: \beta_{n1} = \beta_{n2} = \beta_{n3} = \dots \beta_{nk} = 0$

- At $\alpha = 0.05$
- Formula

$$F_{(k-1, n-k)} = \frac{MSR}{MSE} = \frac{\frac{SSR}{k-1}}{\frac{SSR}{n-k}}$$

Where: MSR represents the Mean sum of Squares Regression;

MSE represents the Mean sum of Squares Error

And the MSR can be calculated as $SSR/k-1$ and;

The MSE can be calculated as $SSR/n-k$

Where: SSR represents the Sum of Squares Regression

k = the number of predictor variables (X);

n = Sample size

3.6 Coverage of the Study

The present study is confined to Nokor Krav Community Village borders Kouk Tachan village in the South, Kouk Kreoul village in the North, Plung village in the East, and Kouk Beng village in the West, located in Sangkat Koukchork, Siem Reap province in Cambodia. The target respondents for the survey were 400 respondents selected from the total population of 3, 764 people in the Nokor Krav Community Village, Siem Reap in Cambodia. The main coverage of the data for analysis was based on the qualitative and quantitative data collected from the 400 personal direct interviews and the in-depth interviews

of the five selected respondents for this study. It did not attempt to cover all any aspects of APSARA National Authority's management task but rather to study only the key data related to the legal framework for site protection, their operational task regarding the conservation of the site, the procedure to apply the law of protection on local people in Nokor Krav Community Village and intervention for improving the livelihood of the living standard of the local people in the protected area, especially the local people of Nokor Krav Community Village, Siem Reap in Cambodia.

In addition, the study is also based on the additional secondary data collected from APSARA National Authority as well as UNESCO to support the analysis. Further, the study covers only the current period of the data collected from 2018 to 2020.

3.7 Procedure of Analyzing Data

To analyze data qualitatively and quantitatively, after the data have been collected, the procedure of data analysis has been carried out in seven steps. First, organizing and classifying data that are fit for each objective. Second, edited, coded, and tabulated data into the computer program. Third, choosing the appropriate model for analyzing the quantitative data, Multiple Regression Analysis, and F Test Statistic. Fourth, choosing and using software programs such as EXCEL to optionally calculate data and SPSS to run the analysis. Fifth,

checking, testing, interpreting, and summarizing data outputs. Finally, organize outputs, draw a conclusion, and write up the report.

- Procedure for Multiple Regression Analysis of Quantitative Data Analysis

Step 1: Defining the model and its assumption about ϵ

Step 2: Testing hypothesis (F test of overall significance)

- Setting Hypothesis; Choosing alpha (α)
- F Test Statistic and P-value for overall test

Step 3: Decision³²

If $F > \text{critical } F \text{ value} \Rightarrow H_0 \text{ is rejected}$

If $F < \text{critical } F \text{ value} \Rightarrow H_0 \text{ is not rejected}$

Thus, the above discussions clearly explain the methodology adopted in the present study.

3.8 Concluding Remarks

To conclude, the study has used both primary and secondary data. The study has employed the usage of Multiple Regression Analysis as a model to examine the positive impacts and the negative impacts of the management of Angkor. F-test statistics and P-value to test the overall significance. A decision is made according to the F value if F is bigger than the critical F value, the null

³² Statistichowto (n.d). F table for alpha levels. Retrieved on 27th July 2021

from <https://www.statisticshowto.com/tables/f-table/>

hypothesis will be rejected. However, if the F value is smaller than the critical F value, the null hypothesis will not be rejected. Finally, the results of the present study have been presented in tables, figures, and graphs.

FOOTNOTES:

- ^{31.} Virginia Braun (2018, February) SPRINGER link. Retrieved on 2nd May 2021 from <https://link.springer.com/referenceworkentry/>
- ^{32.} Tarleton State University (n.d) Determining Sample Size. Retrieved on 3rd February 2017 from: <https://www.tarleton.edu/academic/assessment/documents/samplesize.pdf>
- ^{33.} Statistichowto (n.d). F table for alpha levels. Retrieved on 27th July 2021 from <https://www.statisticshowto.com/tables/f-table/>

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CHAPTER IV

PROFILE OF THE STUDY AREA

The chapter presents the profile of the study area of the present study and is subdivided into three sections. The first section includes the historical background of Angkor, its significance, the symbolic character of the Khmer nation, and how Angkor becomes a World Cultural Heritage. The second section presents the profile of APSARA National Authority, its administration, mission, procedural management for the conservation of Angkor, and procedural management for community participation and sustainable development. The third section describes the living conditions of the local people in Nokor Krav Community Village, which includes the population and socio-economic activities, local culture, tradition, customs, religion, education, health care, housing condition, infrastructure development, and potential resources for tourism development.

4.1 Historical Background of Angkor

4.1.1 Angkor is more than Temples

Angkor is more than the temples of Banteay Srei and Angkor Wat or the Kulen Mountains. It is a geographical region with hundreds of temples, vestiges of monuments, and infrastructure and encompasses the civilization of our ancestors. According to H.E. Ms. Pheoung Sakona, President of APSARA National Authority said in her speech that, "on the 40,000 hectares of the park,

a population of approximately 125,000 souls, live and work, distributed through 112 villages". Angkor is located in Siem Reap Province, the northern part of Cambodia. It is one of the most important archaeological sites in Southeast Asia. It extends over approximately 401 square kilometers and consists of scores of temples, hydraulic structures (basins, dikes, reservoirs, canals) as well as communication routes.

4.1.2 Angkor is the Heart of Cambodia

Angkor is a unique cultural heritage, a living testimony of our past, and the foundation of our identity as a nation. It is therefore a symbol of the Khmer nation on the national flag of the Kingdom of Cambodia, Chheang (2010). Angkor continues to contribute to Cambodia's evolution. Cultural Heritage could be defined as the inherited symbolic and non-symbolic aspects of people's ways of life, where there is a well-harnessed cultural heritage, the existence of museums is facilitated. The museums, on the other hand, serve as the repositories or custodians of either archaeological or products of the historical past with their associated non-material values. Today, Cultural Heritage by its implication attracts cultural tourism, creates job opportunities, build cultural awareness, and improve the social and economic benefit.

4.1.3 Angkor to become the World Cultural Heritage

Angkor is one of the most important archaeological sites in South-East Asia, Angkor includes hundreds of temples dating back to the 9th-15th centuries. In

the early 1990s, the site was under major threat, with many of the temples at high risk of collapse and several sites looted. Nevertheless, conservation work at Angkor had not been possible since the 1970s due to the outbreak of civil war, the rise of the Khmer Rouge regime (1975-1979), and the following civil unrest. Responding to this challenge, His Majesty the late King Norodom Sihanouk launched an appeal in 1991 for the safeguarding of the Angkor archaeological site to the former Director-General of UNESCO, Mr. Federico Mayor, UNESCO (2013).

Process of Property Nomination in UNESCO's World Heritage List

Only countries that have signed the World Heritage Convention, pledging to protect their natural and cultural heritage, can submit nomination proposals for properties on their territory to be considered for inclusion in UNESCO's World Heritage List. The nomination process has to be followed the five steps: The tentative list; The Nomination file; The Advisory bodies; The World Heritage committee; and The Criteria for selection. Below is the description of the property of Angkor to be proposed for nomination³³:

- Total size: 401 Square Kilometer including (Ref. 668)

Angkor = 162 Km² (16200 Ha)

Rolous = 28 Km² (2800 Ha)

Banteay Srei = 18 Km² (1800 Ha)

³³ UNESCO (n.d.) World Heritage List Nomination. Retrieved on July 2019 from <https://whc.unesco.org/en/nominations/>

- Number of villages: 112 villages
- Heritage for the protection: Cultural Heritage (Tangible cultural heritage and Intangible cultural Heritage)

4.1.3.1 Angkor was First Nominated as the World Heritage in Danger

After the nomination proposal of Angkor had been submitted to UNESCO, Angkor of its Universal Outstanding Value (UOV) has met **four** out of the ten selection criteria requirements. The four criteria found by UNESCO are as follow:

- **Criterion (i):** The Angkor complex represents the entire range of Khmer art from the 9th to the 14th centuries, and includes several indisputable artistic masterpieces (e.g. Angkor Wat, the Bayon, Banteay Srei).
- **Criterion (ii):** The influence of Khmer art as developed at Angkor was a profound one over much of Southeast Asia and played a fundamental role in its distinctive evolution.
- **Criterion (iii):** The Khmer Empire of the 9th-14th centuries encompassed much of Southeast Asia and played a formative role in the political and cultural development of the region. All that remains of that civilization is its rich heritage of cult structures in brick and stone.
- **Criterion (iv):** Khmer architecture evolved largely from that of the Indian sub-continent, from which it soon became distinct as it

developed its special characteristics, some independently evolved and others acquired from neighboring cultural traditions. The result was a new artistic horizon in oriental art and architecture.

For several centuries Angkor was the center of the Khmer Kingdom. With impressive monuments, several different ancient urban plans, and large water reservoirs, the site is a unique concentration of features testifying to an exceptional civilization. Temples such as Angkor Wat, the Bayon, Preah Khan, and Ta Prohm, exemplars of Khmer architecture, are closely linked to their geographical context as well as being imbued with symbolic significance. The architecture and layout of the successive capitals bear witness to a high level of social order and ranking within the Khmer Empire. Angkor is, therefore, a major site exemplifying cultural, religious, and symbolic values, as well as containing high architectural, archaeological, and artistic significance. The park is inhabited, and many villages, some of whom the ancestors are dating back to the Angkor period are scattered throughout the park. The population practices agriculture and more specifically rice cultivation.

Integrity

The Angkor complex encompasses all major architectural buildings and hydrological engineering systems from the Khmer period and most of these “Barays” and canals still exist today. All the individual aspects illustrate the intactness of the site very much reflecting the splendor of the cities that once were. The site integrity, however, is put under dual pressures:

1. Endogenous: exerted by more than 100,000 inhabitants distributed over 112 historic settlements scattered over the site, which constantly try to expand the dwelling areas;
2. Exogenous: related to the proximity of the town of Siem Reap, the seat of the province and a tourism hub.

Authenticity

Previous conservation and restoration work at Angkor between 1907 and 1992, especially by the École Française d'Extrême-Orient (EFEO), the Archaeological Survey of India, the Polish conservation body PKZ, and the World Monuments Fund have had no significant impact on the overall authenticity of the monuments that make up the Angkor complex and do not obtrude upon the overall impression gained from individual monuments. After the process of nomination of Angkor, international cooperation was immediately followed by international safeguarding action. During the 16th Session of the UNESCO World Heritage Committee in Santa Fe in the United States of America, Angkor was inscribed in the World Heritage List in Danger on 14th December 1992.

4.1.3.2 Requirement of UNESCO to the Royal Government of Cambodia

On December 14th, 1992, in Santa Fe (USA), the World Heritage Committee requested from the Cambodian national authorities to fulfill 5 conditions, among which the establishment of an adequate staffed national protection and

caretaker agency. Thus, the property is legally protected by the Royal Decree on the Zoning of the Region of Siem Reap-Angkor adopted on 28 May 1994³⁴ and later the Royal Decree of February 19th, 1995, created APSARA Authority³⁵ and a Tourist Police Unit in 1995 and amended as APSARA National Authority in 2020.

4.1.3.3 Angkor Became the World Cultural Heritage

The Royal Government of Cambodia has carefully monitored the work of the APSARA National Authority and the implementation of the guidelines on the protection of heritage. The successful conservation of the property by the APSARA National Authority, monitored by the ICC-Angkor, was crowned by the removal of the property from the World Heritage List in danger in 2004³⁶ for many reasons as below:

- **Sustainable Tourism Development**

Angkor is one of the largest archaeological sites in operation in the world. Tourism represents an enormous economic potential but it can also generate

³⁴ APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree N0001/NS dated 28th May 1994, concerning the Zoning and Management of the Siem Reap-Angkor region.

³⁵ APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree NS/RKT/0295/12 dated 19 February 1995, regarding the establishment of APSARA Authority.

³⁶ Angkor - UNESCO (n.d.), World Heritage Centre. ICC-Angkor. Retrieved on December 2019 from: <https://whc.unesco.org>

irreparable destructions of the tangible as well as intangible cultural heritage. Many research projects have been undertaken since the international safeguarding program was first launched in 1993. The scientific objectives of the research result in a better knowledge and understanding of the history of the site, and its inhabitants that constitute a rich exceptional legacy of the intangible heritage. The purpose is to associate the "intangible culture" with the enhancement of the monuments to sensitize the local population to the importance and necessity of its protection and preservation and assist in the development of the site. Angkor is a living heritage site where Khmer people live in general, but especially the local population, are known to be particularly conservative concerning ancestral traditions and where they adhere to a great number of archaic cultural practices that have disappeared elsewhere. The inhabitants venerate the temple deities and organize ceremonies and rituals in their honor, involving prayers, traditional music, and dance.

Angkor Archaeological Park is very rich in medicinal plants, used by the local population for the treatment of diseases. The plants are prepared and then brought to different temple sites for blessing by the gods. The Preah Khan temple is considered to have been a university of medicine and the Neak Poan an ancient hospital. These aspects of intangible heritage are further enriched by the traditional textile and basket weaving practices and palm sugar production, which all result in products that are being sold on local markets and

to the tourists, thus contributing to the sustainable development and livelihood of the population living in and around the World Heritage Site.

- **Successful Restorations**

Angkor, after being nominated as a Cultural Heritage in Danger, in 1993, UNESCO embarked upon an ambitious plan to safeguard and develop the historical site carried out by the division of Cultural Heritage in close cooperation with the World Heritage Centre. Illicit excavation, pillaging of archaeological sites, and landmines were the main problems. The World Heritage Committee, having noted that these threats to the site no longer existed and that the numerous conservation and restoration activities coordinated by UNESCO were successful. Finally, it was successfully removed from the list of dangers and fully listed as a UNESCO World Cultural Heritage in 2004.

4.1.4 Angkor Became the Most Favorable Tourist Attraction

Angkor with its fabulous reputation became one of the most attractive destinations in the world. In 2017, Angkor Wat, one of the temples of the Angkor complex was crowned the best UNESCO World Heritage Site, it came out on top of the list of the best UNESCO World Heritage, according to a news release from TripAdvisor, the world's largest travel site. "Angkor Wat has previously been named the number one best landmark in the world list and is the number one thing to do in Siem Reap on the TripAdvisor site," followed by the Taj Mahal in Agra, India, won second place, and Great Wall in China respectively as reported by Khmer Times, AKP, December 1, 2017.

4.2 Background of APSARA Authority

4.2.1 Establishment of APSARA Authority

APSARA Authority was created under the Royal Decree NS/RKT/0295/12 dated 19th February 1995, by referring to the Royal Decree N^o 001/NS dated 28th May 1994 concerning the Zoning and Management of the Siem Reap-Angkor region. Later, it has been amended by Royal Decree NS/RKT/0199/18 dated 22nd January 1999 and re-amended by Royal Decree NS/RKT/0904/267 dated 20th September 2004, and another re-amended by Royal Decree NS/RKT/0107/015 dated 10th January 2007. The latest amendment was in 2020 concerning the creation of APSARA National Authority in article one of Royal Decree NS/RKT/0220/203 dated 20th February 2020³⁷. The term **APSARA** is an acronym in French (Autorité pour la Protection du Site et l' Aménagement de la Région d' Angkor), which means Authority for the Protection of the Site and Management of the Region of Angkor. Moreover, APSARA in the Khmer language meant celestial dancers, and thousands of its sculptures were carved on the walls of the temples of Angkor.

³⁷ APSARA Authority (2020), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree NS/RKT/0220/203 dated 20 February 2020 regarding the creation of APSARA National Authority.

4.2.2 Mission of APSARA National Authority

The main mission of the APSARA National Authority in charge of:

- Ensure, in the region of Siem Reap-Angkor, the protection, preservation, and valuation of national cultural property;
- Conceive and lead the development of cultural tourism in the region of Siem Reap-Angkor;
- Carry out sustainable development to contribute to the implementation of the policy of the Royal Government of Cambodia for poverty reduction;
- Establish partnerships with provincial and territorial authorities;
- Cooperate with institutions and organizations, both Khmer and Foreign, which have objectives answering the vocation of Apsara National Authority and are operating in the region.

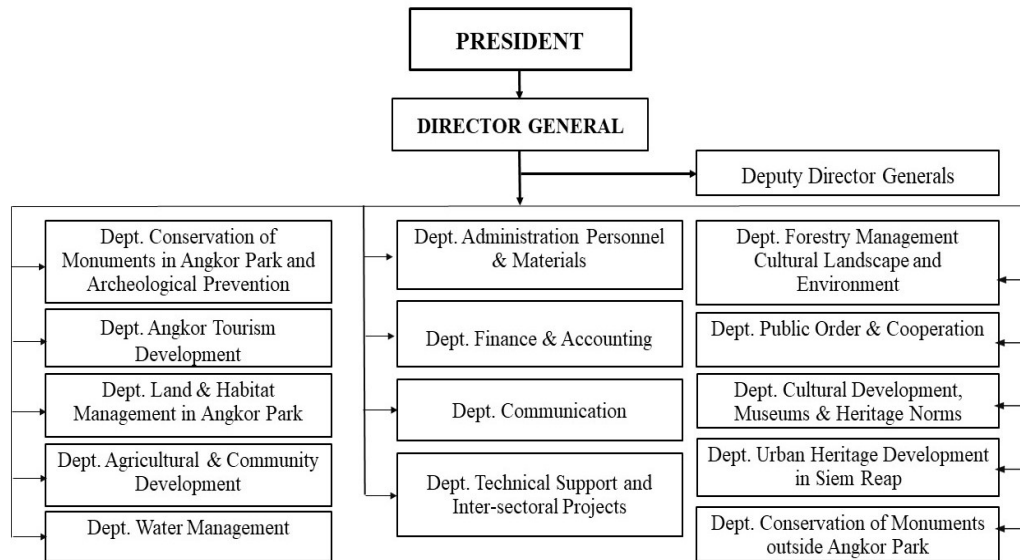
4.2.3 Administration Framework of APSARA National Authority

The administration and management of APSARA National Authority have been followed by the Royal Sub-decree N^o 50 dated 07th May 2008³⁸. The General Department of the APSARA National Authority is led by one president and

³⁸ APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Sub-decree N^o 50 dated 07 May 2008, regarding the administration and management of APSARA Authority.

managed by one Director General and assisted by many deputy director generals and functionally operated by 14 departments as shown in the chart below:

Fig. 4.2.3: Organizational Chart of APSARA National Authority



Source: APSARA Authority, 2006

4.2.3. Human Resource Management

The human resource management in the APSARA National Authority is optionally managed by following the Organizational Norm N^o 2 approved by the Board of Council of APSARA National Authority dated 01st September 1999. Personnel Management in the APSARA National Authority has been categorized into three specific groups:

- The government officials,
- The permanent staff
(Staff have been employed with no limit contract),
- The contracted staff.

4.2.4 One Window Service of APSARA National Authority

To build a good communication network and provide transparent services to the public and local people living in Angkor Park, Service Center's APSARA-SCA was created following the Prokas N^o 112 BRK date 2nd September 2008 in kind of one window service system where the price, duration, and type of services were openly informed to the public. There were at least 30 types of services which are divided into four main categories as below:

1. Services related to admission for tourism services inside Angkor Park as well as other areas are under the governance of the APSARA National Authority.
2. Services related to admission for the construction and land use inside Angkor Park as well as other areas which are under the governance of APSARA National Authority.
3. Services related to admission for celebrating the religious festivals, ceremonies, or other traditional events inside Angkor Park as well as other areas which are under the governance of the APSARA National Authority.
4. Services related to admission letters of confirmation for technical documentation, research, and other archeological purposes are needed under the entitlement of the APSARA National Authority.

4.2.5 Procedural Management for the Conservation of Angkor

4.2.5.1 Zoning

Based on Royal decree N^o 001 NS regarding the establishment of Protected Cultural Zones in the Siem Reap-Angkor Region dated May 28th, 1994³⁹ and followed by the Royal Kram dated January 25th, 1996, on the Protection of Cultural Heritage and the decision N^o 70 SSR regarding the regulation for land use of Zone 1 and Zone 2 dated November 16th, 2004. The Cultural Sites listed in this plan benefit from five national categories of protected sites with different levels of protection.

- **Zone 1: Monumental Sites**

are areas that contain the most significant archeological sites in the country and, therefore, preserve the highest level of protection. They may be quite a small area, but in the case of Angkor, a large area will be managed under this category, given the density and importance of the monuments and archeological remains in the region.

- **Zone 2: Protected Archeological Reserves**

are areas rich in archeological remains which need to be protected from harmful land used practices and consequences of inappropriate development? They will most frequently surround monumental sites, protecting adjacent

³⁹ APSARA Authority (1994), Royal Decree N^o 001 NS dated May 28th, 1994, regarding the establishment of Protected Cultural Zones in the Siem Reap-Angkor Region.

areas of known or likely archeological importance, much of which, in most cases, may not be visible ground. The principal use of zones in this category will be to act as a buffer zone protecting the monumental sites.

- **Zone 3: Protected Cultural Landscapes**

are areas with the characteristics of a landscape that should be protected on account of its traditional appearance, land-use practices, varied habitats, historic building, or man-made features from the past of recent origin, that cultural landscape may also safeguard viewpoints and relationships between significant features which contribute to their historic or aesthetic value.

- **Zone 4: Site of Archeological, Anthropological, or Historical Interests**

are areas including all other important archeological sites, but of less significance than monumental sites, that need to be safeguarded for research, education, or tourist interest. Activities in these sites and areas are subject to regulation. The regulations are similar to those applying to the protected archeological reserves.

- **Zone 5: The Socio-economic and Cultural Development Zone**

This region covers the whole Siem Reap province. The guideline will be provided to encourage sustainable development and assess its impacts on the environment, to preserve the cultural and natural heritage.

4.2.5.2 Functional Guidelines for Land Use of Zone 1

The No. 70 SSR government Decision, dated 16th September 2004 provides for land use in Angkor Park: "All lands located in zone 1 and 2 of the Angkor Site are state properties", and the sub-decree No. 50 ANK/BK on the organization and functioning of the APSARA National Authority adopted on 9th May 2008, specifically provided for the establishment of a Department of Land-use and Habitat Management in Angkor Park.

To strengthen and clarify the ownership and the coding of the protected area of zones 1 and 2, APSARA National Authority first posted the boundary in 2004 and a second time in 2009, and the action was completed in 2012, APSARA Authority Report (2012). In this study, the focus is on the Nokor Krav Community Village, located in Zone 1. Hence, only the guidelines for land use of Zone 1 were quoted as below:

- ❖ Guideline for development activities in Zone 1 [article 8]

Prohibit development in the monumental sites, with exception of development essential for the protection and enhancement of the sites.

- ❖ Guideline for archeological activities in Zone 1 [article 9]

Provide strict protection for the territory of monumental sites and manage it to the provision for archeological research and educational or leisure activities.

- ❖ Guideline for the management of the visitors in Zone 1 [article 10]

- To limit and regulate access by visitors

- To show in a visible way that the management authority is present to inform, guide, ensure security, and provide basic services to the visitors.
 - To fix the entry price at a level that can generate deficient income for conservation work and site management.
 - To lay down limits for the number and size of the groups of visitors to maintain the quality of the visit and protect the monuments.
 - To endure strict control of access by car, ban coaches, impose a speed limit and introduce restrictions regarding car parks.
- ❖ Guideline for tourist facilities in Zone 1 [article 11]
- To authorize only the smallest possible number of constructions for visitors on isolation sites (food and refreshment stand, pedestrian paths, bicycle stands, and minibus stop).
 - To impose restrictions regarding car parks.
 - To make arrangements enabling visitors to observe the archeological excavation and restoration work in progress.
- ❖ Guideline for the presentation of cultural sites in Zone 1 [article 12]
- To organize guided visits and set up descriptive panels on individual sites.

❖ Guideline for water management in Zone 1 [article 14]

To maintain the old, traditional rice fields, exercise strict control over the replacement of structures.

❖ Guideline for the management of the landscape in Zone 1 [article 15]

- To create an authentic way of presenting archeology through suitable landscapes.
- To maintain the natural forest and forest landscapes, and plant decorative trees.
- To landscape the areas around the monuments.

❖ Guideline for the management of natural resources in Zone 1 [article 16]

- To regenerate the native forest and wooded land.
- To care for trees around the monument
- To create a botanical garden and forest paths
- To maintain traditional land use in the form of rice paddies and pasture.

❖ Guideline for residents in Zone 1 [article 17]

- To prohibit residential uses
- To assist residents with their relocation, in particular by providing them with land and building materials for their houses and community facilities.

- To give priority to residents for trading permits/concessions on the sites.
- ❖ Guideline for pagodas in Zone 1 [article 18]
 - To allow no new pagodas or religious facilities in the monuments.
 - To prohibit any overnight stays except in the monasteries of Barkong, Angkor Wat, and Lolei.
- ❖ Guideline for industry and commerce in Zone 1 [article 19]

To prohibit commercial development within the protected sites, with exception of small-scale activities associated with maintenance and protection of cultural landscapes and archeological reserves.
- ❖ Guideline for electricity cable in Zone 1 [article 20]
 - No high-tension electric cables are to be allowed to cross the protected sites.
 - Low-tension cables for the local supply of electricity should be unobtrusive.
- ❖ Guideline for environmental awareness in Zone 1 [article 21]

To undertake a program to make local people and visitors more aware of the importance of cultural heritage, and environmental matters.
- ❖ Guideline for training in Zone 1 [article 22]

- To train laborers for work on excavations and restoration activities.
- To train park keepers and maintain staff
- To train archeologists, architects specializing in restoration work, and other professionals in the field of the management of cultural heritage.

4.2.5.3 Technical Review (ICC-Angkor)

As of 1993, the International Coordinating Committee for the Safeguarding and Development of the historic site of Angkor (ICC-Angkor) was created on 13 October 1993, to ensure the coordination of the successive scientific, restoration, and conservation-related projects, executed by the Royal Cambodian Government and its international partners. Since then, UNESCO has been assisting the APSARA National Authority in carrying out several programs for the preservation of Angkor, in collaboration with the ICC-Angkor to ensure the consistency of the various projects, and defines, when necessary, technical and financial standards and calls the attention of all the concerned parties when required. It also contributes to the overall management of the property and its sustainable development.

4.2.6. Procedural Management for Community Participation and Sustainable Development

4.2.6.1 International Cooperation Projects

There are three projects which relate to community development. The Angkor Management Plan (AMP) and Community Development Participation Project (CDPP), bilateral cooperation with the Government of New Zealand. (AMP) helps the APSARA National Authority to reorganize and strengthen the institutional aspects, and (CDPP) prepares the land use map with an experimental participation of the communities and supports small projects related to tourist development to improve the income of villagers living in the protected zones. While the Heritage Management Framework (HMF) is composed of a Tourism Management Plan and a Risk Map on monuments and natural resources; a multilateral cooperation with the Government of Australia and UNESCO. Preliminary analytical and planning work for the management strategy will consider the necessity to preserve the special atmosphere of Angkor. All decisions must guarantee physical, spiritual, and emotional accessibility to the site for the visitors.

4.2.6.2 Run Ta-Ek Eco-Village Development Project

As mentioned earlier, on the 401 square kilometers of Angkor Park, there was a population of approximately 125,000 souls, living and working, distributed through 112 villages in five districts. To fulfill the increase in the number of new

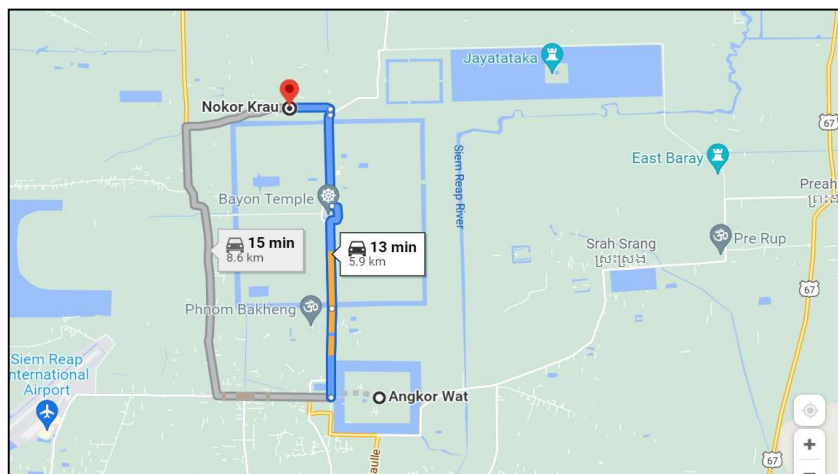
families of the young generation of local people residing in the Angkor Park without endangering the integrity of the World Heritage Site, APSARA National Authority fitted out a 1,000-hectare site, developed it as an Eco-village at Run Ta-EK, to facilitate their resettlement outside the Angkor Park. It is located about 20 kilometers from Angkor Wat, 24 kilometers from downtown, and 26 kilometers away from International Airport. The APSARA National Authority has provided a piece of land to each volunteering family, built some basic infrastructures for development, and supported technical assistants for agro-tourism development, APSARA Authority Report, (2004).

4.3. Background of Nokor Krav Community Village

4.3.1 Location

Nokor Krav Community Village is located in Sangkat Koukchork, Siem Reap City, Siem Reap Province. It is about 6 kilometers from Angkor Wat and 14 kilometers away from downtown. It is bordered by Kouk Tachan village in the South, Kouk Kreoul village in the North, Plung village in the East, and Kouk Beng village in the West. Nokor Krav Community Village has a total population of 3,764 people in 2020, and 2,411 of them are age of 18-year-old or above. There were 933 families based on the commune census in 2020 compared to 426 families in 2006, Sokun. A (2006). It has increased more than double the total population within 14 years even though it was controlled and protected by APSARA National Authority.

Fig. 4.3.1: Map of Nokor Krav Community Village



Source: Google Map, 2020.

4.3.2 Population and Socio-economic Activities

Many of the villagers in this community rely mainly on rice cultivation as the staple crop for consumption. Besides, agriculture, they are dependent on living with nature by benefiting from the natural forest of Angkor Park with some forms of traditional works to make their living. Their economic activities include collecting the resin from a tree, making resin torches, collecting the firewood and the seasonal wild fruits in the Angkor forest for sales, raising plants, fishes, and animals, and engaging in petty business in the district, and provincial towns. When Angkor became a World Heritage in 1992, most of its traditional economic activities have been prohibited for the sake of conservation of Angkor Park as well as the Angkor forest itself. Removing resin or collecting firewood from the Angkor forest has been prohibited. However, only some specific

economic activities are allowed to be practiced inside the Nokor Krav Community Village. Due to the economic constraints faced by the locals living in the protected area of Angkor Park, particularly Nokor Krav Community Village, the Royal Government of Cambodia, under the APSARA National Authority has been mandated to employ locals in the protected area of Angkor Park as a priority for job employments. Moreover, the APSARA National Authority in recent years does not only focus on conservation but also on attracting tourists, both domestic and international to visit Siem Reap-Angkor. As a result, the local villagers in Nokor Krav Community Village also depended mainly on earning income from tourism. Based on the commune census in 2020⁴⁰, it was found that there were 568 people from Nokor Krav Community Village having jobs that are involved in the services and construction sectors that predominately cater to the tourism industry in Siem Reap. Notably, 54 out 198 workers of APSARA National Authority are from Nokor Krav Community Village, as reported by the APSARA Authority in 2020.

4.3.3 Local Culture, Tradition, and Customs

Nokor Krav Community Village is considered to be one of the identical and original Khmer communities left over after the Angkor Empire. Considering the origin of the Angkor citizens, one needs to recall the local villagers living

⁴⁰ Commune Census (2020) Commune Strategic Development Plan Survey
Report by the Sangkat Koukchork in 2020.

inside Angkor Park. Cambodian people are authentically born with arts and smiles. Most pieces of evidence of the traditional activities, social beliefs, religious festivals, customs, etc., can be found in their daily activities and are very well preserved today. These include the ways of dressing, ceremony celebration, festivals, interesting local hand-made products, Khmer classical, folklore and Trot dance, music and drama, weddings, and architectural shapes of their dwellings where some of them could hardly be found in other parts of Cambodia today. Nokor Krav Community Village is not only rich in its own culture, traditions, and beliefs but it is optionally unique when compared to the other parts of Cambodia since the family relationship is quite strong. They prefer to live close to their parents so that they can take care of their parents when they are old. It was also found that the majority of the couples prefer to marry the locals residing in the same village or those from neighboring villages in the same area of Angkor Park because they can share the same culture and have the same family bond. They seemed to be originally born with kind-heartedness and friendliness and visitors to their village are always welcomed with an authentic smile. Hence, it makes this Angkor area or region where the villagers are residing a good potential for attracting both domestic and international tourists.

4.3.3 Religion

Buddhism has existed in Cambodia since at least the 5th century AD, with some sources placing its origin as early as the 3rd century BC. Theravada

Buddhism has been the Cambodian state religion since the 13th century AD (except for the Khmer Rouge period) and is currently estimated to be the religion of 97.9 percent of the total population.⁴¹ The history of Buddhism in Cambodia spans nearly two thousand years, across several successive kingdoms and empires. Buddhism entered Cambodia through two different streams. The earliest forms of Buddhism, along with Hindu influences, entered the Funan kingdom with Hindu merchants. In later history, the second stream of Buddhism entered Khmer culture during the Angkor Empire when Cambodia absorbed the various Buddhist traditions of the Mon kingdoms of Dvaravati and Haripunchai. For the first thousand years of Khmer history, Cambodia was ruled by a series of Hindu kings with an occasional Buddhist king, such as Jayavarman I of Funan, and Suryavarman I. A variety of Buddhist traditions co-existed peacefully throughout Cambodian lands, under the tolerant auspices of Hindu kings and the neighboring Mon-Theravada kingdoms. Today, local people in Nokor Krav Community Village, as well as other villages of the protected areas, still hold strong beliefs, customs, and religious activities that combine commonly both Buddhist theories with Hindu activities and practice.

⁴¹ Wikipedia (n.d) Buddhism in Cambodia. Retrieved on 17th May 2020 from:
https://en.wikipedia.org/wiki/Buddhism_in_Cambodia

4.3.4 Education

Education in Nokor Krav Community Village is similar to everywhere in Cambodia which is controlled by the state through the Ministry of Education, Youth and Sports at a national level and by the Department of Education at the provincial levels. The Constitution of Cambodia establishes that the state shall protect and upgrade citizens' rights to quality education at all levels, guaranteeing that all citizens have equal opportunity to earn a living.

After survival from Khmer Rouge in 1979, most literate people were killed only those who had hidden their background (by pretending to be the person who cannot read and write) can be survived. Starting from empty hands, the Cambodian government had been putting all of its efforts into establishing the school system, building the capacity of the teachers by using the strategy of the high-educated people teaching the lower-educated people and the lower-educated people teaching the illiterate people. Non-system education has also been established for teaching the 20-30 years-men or women starting from the primary level. However, only existing schools located in the city or provincial town were opened, because the civil war still existed until 1993. Therefore, only a few improvements had contributed to the educational system in Cambodia. Later, after signing the peace accord in 1993 in Paris, Cambodia opened its door to the democratic system. The first election was started in the same year with the facilitation assistance from United Nations

Transitional Authority in Cambodia (UNTAC). After the election, there was the arrival of Non-Governmental Organizations (NGOs), and the Royal Government of Cambodia itself also committed to establishing more school buildings and upgrading the school system. However, the demand for education is quite high even more schools have been built, but they are not sufficient to cater to the children's needs. Moreover, in some parts of the country especially in remote areas, there was a shortage of teachers. As a result, the reconstruction efforts of the Cambodian government in the education system from the 1980s onwards have not been much improved. In 2017, UNICEF indicated that only 41 percent of the children have completed lower secondary education (junior high school equivalent) in Cambodia. One of the examples is the Nokor Krav Community Village, which is located about 16 kilometers away from Siem Reap downtown, but there was only one primary school available in the village. Sokun. A., (2006) found that most students drop school at the secondary level just because they cannot access the secondary school which is further away from their home. The level of students' dropouts of school was very high due to the constraint of transportation because the parents cannot afford to pay for the transportation expenses due to their limited incomes. Hence the children often drop out of school permanently instead of continuing their education. Sokun. A., (2006) found that among 233 children from 200 families in Nokor Krav Community Village enrolled in grades 1 to 3, there was 78 dropout school in grade 4 to 6 and 95 of them has dropout in grade 7 to 9, and only 19 of them can continue

to the high school level. UNICEF (2016) also found that 20 percent of Cambodian children between 5 and 14 years old were working. Indeed, many families do not appreciate the benefits of educating their children but rather prefer to rely on the short-term solution of the income brought by their work. This problem is even more important in an area such as the Angkor temples, where the attraction of tourism has favored the development of economic activities. Some jobs do not require any qualifications so children can carry out with or in place of their parents. Due to inadequate education, children in Nokor Krav Community Village have limited opportunities for high-paid employment in the tourism industry. Sokun. A., (2006) found that only 12 percent of the 400 selected respondents from Nokor Krav Community Village have been involved directly and/or indirectly in the tourism industry. From the respondents surveyed, her previous study indicated that 99.5 percent of them obtained low-paid jobs of below USD 100 per month. Chheang (2008) also mentioned that the hotel staff and service providers at the restaurant can earn about USD 100 per month if compared to the other general rate of USD 60 per month of the cleaners or security guards. In his interview with a woman from Angkor Park in 2007, he also quoted that:

We are still poor...our kids are still small so they could not get jobs to get money. We don't have [the] knowledge to get jobs. I grow rice and vegetables and then sell them to the market. Sometimes we don't have food to eat so I ask my kids to get some money from the tourists.

There is no question why this woman has mentioned this in her interview just because more than half of the mothers living in Nokor Krav Community Village have no chance to attend school. Sokun. A., (2006) found that 56.5 percent out of 200 respondents selected for the interview have illiterate mothers. Recently, the children's enrollment improved, and more students can access higher education. There is one primary school in the middle of the village. Besides the state school, in 2008, FKC (Future of Khmer Children Organization) commenced free English education classes in Nokor Krav Community Village.

Picture 4.3.4 (A): School Activities of KFC, 2020



Source: Website of the Future of Khmer Children Organization, 2020.

The program embraces both general education and vocational training. The children and young adults have the opportunity to learn and develop valuable life skills through several activities such as English, Computer Training, Sports, Food Support, and Health Care. They can also study traditional dance and music performance, handicraft design, dressmaking, and sewing. Starting from 2

English classes and currently 11 English classes throughout the day with students ranging in age from 4 to 22 years old. The school caters to 224 children per day. The demand from students wanting to attend Nokor Krav Community Village far exceeds the current facilities. Therefore, KFC is seeking to expand to build more classrooms. However, not all constructions were allowed due to the law of protection monitored by the APSARA National Authority. Later in 2013, another Junior high school called Bayon Junior High School was established in the Kouk Beng Village, which bordered with Nokor Krav Community Village. The sponsor was by Joint Support Team for Angkor Community Development (JST) with the cooperation of the National Federation of UNESCO Association in Japan (NFUAJ) and technical cooperation from JASA and facilitated by APSARA National Authority. The school building was upgraded to Bayon High School in 2016 and officially recognized as a public school run under the government system.

Picture 4.3.4 (B): School activities of Bayon High School, 2020



Source: Website of the Bayon High School, 2020.

The children in Nokor Krav Community Village can now also continue their

studies in this school because it is the only nearest high school available in the nearby village of Nokor Krav Community Village. The Bayon School offers students a completely free education so that money does not become a barrier to schooling for children from disadvantaged families. All the necessary school materials are made available to primary and secondary students. The primary school children are fed twice a day (breakfast and lunch) to reduce the families' living expenses. A monthly allowance is also distributed to each secondary school student to cover their tuition fees in Siem Reap high schools. Due to the great demand for education, Bayon School has also been running a kindergarten class since 2017; it not only improves the future academic results of the students by preparing them for primary school, but it also financially relieves the families. By enrolling their children in school as early as possible, the families reduce their costs and have more time for work. The school has been facilitating and getting involved in the learning process, supporting the students, and limiting the impact of their disadvantaged socio-economical background. For primary pupils from grade 1 upwards are initiated in arts and culture. Educational games and books are available to them in the library to encourage them to read. At the secondary level, they are very active, monitoring the academic results and attendance of the students. Individualized support lessons are set up to help students improve their academic results and thus limit the dropout rate substantially. Vocational guidance and support of the students towards higher education are the main emphases to give them a chance to break out of the poverty cycle. To enable the students to acquire the

skills they need for higher education and their future professions such as English, computer science, personal development courses, and trade meetings with qualified professionals and career forums were guided to the possible career opportunities, in partnership with other local NGOs such as Pour un Sourire d'Enfant, Sala Bai or Egbok. Ten scholarships have been provided every year to students who demonstrate strong motivation to continue their studies at the tertiary level.

4.3.5 Healthcare

The quality of health in Cambodia is rising along with its growing economy. The Royal Government of Cambodia has given a high priority to the public health care system. With the support and assistance of many non-governmental organizations, there were continuous improvements in the health profile of its population since the 1980s, with a steadily rising life expectancy. Moreover, the Royal Government of Cambodia has been committing to upgrade the public health care services at the provincial and communal levels by having at least one health care center in each commune. Additionally, IDPoor cards were also given to locals to access the health services free of charge. More private hospitals and highly equipped clinics have been encouraged to open within each province and city to minimize the number of patients traveling away to seek medical treatments in the neighboring countries. However, Siem Reap is optionally unique not only in terms of having the Angkor World Heritage but also the only province that has an international hospital, though it is expensive like the Royal Hospital, it is well-

equipped with advanced technology. Fortunately, Siem Reap also has sponsored hospitals such as Jayavarman VII and Angkor Hospital for Children, which provide free health care services with advanced equipment and trusted services. These two hospitals draw many local people from other provinces in Cambodia coming to Siem Reap to leverage these free medical services.

Medical Care in Nokor Krav Community Village

It sounds like improvement in medical care has resulted within the country and city as a whole. However, the level of development is still limited because the government can only support one health care center in one commune but not in each village. Nokor Krav Community Village is quite big but there is no health care center in this village. In most circumstances, the local people have to travel 10 kilometers away from their homes to access the commune health care services and further away to get to other public health care services in the nearest towns. The study found that no villagers in the Nokor Krav Community Village have ever been cured in the expensive clinics and hospitals. Compare to other villages outside Angkor Park, it is normal to have small clinics or pharmacies in the village for an emergency. However, Nokor Krav Community Village does not have any of these medical facilities for three reasons. Firstly, there are no well-educated people in the village due to poverty, and local people cannot have access to higher education, especially for medical practices. Secondly, Nokor Krav Community Village is located in the protected area of Angkor Park, and medical practitioners residing outside this village, no matter how skillful, are not allowed to live in this

village. Thirdly, the limit on the possibility of the construction of small medical clinics and pharmacies in the village of the protected area. Hence, the villagers have no other options besides traveling to the commune health care center or seeking medical consultations and treatments at the sponsored hospitals in town.

Hygiene of Water Consumption and Toiletry

The development in this village is being upgraded from time to time. Due to the support from the NGOs and personal support from tourists, the majority of the villagers consume clean water. According to the commune survey in 2020, there were 690 out of 933 families used the drilling wells with filters. The other 218 families consumed the pure drinking water bought from the market. Regarding toilets, there were 861 families of the total 933 families that have at least one toilet. Among those villagers, there were 769 toilets technically constructed that meet the expected government standard. Overall, the result revealed an improvement in hygiene and toiletry in Nokor Krav Community Village as it was supported partly by NGOs and personal funding from the tourists as depicted in the pictures below.

Picture 4.3.5: Support for the construction of well



Source: Own Photo, 2020.

4.3.6 Housing Condition

Khmer Architectures and Social Status Value

Traditionally, the architecture of Khmer houses followed closely the patterns of the shape of the roof frame such as a gabled roof (Phteah Rông Daol), a hipped roof (Phteah Pét), and the Khmer house (Phteah Kantang). The housing structure of local villagers in Nokor Krav Community Village is typically similar to the rural Khmer houses, which consist of one or two-story buildings, varying in size from 4 to 5 meters wide and 6 to 10 meters in length. The basic structure consists of a wooden frame, and the roof is erected before the walls on the upper floor are inserted. Houses are not only places for accommodating people, but they are also an indication of the owner's social status. For example, if the house is small and the roof is covered by thatch, the owner is being treated as poor. If the house is medium and the roof is covered by zinc steel, the owner is middle class. If the house is big and its roof is covered by tile, the owner is considered to be rich. Dwellings are raised on stilts that sometimes extend as high as 3 meters off the ground. In this way, annual floods do not affect the main room in the houses of rice farmers, whereas rural farmers can use the ground level area beneath the house for working and to provide shelter for livestock. One or two wooden ladders, ramps, or staircases provide access to the upper floor. The simple houses consist of only one room on the upper floor, partitioned off to provide a storage place for rice, a bedroom for the parents, and extra space for unmarried children. Khmer houses are very comfortable,

both at ground level and on the upper floor. Despite the absence of electric or mechanical air conditioning, a draught-free environment appears to be attained simply through natural ventilation.

Past and Present

Cambodia used to be a country with plentiful natural resources. We have a slogan of "in the water for fishes, in the forest for animals." It means that Cambodian people can live carefree with no worry because they can catch fish from the natural pond and get food from the natural forest for free. Cambodia used to have a lot of mineral resources such as gold, diamonds, gems, and mineral oil in the ground. Naturally, Cambodian people did not spend much money on house construction. They collect thatch and wood from the forest and help each other in constructing the house. The wooden house is easily destroyed by termites. However, locals in the past repair it without spending much money as everything gets free from the forest. However, things have changed as most of our natural resources have been destroyed by the prolonged war in Cambodia. Today, locals like building houses made of concrete and cement as it lasts longer and can avoid the effect caused by termites. Another reason, wood has now become very expensive due to the depletion of the forest. Though building wooden house is much more conservative even local people have to spend more for maintenance but APSARA National Authority still encourages locals to preserve this architecture.

4.3.7 Infrastructure

It is always recognized that tourism development can improve infrastructure and public utilities in both the public and the private sectors. Recently, the Royal Government of Cambodia has built 38 new roads with an estimated cost of USD150 million and one bigger airport to respond to the demand for tourism development in Siem Reap. Hence, it will benefit direct and indirect the local people in Siem Reap as a whole. Though, Nokor Krav Community Village is not included in the government's action plans because it is in the protected area of Angkor Park.

4.3.8 Potential Resources for Tourism Development

The richness of resources in Nokor Krav Community Village is a good potential for tourism development. However, this village is inside the protected area of Angkor, which is about 10 kilometers away from Angkor Wat and borders the Grand Circuit of Angkor complex. Therefore, the pace of development in this area must be strict, sustainable, safe, and legal to the World Heritage Norms. Nokor Krav Community Village is not just a community, but the villagers themselves are parts of the Angkor World Heritage. Considerably, there are plenty of potential resources that can attract tourists including the pristine rain forests, wildlife, local cultures, festivals, rituals, and other four historic temples such as Banteay Thom, Tropeang Virn, Chann Ta Oun, and Tole Sngout Temple.

Picture 4.3.7: Temples in Nokor Krav Community Village



Source: Own Photo, 2020

4.4 Conclusion

To summarize, the chapter provides detailed information about the profile of the study area, which includes the historical background of Angkor by describing its significance. Angkor is the heart of Cambodia, the symbol of the Khmer nation, and the indication of Khmer civilization. It is not just a group of temples with a total area of 401 square kilometers that was nominated as the World Heritage in Danger in 1992. Later due to the commitment of the Royal Government of Cambodia, APSARA Authority was created in 1995 to manage and conserve the Angkor Region. The zoning has been created with different levels of functional protection. Achievements have been made, starting from the success of the restoration of the temples to sustainable tourism development. With the facilitation of ICC, Angkor has finally taken off the list

of World Heritage in Danger and became the World Cultural Heritage in 2004. Driven by a clear mission and administration system, the APSARA National Authority has set clear guidelines for the procedural management for the conservation of Angkor and procedural management for community participation and sustainable development. Later in 2020, the APSARA Authority was renamed to APSARA National Authority. For this present research, Nokor Krav Community Village was selected as a study area. It is located in zone 1 of the Angkor protected zone, so it is governed by the local authority for general administration and by APSARA National Authority for the Angkor Park protection and conservation. The living standard of the locals in Nokor Krav Community Village is low compared to those villagers outside Angkor Park. In further assessing their living standard, specific backgrounds of the locals in Nokor Krav Community Village have been described. These include the population and socio-economic activities, local culture, tradition, customs, religion, education, health care, housing condition, infrastructure development, and potential resources for tourism development.

There have been some substantial studies done on the impacts of tourism on the living conditions of the villagers residing in the protected areas under the APSARA National Authority in the conservation of the Angkor region which is listed under the UNESCO Heritage Site in Siem Reap Province. However, this present study would serve as supplementary research to find out the impact of tourism specifically on Nokor Krav Community Village. Particularly, as a direct

result of the impacts of tourism that affects Nokor Krav Community Village whether there is any improvement in their living standard. The findings of the study would benefit the APSARA National Authority and other policymakers as it will reveal the actual living standard of living conditions of this particular village in the protected area of the Angkor region. Other academic researchers can also use the findings as empirical literature to further carry out their studies in other villages in the protected area that have not been studied yet for comparison purposes.

FOOTNOTES:

- ^{34.} UNESCO (n.d.) World Heritage List Nomination. Retrieved on July 2019 from <https://whc.unesco.org/en/nominations/>
- ^{35.} APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree N0001/NS dated 28th May 1994, concerning the Zoning and Management of the Siem Reap-Angkor region.
- ^{36.} APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree NS/RKT/0295/12 dated 19 February 1995, regarding the establishment of APSARA Authority.
- ^{37.} Angkor - UNESCO (n.d.), World Heritage Centre. ICC-Angkor. Retrieved on December 2019 from: <https://whc.unesco.org>
- ^{38.} APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Decree NS/RKT/0220/203 dated 20th February 2020 regarding the creation of APSARA National Authority.
- ^{39.} APSARA Authority (2006), Law and Norms of Cultural Heritage Protection and APSARA Authority. Royal Sub-decree N^o 50 dated 07th May 2008, regarding the administration and Management of APSARA Authority.
- ^{40.} APSARA Authority (1994), Royal Decree N^o 001 NS dated May 28, 1994, regarding the establishment of Protected Cultural Zones in the Siem Reap-Angkor Region.

- ⁴¹. Commune Census (2020) Commune Strategic Development Plan Survey
Report by the Sangkat Koukchork in 2020.
- ⁴². Wikipedia (n.d) Buddhism in Cambodia. Retrieved on 17th May 2020
from: https://en.wikipedia.org/wiki/Buddhism_in_Cambodia

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3. UNESCO World Heritage Centre (n.d.), Description. Retrieved on 21st June 2021 from: <https://whc.unesco.org/en/list/668/>
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CHAPTER V

DATA ANALYSIS AND DISCUSSION

OF FINDINGS

The data analysis and the discussion of the findings of the research study are presented in the chapter. The present research specifically focused on examining the impacts of management of the Angkor World Heritage on Nokor Krav Community Village, Siem Reap Province, Cambodia, the study area of this research. The chapter is divided into seven sections. These include the profile and information of respondents in Nokor Krav Community Village, the significant importance of the management of the Angkor World Heritage on this village, the resultant factors that contributed to poverty and the present conditions that affect the living standard of this village, the impacts of the management of the Angkor World Heritage on this village along with the hypothesis testing, the key strategies of the APSARA National Authority and the government towards the improvement of the livelihood of this village; their perceptions and suggestions toward the improvement of their livelihood and their requests to APSARA National Authority and the government. Finally, a conclusion remark is also given in this chapter.

5.1 Profile and Information of Respondents in Nokor

Krav Community Village

5.1.1 Origin of Residents in Nokor Krav Community Village

The development of tourism in one area may lead to an increase in the number of migrants or new outsider residents into the community, it is one of the main concerns of those new outsider residents to be richer and more commercialized as they have better education and skills in doing business especially, in the business skills of tourism and hospitality. They may compete with the local community by opening bigger shops, constructing bigger houses, and enlarging farmland. Finally, they become the invaders of the local economy. However, the level of new residents who moved into the Nokor Krav Community Village was not a problem. Notably, Angkor was on the list of UNESCO since 1992. It is, therefore, the study has verified those residents who lived in the Nokor Krav Community Village before 1993 as residents and those who moved to live in the Nokor Krav Community Village in 1993 as outsider residents. As shown in Table 5.1.1, only 10.5 percent out of the total 400 respondents surveyed, were new residents who moved from neighboring villages of Angkor Park. Eventually, they are also local community living in the same area of Angkor Park, and 27 of them, which accounted for 6.75 percent have moved in because they marry to the locals in Nokor Krav Community Village, 8 of them, which accounted for 2 percent have moved in because of their family condition, and 6 of them,

which accounted for 1.5 percent have moved in for other reasons. While the rest 358 respondents, which accounted for 89.5 percent were locals who originally lived in this study village before 1993. Overall, the locals in Nokor Krav Community are well protected and safe from the new resident invaders.

Table 5.1.1: Origin of respondents in Nokor Krav Community Village

N*	Type of Residents	Reason	Frequency	Percent	Subtotal
1.	Local Residents	lived before 1993	358	89.5	89.50
2.	Outsider Residents	Marriage	27	6.75	10.5
		Family	8	2	
		Other	6	1.5	
Total:			400	100	

Source: Own Survey, 2020.

5.1.2 Family Size

The lifestyle of locals in Nokor Krav Community Village is not very much different from other parts of Cambodia. Most of them build a small house or cottage close to their parents because it is easy for them to take care of their parents when they are getting old. Few of them may live in an extended family. In contrast to Chinese culture, most of them lived with extended family, and commonly the groom has to move into the bride's house. However, in Khmer culture, the bride has to move into the groom's house even though it is not as strict as the Chinese. According to the survey of 400 respondents, the locals in Nokor Krav Community Village have average family members of between 5 to 6 people, with a mean of 5.53 and a standard deviation of 1.001. As shown in

Table 5.1.2, 37 respondents, which accounted for 9.3 percent lived in a nuclear family of one to three people, and 265 respondents, which accounted for 66.3 percent lived in a nuclear family of four to six members. While 81 respondents, which accounted for 20.3 percent may live in both nuclear and or extended families of seven to nine members, and 17 respondents, which accounted for 4.4 percent lived in the extended family of more than ten members.

Table 5.1.2: Family size

N*	N*of family members	Frequency	Percent	Mean	Std. Deviation	Sum
1.	1-3 people	37	9.3	5.53	1.001	2210
2.	4-6 people	265	66.3			
3.	7-9 people	81	20.3			
4.	>10 people	17	4.4			
Total:		400	100			

Source: Own survey, 2020.

5.1.3 Age and Sex of Respondents

In this study, the majority of the respondents selected for the interview were mostly elder women because they stay home and take care of their families while the man went out to work and the children went out to school. As shown in Table 5.1.3, among 400 respondents, 96 of them were male, which accounted for 24 percent, while 304 respondents were female, which accounted for 76 percent. Though, the varied number of male and female respondents does not affect the result because the study focuses on the data

of each household. Regarding the age group of respondents, 5 respondents were under 18 years old, which accounted for 1.25 percent, and 146 respondents were aged 18 to 36 years old, which accounted for 36.5 percent. The present study also found that 156 respondents were the age of 37 to 55 years old, which accounted for 39 percent, and 93 of them were at the age of more than 55 years old, which accounted for 23.25 percent.

Table 5.1.3: Age and sex cross-tabulation

Sex		Male	Female	Frequency	Percent
Age	<18 years	2	3	5	1.25
	18-36 years	36	110	146	36.5
	37-55 Years	40	116	156	39
	>55 years	18	75	93	23.25
Frequency		96	304	400	100
Percent		24	76	100	

Source: Own Survey, 2020.

5.1.4 Occupation and Education of Respondents

Nokor Krav Community Village is originally a low-income community but they lead their lives in harmony and destiny depended mainly on agriculture and the natural resources of the Angkor forest. However, after listing Angkor as a World Heritage, Nokor Krav Community Village automatically became part of the

Angkor World Heritage. Several kinds of traditional economic activities which lead to harm to Angkor Park have been prohibited by APSARA National Authority. In return, the local in Nokor Krav Community Village is expected to benefit more from the tourism development of Angkor. It was found that, besides doing agriculture, the local people also earn some extra income from feeding animals, planting fruits, selling thatch, climbing palm trees, selling things, offering local services, motor-dop drivers, etc. Others gain benefits from tourism such as working as construction workers, public cleaners, souvenir sellers, temple guards, and workers in APSARA National Authority, etc. Local in Nokor Krav Community Village is supposed to have more opportunities and get easy access to making income from tourism development in Siem Reap-Angkor. However, due to their level of education being very limited, it has also limited their opportunity to access high-paid incomes jobs. The level of illiteracy rate in Nokor Krav Community Village is very high, according to the survey of 400 respondents, as shown in Table 5.1.4, 117 respondents which accounted for 44.25 have never attended school. It was also found that only 41 respondents which are accounted for 10.25 percent who can access high school. Compared to 60 respondents who accounted for 15 percent have dropout at the level of junior high school and 116 respondents who accounted for 29 percent have dropout at the primary level. Of course, more education means more chances, but only 6 respondents which accounted for 1.5 percent can access to university level.

Table 5.1.4: Education of the respondents

N*	Level of Education	Frequency	Percent	Mean	Std. Deviation
1.	No education	177	44.25	1.96	1.067
2.	Primary Level	116	29		
3.	Junior High School	60	15		
4.	High school	41	10.25		
5.	Bachelor's Degree/postgraduate	6	1.5		
Total:		400	100		

Source: Own Survey, 2020.

5.2 Significance of the Management of the Angkor on Nokor Krav Community Village

5.2.1 Cultural Survival and Local Pride

As mentioned earlier that "Angkor" is a crucial component of Cambodia's identity, and it is the only nation in the world to depict a ruin on its flag. Unfortunately, Cambodia had experienced a difficult period of pro-long wars for nearly a hundred years. The last civil war was from 1970-1975, the ruinous Khmer Rouge Era, Angkor has been forgotten, let alone the local builders of Angkor. Nokor Krav Community Village is one of the communities that had been involved in building the Angkor monuments. Most of the people who built the

temples and grew food for the elite were rice farmers, using techniques that have endured with little alteration until the present day. The Khmer were skillful builders and also talented artists in stone and wood carving. Khmer engineers designed impressive reservoirs and arrow-straight roads connecting Cambodian cities, and Khmer poets composed elaborate inscriptions that survived at many temples. Cambodian warriors attacked neighboring kingdoms and defended against invaders. Many of these contributors are almost forgotten. Later, when Angkor became the World Heritage, more attention has been paid to the locals living inside Angkor Park. Visiting the locals, and learning about their culture and traditional activities may remind visitors to have an image of the Khmer's ordinary life during the past thousand years ago.

Angkor is an area of 401 square kilometers, which includes many temples and communities. It is, therefore, not only the temples in Angkor, the tangible cultural heritage, but also the locals, the living heritage and their culture, traditions, and customs, the intangible heritage, was to be restored and conserved. The Nokor Krav Community Village is also one of the communities inside Angkor Park, whose culture, customs, and traditions have survived and are well preserved by the APSARA National Authority for their authenticity and recognized internationally by UNESCO.

Picture 5.2.1 (A): Local Cultural Activities



*The Knot Shaving Celebration (Local called Pithi Kour Chuk or Kampony)
3 years old boys are joining the Knot Shaving Celebration, all hair has been shaved but keeping one to three knots.*

Picture 5.2.1 (B): Local Cultural Activities



*The Bamboo Sticky Rice Offering Celebration
Local called Pithi Phung Krolarn*

*The Worship to Request for The Rain Celebration
Local called Pithi Soum Teuk Plirng*

Source: APSARA National Authority, 2020.

5.2.2 Opportunity for Making Incomes

The status of the World Heritage of Angkor, with its brand, is an enormous place at the global and national levels. It also influences future planning decisions at the local level. The designation of Angkor tends to mean that the site will be able to change, and it usually leads to an increase the publicity and the number of visitors. Since the door opened for tourism development, in other words, if visitors arrived, there would be chances for Nokor Krav Community Village to host. However, it requires technical skills in marketing, supplying, and satisfying visitors with

professional hospitality services. Indeed, it is important to recognize that some accessible approaches to educational and interpretational facilities and planning are needed. Nokor Krav Community Village is part of the Angkor attraction, so local people living in this village can have the opportunity to benefit directly from the tourism industry by selling souvenirs, food and drinks, and local products to tourists who visit or come across their village. Moreover, they can have the opportunity to access job employment in the tourism industry and the APSARA National Authority.

5.2.3 Protection from Outsider Resident Invaders

As mentioned earlier, to protect the prosperity of local resources in Nokor Krav Community Village, APSARA National Authority does not allow new residents' dwellings in this village. Moreover, to avoid the invasion of the new outsider residents especially, those who are more commercialized and richer, the Royal Government of Cambodia has prohibited original locals in Nokor Krav Community Village not to sell lands to outsider residents but exceptionally allowed them to sell to those buyers who are from the same village. Notably, Siem Reap is one of the main tourist attractions in Cambodia. It has attracted not only international visitors but also domestic tourists. The booming of the tourism industry in Siem Reap has also attracted locals of other provinces to migrate to this city to look for jobs either or do business in tourism. Even though the number of new residents is increasing in most parts of Siem Reap city, only a few new residents were moving into the Nokor Krav Community Village. As

shown in Table 5.1.1 above, only 10.5 percent of new residents moved from the neighboring villages of Angkor Park, and most of them moved to live in this village just because of the marriage reason compared to 9 percent in 2006 found by Sokun. A., (2006) has increased only 1.5 percent within the period of 14 years.

5.2.4 Security and Safe Guarding

Since Angkor became a tourism attraction, most of the areas, which are under the governance of the APSARA National Authority, are very well secured from crime and drug abuse. Tourism Police Unit⁴² was created to provide security to tourists while Nokor Krav Community Village is also part of Angkor Park. Therefore, it is automatically received this advantage of safeguarding. Recently, it was free from child trafficking, child sexual violation, crime, thief, and fighting, Commune census, 2020.

5.2.5 Enhancement of Local Awareness and Education

Local people living in Angkor Park, especially locals in Nokor Krav Community Village, are prioritized in receiving support for education and awareness of the

⁴² The tourism Police Unit is a Co-operation Unit that is under the administration of the Ministry of Interior, Royal Government of Cambodia.

Address, Charles De Gaulle, Krong Siem Reap, Cambodia.

World Heritage. APSARA National Authority has organized specific training courses related to heritage education and environmental awareness to train local children in primary, junior, and high schools of Angkor Park every year. Be noted, that the Royal Government of Cambodia has also encouraged NGOs to support the local communities of Angkor Park. It is, therefore, three educational organizations sponsored by Nokor Krav Community Village such as Future of Khmer Children (FKC), Japanese Community Center (JCC), and Bayon High school. Though the high school is in Kouk Beng village, children from Nokor Krav Community Village can also access this school. Besides the formal education, the young adults in Nokor Krav Community Village can benefit from informal education through observing and interacting with tourists. Whereas, children can get the opportunity to be supported by tourists for some technical skills or continue to higher education.

5.2.6 Opportunity for Receiving Supports

Being part of the tourism attraction, villagers in Nokor Krav Community Village have more chances for tourist-host interaction. The tourist-host relationship tends to be very positive because Cambodian locals are very warm-hearted, friendly, kind, and born with the charm of their smiling faces. Culturally, instead of saying hello for greeting, Cambodian locals prefer to smile as a gesture of greeting. This representation is on the smiling faces of the Bayon temple, which can be seen today. Another evidence is everywhere in Cambodia where tourists

travel, Cambodian people always appreciate seeing foreigners visiting their village; no matter if they are poor, it is their hospitality to kill one chicken to cook food for their guests though it is not common to kill one for their family as was remained for sales. Hence, there is no question that the tourist-host interaction is good. As long as tourists perceived the personal touch experiences of locals, it is the nature of human beings to pay back their respect by contributing to the local hospitality. It is beyond the expectation of the Khmer locals, but it is a global societal perspective for helping each other and especially for the poor community. Nokor Krav Community Village is one of the poor communities that experienced receiving support from tourists. According to the survey, 18 percent of the 400 respondents selected for this study have received support for their education. 38 percent have received support for the construction of wells, 13 percent have received the water filters, and 12.5 percent have partly been supported for the toilet construction.

Table 5.2.5: Opportunity for receiving support

N*	Answer	Education		Well Construction		Water Filter		Toilet Construction	
		Fre.	Percent	Fre.	Percent	Fre.	Per.	Fre.	Percent
1	Yes	73	18	152	38	52	13	50	12.5
2	No	327	82	248	62	348	87	350	87.5
Total:		400	100	400	100	400	100	400	100

Note: Data presented a summary of four questions

Source: Own Survey, 2020.

5.2.7 Opportunity for Receiving Land from the Government

To minimize the high population and the booming of building inside the Angkor Park, the Royal Government of Cambodia has established one development project to resettle the new generation of locals of Angkor Park in Run Ta-Ek. However, the opportunity is not for everybody, it is only for those residents who lived inside the protected area of Angkor Park before 1998. Since Nokor Krav Community Village is one of the communities located in the protected area of Angkor, it also has the opportunity to receive a free piece of land for both housing and farming from the government. Being new residents living in the new village, the government also provides some support for their basic needs such as infrastructure, employment opportunities, and agricultural and eco-tourism services training to them.

5.3 Resultant Factors for Poverty

Cambodia is the fourth poorest country in South East Asia⁴³. There are many reasons to support the question of why Cambodia is poor. However, in this study, the researcher limits to focus on the constraint factors for poverty in Nokor Krav Community Village only. Based on the interview of 400 households,

⁴³ The Borgen Project (2017, June) Why is Cambodia Poor? Retrieved on 23rd June 2021 from <https://borgenproject.org/why-is-cambodia-poor/>

the study found that five main factors that led Nokor Krav Community Village to be poor were: (i). Low level of education; (ii). More jobless people in the family; (iii). Having limited farmland and a low level of economic activities; (iv). Having more sicknesses and debts; and (v). The constraints of the law of protection of Angkor World Heritage. Below is the detailed data presented for each problem as follow:

5.3.1 Low Level of Education

Having an education is a key solution to most problems. However, without education, it is limited to almost everything. Having an education can unlock the door to the world not only the way of thinking and making a living, but the person with an education can access many different opportunities compared to those who are illiterate. Most villagers always claimed that because of poverty, they cannot send their children to school while other locals, instead of encouraging their children for higher education because they cannot afford to spend more for transportation, rather allow their children to drop school so that they can go to work for short term money. During the interview, the researcher also takes some time to explain to locals to understand about the advantages of education for their children by using the following slogan:

"If I drop school today just for the reason of poverty;

Tomorrow, I will be poor just because of what I do today".

Education can change their life. It is what the locals should understand and

motivate their children to school. The level of local literacy rate in Nokor Krav Community Village is low. According to the survey of 400 respondents selected for this study, 44.25 percent of them have no chance to attend school. While 29 percent drop school at the primary level and 15 percent can continue to junior high school. Since the high school is a bit further away from their home, eventually, only 10.25 percent can have access to study at high school, and only 1.5 percent can access to university level.

Table 5.3.1: Level of respondents' education

Age and Education Cross tabulation							
Age		No education	Primary Level	Junior High School	High school	Bachelor Degree	Total
							Frequency Percent
<18 years		0	0	3	2	0	5 1.25
18-36 years		24	39	42	35	6	146 36.5
37-55 Years		85	56	11	4	0	156 39
>55 years		68	21	4	0	0	93 23.25
Total	Frequency	177	116	60	41	6	400 100
	Percent	44.25	29	15	10.25	1.5	100

Source: Own survey, 2020.

Be noticed that, the local villagers who have no chance to attend school are those aged people starting from 37 years old or older because their childhood was affected by the Khmer Rouge Regime. Those who can access higher education are those 18 years old or over. They have more chances to benefit from the tourism industry in Siem Reap Angkor.

5.3.2 More Jobless People in the Family

Having more people in the family means having more hands to work and more mouths to eat. Unfortunately, the study found that more than half of the local people in Nokor Krav Community Village cannot make any income for their families because most of them are aged people and small children. Among the 400 households selected for the study, each family has 5 to 6 members on average, and among those members, there were only 1 to 2 people who make money to support the family. As shown in Table 5.3.2 below, the study found that among 2, 210 people, only 759, which accounted for 34.35 percent can access to make income. While other 1451 people, which accounted for 65.65 percent have no jobs.

Table 5.3.2: Level of jobless people in the family

N*	Jobs within 400 households	Mean	Std. Deviation	Sum	Percent
1.	Having Job members	1.90	0.943	759	34.35
2.	Jobless members	3.63	1.799	1451	65.65
Total:		5.53	2.001	2210	100

Source: Own Survey, 2020.

5.3.3 Lack of Farmland and Low Level of Economic Activities

Problem of Farmland

Cambodian people were farmers for generations. The majority of them led their lives depending on the yields of rice collected from their farm. Traditionally, those

who owned bigger farmlands meant having a good living condition. As mentioned earlier, Cambodian people are not skillful in doing businesses but rather skillful in arts and living depending on nature. Unfortunately, among 400 households selected for the interview, only 60.5 percent of the locals in Nokor Krav Community Village own farmlands, but only 33.5 percent of them still grow rice once a year. While the other 11 percent have a too-small piece of land, so they do not grow rice anymore because the yield does not cover the cost. Exceptionally, the other 16 percent of the local villagers have farmlands in the protected area, so they cannot grow rice anymore. As mentioned earlier, farmland is one of the most important resources for their living. However, 39.5 percent of the locals in Nokor Krav Community Village do not have farmland.

Table 5.3.3 (A): Local accessibility to farming

N*	What is your farming condition?	Fre.	Per.	Subtotal
1.	I grow rice depending on rainy water	134	33.5	60.5
2.	I don't grow because my land is too small	44	11	
3.	My farmland is in an area to be prohibited by APSARA National Authority.	64	16	
4.	I don't have any farmland	158	39.5	39.5
Total:		400	100	100

Source: Own Survey, 2020.

The problem of Less Economic Activities

To make a living, one must work for it, especially in the globalization and technology advancement world. Since the population grows rapidly, the

demand for natural resource consumption is also increasing. Therefore, local villagers in Nokor Krav Community Village cannot just be dependent on the supply of natural resources as in ancient times anymore. They have to be flexible and learn how to cope with the challenges of the law of protection. Nokor Krav Community Village is not a simple village anymore, but it became part of the Angkor World Heritage. Instead of sitting and waiting for solutions from the government, the locals themselves have to learn how to lead their life in a more active way to improve their living and benefit from the development of the tourism industry in Siem Reap-Angkor. However, the finding revealed that the locals in Nokor Krav Community Village seemed to be slowly adapted to the changes in their ways of life to involve in tourism development, but rather still expected to depend on the natural resources that existed in the Angkor forest. Based on the commune census in 2020, the number of people who have been involved in the tourism industry was 568 people, which accounted for 37.9 percent of the total population in Nokor Krav Community Village, which has increased by 18.22 percent compared to the last 14 years was only 19.68 percent. There were 931 people involved in agricultural work, which accounted for 62.1 percent in 2020, compared to 88 percent in 2006, which has dropped by 25.9 percent, Sokun. A., (2006). As mentioned earlier, locals in Angkor Park are expected to be more active in taking advantage of the tourism development in their area. However, Table 5.2.3 (B) below shows that there were only two main sources of economic activities for making income such as agriculture and

tourism services; compared to other villages, they have more income activities such as fishing, handicraft production, and other manufacturing activities.

Table 5.3.3 (B): Local's economic activities

N*	Sector	Economic Activity	N ^o of people	Subtotal	Percent
1.	Tourism & Services	Production (handicraft)	0	568	37.90
		Transportation and mechanic	8		
		Construction labor and services	560		
2.	Not related to tourism & Services	Rice farming	736	931	61.1
		Vegetable growing and Short term plantation	38		
		Animal Raising	60		
		Fishing	0		
		Government officials, private sectors.	97		
Total:				1499	100

Source: Commune Census for Development and Planning, 2020

5.3.4 Problem of Sickness and Debts

Having no illness means no spending, and having no debt means no complicated problems. However, Nokor Krav Community Village has both sickness and debt problems. Table 5.3.4 below showed that among 400 households selected in this study, 323 households, which accounted for 80.75 percent were in debt. 138 households, which accounted for 34.5 percent who have a family member with a permanent illness. The main concern was that among the 323 families who were in debt, there were 116 who had the

sickness. To be in debt, we need healthy people to work for money and pay back the debts and sometimes the interest. Due to the family condition of having a sick person, another family member has to stay home and take care of it. Consequently, the families were falling into the problem of losing the workforce for making income, but increasing the expenditure on medicine, debt, and interest.

Table 5.3.4: Problem of sickness and debts cross-tabulation

N*	Debt Problem	Sickness Problem			
		Yes	No	Total	Percent
1.	Yes	116	207	323	80.75%
2.	No, not at all	22	55	77	19.5%
Total:		138	262	400	100%
		34.5%.	65.5%	100%	

Source: Own Survey, 2020.

5.3.5 Constraints of the Law of Protection of Angkor

5.3.5.1 Limit of new construction

Nokor Krav Community Village is one of the 112 villages of Angkor Protected Zone, which is under the monitoring of the APSARA National Authority. Local communities of this area are not allowed to build new houses or even small shops, but they can only maintain their home or reconstruct to replace the old ones. To reconstruct or repair their house, they must submit the request to

APSARA National Authority. Then, the technical experts of APSARA National Authority will check if it is met the following criteria below⁴⁴:

- Must be residents who lived in that village before the year 2000.
- Must have Khmer identification card.
- Must have an identification letter of birth and household manual authorized by the village and commune they are living.
- Holding the official land tenure card authorized by the village and commune they are living.
- Having name listing in the 2004-2005 census of APSARA National Authority.
- Having a name and house building listed in the mapping data of JICA census in 1998 as recorded by google earth.
- The new replacement of the old house building can be resized bigger due to the number of people in that family and reshaped properly to meet the standard of traditional Khmer architecture. No modern architecture is allowed.
- The location of the building must not be on or impact the ancient infrastructure.
- The construction of public buildings such as schools, health care centers, and buildings of public administrations are exceptional.

⁴⁴ Buntheoun Sum, Lecture regarding land use in Angkor park 2019

5.3.5.2 Limit of Land Selling in Nokor Krav Community Village

The tourism industry is considered the greatest and most various industry in the world. The increase in demand for tourism infrastructure development has caused an increase in the price of land. Buying land and house sometimes results in high profit and of course for this reason that real estate in Siem Reap is as good as it ranked number two after Phnom Penh Capital City. Though, the increase in land price may sound negative to anthropologists and sustainable developers. Hence, the Royal Government of Cambodia with the facilitation of UNESCO experts has set the protected law by not allowing residents living in Angkor Park to sell land to outsider residents except those buyers are villagers who have been living in the same region for a long time. Due to the limitation of land selling, the price of land in Angkor Park is very low compared to the outside area of town. With optimistic thinking and for conservation perspective, land in Angkor Park especially lands in Nokor Krav Community Village has been well preserved by residents for generations which indicate that they are the owners, the builders, the guardians, and the living heritage of Angkor. However, if considering the balance and fairness for economic development purposes, it sounds to be unfair for the local communities of Angkor Park because the price of their land is quite cheaper than the land located outside the park due to the small market segment of customers. In some exceptional cases, even if they sell their land, with a small amount of money they earned, they cannot develop any businesses to upgrade their living and sometimes do not even cover their

basic needs or debts. While the land outside Angkor Park is not prohibited, the price is quite high. If the property owners are kind of smart money users, with that big amount of money, they can do many things to upgrade their living standards such as education, skills, and or invest in some kinds of tourism businesses.

5.3.5.3 Limit of Land Use

Under the protection of the APSARA National Authority, the land in the protected area has been preserved and characterized into four different categories as below:

1. Housing land;
2. Farming and plantation land;
3. State or community-owned land;
4. Land of forestry, ponds, and temples.

Since the land located inside the protected area of Angkor Park has been classified for use and strictly protected by APSARA National Authority, local people living in Nokor Krav Community Village do not have enough freedom to grow or do anything they want. In most cases, they have to request APSARA National Authority for authorization. Notably, not all requests are approved, and each time may take time for administration and technical control from the expert team of the APSARA National Authority. Rice farms and plantation lands are commonly the main resources for making income because the majority of them were farmers for generations. As mentioned

earlier, only 33.5 percent out of the 400 respondents selected can have access to growing rice once a year, and 16 percent of 400 households have been affected by the protection law, some parts of the land for plantation are also not allowed to, as to protect the natural forest for the sake of saving the value of Angkor Park.

5.3.5.4 Prohibitions of Traditional Works

Nokor Krav Community Villagers have been living in Angkor Park for generations. They are skillful in arts, wood and stone carving, making sculptures, music and song, poem, and dances. They do not have many skills in doing business. They live peacefully and harmonize with nature depending on the available resources of the Angkor forest. They grow rice, collect fish from the ponds of Angkor or Siem Reap stream, harvest seasonal wild fruits in the Angkor forest, collect firewood for cooking, take resin from the big tree for making torches, collecting medicinal plants from Angkor for curing. They easily led their lives with not many worries. They are born with a smile and live happily for generations. However, today is different, such kinds of traditional works have no more available for them for the sake of protecting and conserving Angkor Park. They are always expected to be involved in the tourism industry as a replacement for their traditional jobs. However, it takes more time for them to learn new things and new skills for what they had no experience with so far.

5.3.5.5 Limitation in Specific Activities and Modernization

Tourism is positively claimed to bring about income to locals. It creates job employment both direct and indirect. Tourism development may link to the modernization of infrastructure and facility development to supply this industry. However, Nokor Krav Community Village is protected from establishing any forms of modernization and commercial activities. Locals of the destination country are supposed to be benefiting from such kinds of tourism services as accommodating, catering, other souvenir selling, etc. Due to the law of protection for not having new constructions in the Nokor Krav Community Village. It is, therefore, locals in this study area do not have the opportunity to do business with tourism such as homestays, restaurants, petrol stations, banking, and or even small souvenir shops. Consequently, listing Angkor as a World Heritage can bring tourists to Siem Reap-Angkor, but it does not mean that locals in Angkor, the Nokor Krav Community Village can benefit from the tourists. These problems should be addressed by APSARA National Authority to establish more alternative business activities and opportunities for locals who live in Angkor Park.

Locals' Opinion on the Current Issues Affecting their Standard of Living

To find out the solution to the problems, it is good to know about its root. As described above, the study found five main factors which challenged the local

community in Nokor Krav Community Village to be poor. The study attempts to look into the local's perception of their poverty. According to the survey of 400 respondents in Nokor Krav Community Village, only 90 out of the 400 respondents, which accounted for 22.5 percent, realized that the cause of their poverty is related to less education. As mentioned earlier, education is the key to unlocking things. However, the result revealed only a small number of people know about this problem. Regarding the second factor, 170 respondents, which accounted for 42.5 percent of the total 400 respondents, indicated that the causes of their poverty are related to jobless. These include families with aged people and families having too many children. Moreover, 27 households, which accounted for 6.8 percent, mentioned that the cause of their poverty is related to the condition of their family being single parents and of handicapped members, which have more responsibility not only to take care of their family alone but also to take care of the handicapped person in their family. The third problem is the lack of farmland and fewer business experiences in making money. The study found that 50 respondents, which accounted for 12.5 percent, mentioned that they used to be farmers for generations, but they did not have rice farms and if they have, at least it can minimize the cost of expense for their daily consumption. The majority of the locals in Nokor Krav Community Village have raised that:

"Having tourists visiting our village, we are expecting to get some money by selling something to them, but we do not know even how to write the Khmer language let alone speaking the foreign one; and if we can

learn to speak a foreign language, but we live in the protected area of Angkor Park where no shops are allowed. We want to look for jobs in tourism as well as in APSARA National Authority, but we do not know how to apply for jobs, do not even have the communication network”.

Table 5.3: Locals’ opinions on the main challenges to their poverty

N*	Main challenges of poverty	Frequency	Percent	Subtotal
1.	Less education	90	22.5	22.5
2.	Jobless, Single parent, and handicapped	170	42.6	42.5
3.	No farmland and no business skills	50	12.5	12.5
4.	Sickness and debts	41	10.3	10.3
5.	Challenge with protected law	49	12.3	12.3
Total:		400	100	100

Source: Own Survey, 2020.

The fourth problem is related to sicknesses and debts. Most of them do not have any savings accounts, and they sometimes have to sell out their property to cure illnesses. The result found that 41 respondents, which accounted for 10.3 percent of 400 surveyed, have sickness problems. They permanently have to spend extra money on medicine for curing illnesses. Some locals may have the IDPoor card for getting free healthcare services in many public hospitals, but they still have no extra money to spend on transportation to the city. Last but not least, 49 households, which accounted for 12.3 percent, indicated that

the main challenge for their living was related to the law of protection of the Angkor World Heritage.

5.4 Impacts of the Management of Angkor World Heritage

5.4.1 Positive Impacts of the Management of Angkor World Heritage on Nokor Krav Community Village

5.4.1.1 Local Employment Opportunity

Economically, employment provides income, revives domestic demand for goods and services, and stimulates overall growth. Socially, employment can also promote social healing, encourage the return of displaced persons, and improve social welfare in the long run. In this study, to measure the positive impacts of the management of Angkor World Heritage managed by APSARA National Authority, the result of the local employment opportunity received from the development of tourism in Siem Reap Angkor is one of the five indicators to interpret the positive impacts of the management of Angkor World Heritage. As shown in Table 5.4.1.1 (A), 256 respondents, which accounted for 64 percent, have benefited from the jobs in the tourism industry. Those include 146 respondents, which accounted for 36.5 percent have benefited directly, and 53 respondents, which accounted for 13.3 percent have benefited from jobs resulting from the development of industries such as transportation, agriculture, banking, etc., technically called "Induced Jobs." While 57

respondents, which accounted for 14.2 percent gained benefit from "Indirect Jobs" which referred to any jobs indirectly created by tourism, arising from the spending of money by residents from their tourism incomes. Particularly, only 144 respondents, which accounted for 36 percent still depend on jobs, which are not related to tourism.

Table 5.4.1.1 (A): Employment opportunity among 400 respondents

Employment Opportunity among 400 Respondents					
N*	Respondent's job	Frequency	Subtotal	Percent	Subtotal
1.	Direct jobs in tourism	146	256	36.5	64
2.	Induced jobs in tourism	53		13.3	
3.	Indirect jobs in tourism	57		14.2	
4.	Jobs not related to tourism	144	144	36	36
Total:		400	400	100	100

Source: Own Survey, 2020.

Though the data presented above seem to be good in general, if compared to the total number of people in each household, it was found that only 29.33 percent of the Nokor Krav Community Village have benefited from the tourism industry. These include 212 people, which accounted for 9.6 percent, who have benefited directly, 280 people, which accounted for 12.67 percent, who have benefited from induced jobs, and 156 people, which accounted for 7.06 percent, who have benefited from indirect jobs of tourism and hospitality. The Nokor Krav Villagers who have benefited from the tourism industry were very small in

number due to many problems that the study has to further search for detailed information. One of that problems can be related to the high number of illiterate people in each family. Hence, without question, the level of education could limit the chances of employment. Another problem, as shown in Table 5.4.1 (B) below, there was that 65.65 percent of children and aged people were not capable of accessing job employment.

Table 5.4.1.1 (B): Employment opportunity among 400 households

N*	Employment Opportunity among 400 Households						
		Type	Frequency	Subtotal	Percent	Subtotal	Total
1.	Jobs in tourism	Direct	212	648	9.60	29.33	29.33
		Induce	280		12.67		
		Indirect	156		7.06		
2.	Jobs not related to tourism		111	111	5.02	5.02	5.02
3.	Jobless people (Children & Aged people)		1451	1451	65.65	65.65	65.65
Total:			2210	2210	100	100	100

Source: Own Survey, 2020.

5.4.1.2 Level of Local Involvement in Conservation of the Site

Local involvement is crucial for sustainable development and conservation of the site. The main question was the local perception of the willingness to respect the construction law. It was found that only 45 out of the 400 respondents, which

accounted for 11.3 percent, are happy to respect the construction law. While 135 of them, which accounted for 33.8 percent, do not want to respect the law. Though, they have to do it because it is an obligation required by the government. The result sounds negative as more than half of 400 respondents are dissatisfied with this construction law since 220 respondents, which accounted for 55 percent, attempted to respect the law with dissatisfaction. Based on the in-depth interview, most of the locals in Nokor Krav Community Village agreed that "conservation of the Angkor Park is compulsory, and they also understand this. However, the application for receiving admission from APSARA National Authority seemed to be too strict and unfair with less transparency."

Table 5.4.1.2 (A): Local's willingness to respect the construction law

N*	Are you willing to respect the construction law?	Frequency	Percent
1.	Yes, highly respect	45	11.3
2.	Respect as obligation	135	33.8
3.	Respect with dissatisfaction	220	55.0
Total:		400	100.0

Source: Own Survey, 2020.

APSARA National Authority Vs. Local's Perception

The study found many reasons as explained by the technical experts of APSARA National Authority to support the creation of the strictly protected zone and the establishment of protected law as follows:

1. The construction of the Angkor temple is unique if compared to modern architecture today because our ancestors used sand as the base, not the cement as today. The water moats were built around all temples to absorb the sand and balance the base of the temples.

2. Siem Reap people do not have a clean water system to supply to locals living in Angkor Park. They relied on water from the underground by using the pumping wells. To control the number of wells pumped from the underground water that can affect the water table and the sand base of the temples, APSARA National Authority has limited the number of new constructions inside Angkor Park. More people living in Angkor Park means more consumption of underground water. So, minimizing the number of new constructions also means minimizing the number of pumped wells.

3. Cambodia is a poor country, which does not have enough funds to do archeological research in all parts of the surrounding areas of the temples, and if new constructions are allowed to build freely, there is no guarantee that the digging for the new building will not affect the antiques inside those areas.

4. To preserve the authenticity of the Khmer village and its cultural landscape, the construction of new buildings must be controlled and strictly monitored by the expert team of the APSARA National Authority.

5. To avoid the invasion of new elite residents on local communities as well as to limit the booming number of new buildings of the young generations whose parents are originally living in Angkor Park, the Royal Government of

Cambodia has set the regulations for land use planning and management as follow:

- Land inside the protected area of Angkor Park is not allowed to be sold to outsider residents, except sold to locals who have been living in Angkor Park for a long time. This regulation also intends to limit the new outsider residents living in Angkor Park to avoid the invasion of the new local elite on the poor community as well as to avoid the influence of new culture on the authenticity of the culture of residents in Angkor Park so that the intangible heritage can be well preserved.
- The new couple of the next generation of the locals who want to build a house next to their parents is not allowed. In return, APSARA National Authority has motivated them to live in a new village called Run Ta Ek Eco-Village. To compensate for the willingness, APSARA National Authority has supported most of their basic needs such as housing land, farming land, housing materials, well construction, and schools for children. To facilitate the living of these new residents, APSARA National Authority has also employed some of them to work in the Run Ta-Ek Eco-development Project, create homestay models, and offer informal training skills related to tourism services to the locals.

The study also further survey 400 respondents in Nokor Krav Community Village on the local perception of the regulations set by the government to identify the level of their responsibility for the conservation of the Angkor Site.

Table 5.4.1.2 (B): Local's opinion on the government's strategy

N*	Answer	Do you agree?					
		not to sell land to outsider residents		Want to have new residents in the village		move to live in Run Ta-Ek Eco-village	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
1.	Yes, I do	308	77.0	71	17.8	113	28.3
2.	No, I don't	54	13.5	295	73.8	47	11.8
3.	No idea	38	9.5	34	8.5	240	60.0
Total:		400	100.0	400	100.0	400	100.0

Source: Own Survey, 2020.

The result is shown in Table 5.4.1.2 (A) above seemed to be positive because 308 respondents, which accounted for 77 percent, supported the regulation of not allowing locals to sell out land to outsider residents. Moreover, 295 out of 400 respondents, which accounted for 73.8 percent, also agreed that not having new residents in their village is good. However, regarding the perception of moving to live in Run Ta-Ek Eco-village, there were only 113 respondents, which accounted for 28.3 percent who wanted to live there. While 47 respondents, which accounted for 11.8 percent did not want to live there because it is far away from their parents, the other 240 respondents seem to

have no idea about living there because they do not get enough information about this project.

5.4.1.3 Housing Condition

In Cambodia, many Khmer-style houses are built depending on hierarchy and purposes. House is a symbol of prosperity in the national society, and it serves the lives of the people in each village, which is culture and nature. Khmer has traditionally been known to live on a different design of stilt houses with some multi-leveled floor and gable finials at both ends of the roof ridge.⁴⁵ Though, it sounds a bit technically complicated in terms of the architectural designs. However, the housing indicator in this study has been characterized in two ways. The type of house is socially indicated the socioeconomic status, and the period of construction is a sign of an economic improvement if the house is built after 1993 after Angkor became a World Heritage.

Picture 4.4.1.3: Type of house as an indication of social status



Source: Own Picture, 2020.

⁴⁵ Wikipedia (n.d.) Traditional Khmer Housing. Retrieved on 28th October 2021 from: https://en.wikipedia.org/wiki/Traditional_Khmer_Housing

As shown in Table 5.4.1.3 below, the survey on 400 households found that the living standards of the majority of the locals are low because 76.5 percent were living in the cottage and small wooden houses. These include 101, which accounted for 25.25 percent lived in cottages, and 205 respondents, which accounted for 51.25 percent, who lived in small wooden houses. While only 90 of them, which accounted for 22.5 percent of the respondents, lived in brick and wooden houses, which were treated as medium standard. Exceptionally, 4 respondents, which accounted for 1 percent, lived in big houses with gardens, and they were treated as high class.

Table 5.4.1.3: Type and period of house construction cross-tabulation

N*	Type of House	Construction		Total	
		Before 1993	After 1993	Fre.	Per.
1.	Cottage (very poor)	19	82	101	25.25
2.	Small wooden house (poor)	45	160	205	51.25
3.	Brick & wooden house (medium)	21	69	90	22.5
4.	Big house with garden (rich)	0	4	4	1
Total	Frequency	85	315	400	100
	Percent	21.25	78.75	100	

Source: Own Survey, 2020.

Regarding the house construction in this village, the results indicated a good sign of the impact because 78.75 percent of the respondents were able to construct their houses after 1993 after Angkor became a World Heritage. Though they get

some loans for the construction and maintenance, within their permanent low-income earnings from the jobs in the tourism industry are confident enough to pay back the loans.

5.4.1.4 Education Improvement

Education and development must go hand in hand. The role of education in developing countries is compulsory because lacking education can cause poverty and slow the economic development of a country, especially for a developing country like Cambodia. The role of education in poverty reduction is huge such as it boosts economic growth, increases the GDP of a country, reduces infant mortality rate, increases human life expectancy, etc. Improvement in education means helping people make the right decisions, changing their quality of life, promoting peace and reducing drop-out rates from schools and colleges, and encouraging healthy competition, Leon Feinstein et al. (2005). Many children drop out of college as they are not aware of the advantages of a college education. In this study, improvement in the quality of education is one of the indicators to measure the positive impacts derived from the management of the Angkor World Heritage. As shown in Table 5.4.1.4 (A), 298 respondents, which accounted for 74.5 percent of the 400, indicated that the education in Nokor Krav Community Village has been improved. While only 52 of them, which accounted for 13 percent, have responded that there is no difference. This group of respondents seemed not

to care much about education and were carefree about their children's education. While the other 50 respondents, which accounted for 12.5 percent, responded that they have no ideas because most of them are aged people who stay home and have no knowledge about training and education.

Table 5.4.1.4 (A): Education in Nokor Krav Community Village

N*	Have the quality of education in your village improved, recently?	Frequency	Percent
1.	Yes	298	74.5
2.	No	52	13.0
3.	No, idea	50	12.5
Total:		400	100

Source: Own Survey, 2020.

Overall, education in Nokor Krav Community Village has improved steadily. As shown in Table 5.4.1.4 (B), 306 out of 400 households which accounted for 76.5 percent, have sent their children to school. While the other 33 households, which accounted for 8.3 percent, have only sent some of their children to school because some of their children's childhood was in the Khmer Rouge Regime. While the other 6 less fortunate families, which accounted for 1.5 percent, did not send their children to school because they were too poor, and 55 families, which accounted for 13.8 percent, have not yet sent their children to school because they are too young to attend schools.

Table 5.4.1.4 (B): Children's education in each household

N*	Have all your children been to school?	Frequency	Percent
1.	Yes	306	76.5
2.	No, not all of them	33	8.3
3.	No, not at all	6	1.5
4.	Too small to attend schools	55	13.8
Total:		400	100

Source: Own Survey, 2020.

Besides the level of children's enrollments, the study also looked into the rate of children drop off school as shown in Table 5.4.1.4 (C) below. The survey on 400 respondents found that 141 families, which accounted for 35.25 percent, have sent their children to learn at school until junior high school compared to other 64 families, which accounted for 16 percent who can support their children to learn until high school and or university level.

While 183 families, which accounted for 45.8 percent, have not yet allowed their children to drop out of school. Overall, this present result seemed to be appreciated if compared to 87.7 percent of illiterate people found in the last 14 years, Sokun. A (2006).

Table 5.4.1.4 (C): Level of children drop out of school

N*	At what highest level do your children drop school?	2020		Subtotal	
		Frequency	Percent	Frequency	Percent
1.	Primary School	55	13.8	141	35.25
2.	Junior High School	86	21.5		
3.	High School	44	11.0	64	16
4.	University	20	5.0		
5.	Still learning	183	45.8	183	45.8
6.	No children attend school	12	3.0	12	3.0
Total:				400	100

Source: Own Survey, 2020.

5.4.1.5 Physical and Mental Healthcare Support

People in developing countries tend to have less access to health services than those in developed ones. Nokor Krav Community Village is a poor community. It is, therefore, they have less access to health services. However, the Royal Government of Cambodia has made some reforms and supports rural development by providing funds to the poor locals. The amount of funding given to each family may differ according to the different types of IDPoor, and the number of people in each family and those who received the IDPoor would have a card for getting free health care services. As shown in Table 5.4.1.5 (A) below, 174 households, which accounted for 43.3 percent of the total 400

households selected for the interview, received funding support from the Cambodian Government. While 82, which accounted for 20.5 percent, partly received physical health care facilities such as water filters, well, and toilet construction. Nevertheless, 144 households, which accounted for 36 percent, have not received any support.

Table 5.4.1.5 (A): Physical and mental healthcare support

N*	Physical and Mental Healthcare Support	Frequency	Percent
1.	Partly supported for water filters, well, and toilet construction	82	20.5
2.	IDPoor Funding Card from the government	174	43.5
3.	Not receiving anything	144	36
Total:		400	100

Source: Own Survey, 2020.

Developing countries are mostly affected by water shortages, flooding, and poor water quality. The majority of illnesses in the developing world are linked to inadequate water and sanitation. Clean, accessible water is critical to human health, a healthy environment, poverty reduction, sustainable economy, peace, and security. Regarding the hygiene and the quality of drinking water, 400 respondents have been surveyed in Nokor Krav Community Village.

Table 5.4.1.5 (B): Hygiene and quality of drinking water

N*	What drinking water have you consumed?	Fre.	Per.	Subtotal
1.	Clean water from the school	74	18.5	83.6
2.	Clean water from the personal filter	235	58.8	
3.	Drinking water bought from the market	25	6.3	
4.	Boiled underground water	37	9.3	9.3
5.	Water pumped directly from underground (not boiled or filtered)	29	7.3	7.3

Source: Own Survey, 2020.

Table 5.4.1.5 (B) revealed that 334 households, which accounted for 83.6 percent, have consumed clean water from different sources. These include water from school (as offered to students, but locals can also bring it home free for their daily consumption), water from their filters, and water bought from the market. Even though the quality of the afore-said water can not be measured, still safer than the other 37, which accounted for 9.3 percent, who consumed boiled water. While the other 29 respondents, which accounted for 7.3 percent, were at risk because they used water pumped directly from the underground (without being boiled or filtered).

Violation against women and girls is critical public health, societal, and economic problem affecting 35 percent of women globally. Regarding the mental health of the locals in Nokor Krav Community Village, the study has also

identified the case of family violation. As a result, among 400 respondents surveyed, 21 of them, which accounted for 5.3 percent, were found to have family violations, but 367, which accounted for 91.8 percent, did not face this problem. However, the present study has found that 12 cases, which accounted for 3 percent, had the problem of family divorce.

Table 5.4.1.5 (C): Mental healthcare condition

N*	Have you ever had a family violation?	Frequency	Percent
1.	Yes	21	5.3
2.	No	367	91.8
3.	Divorce	12	3.0
Total:		400	100

Source: Own Survey, 2020.

As shown in Table 5.4.1.5 (C) above, the problem of family violation was 5.3 percent compared to 35 percent globally and family divorce was 3 percent compared to 2.4 percent at the national level revealed to the National Institute of Statistics in 1998. This low rate is in large part due to culture, which discourages divorce. Divorce is a shameful affair, especially for women. Social tradition and today's family laws encourage reconciliation rather than divorce, even when one partner is a serious physical or psychological risk. The rate is also low because poor women have limited access to the legal system. Another reason

can be related to the cultural preferences for choosing to marry the villagers of the nearby village or the same area of Angkor Park. As indicated by respondents during the depth interview, most parents mentioned that they believed and also experienced seeing many cases of those who marry people from outside Angkor Park especially those from the different provinces are usually faced some difficulties in living together because they both do not share the same culture, way of life and way of thinking. To avoid the case of divorce, marriages among local is preferable. Moreover, locals in Angkor Park still hold the authenticity of Khmer culture compared to other parts of Cambodia has already been lost and modernized. The norm of Khmer culture, the woman must take care of all the domestic affairs and respect her husband. She must also learn to be patient to avoid divorce. While the man is valued to be superior and responsible for making money to support the family.

5.4.2 Negative Impacts of the Management of Angkor

5.4.2.1 Availability of Infrastructure Development

Siem Reap is one of the main tourist attractions, which has Angkor as the heart of Cambodia. Recently, the Royal Government of Cambodia has been committing to invest USD140 million to construct 38 roads in Siem Reap City⁴⁶.

⁴⁶ Long Nary-AKP (2021, July). Report by Minister of Public Works and Transport Sun Chanthol in Khmer Time. Retrieved on 30th October 2021 from: <https://www.khmertimeskh.com/50895581/construction-of-38-roads-in-siem-reap-reach-66-percent/>

in Khmer Time on 17th July 2021, the construction of the road has now achieved 66 percent. Moreover, the new International Airport is also under construction to promote tourism development in Siem Reap. No matter if all of these projects were not taken place in Nokor Krav Community Village, to some extent, it will also indirectly benefit the locals in Siem Reap as a whole if there was an increase in the number of tourists visiting Siem Reap-Angkor.

Table 5.4.2.1 (A): Road condition in Nokor Krav Community Village

N*	What is the road condition in your village?	Frequency	Percent
1.	It is very good recently	80	20.0
2.	It is good only at some specific points	135	33.8
3.	I don't mind. It is usable.	26	6.5
4.	More improvement would be better	159	39.8
Total		400	100

Source: Own Survey, 2020.

In this study, 400 respondents have been selected for interview to find out the condition of the infrastructure development available in Nokor Krav Community Village. As shown in Table 5.4.2.1 (A), 80 respondents, which accounted for 20 percent, indicated that the road construction in their village is good. While the other 135 respondents, which accounted for 33.8 percent, mentioned that it is good only at some specific points. Other 26 respondents, which accounted for 6.5 percent, felt acceptable. However, 159 respondents, which accounted for 39.8 percent, requested to enlarge the roads.

Infrastructure development is compulsory for everyone, not only for the city people but also for locals inside Angkor Park. Even Nokor Krav Community Village is in a protected area, but it is exceptionally allowed for any construction to serve the public. The population naturally grows from time to time, and the demand for social health care and public services would be higher. Regarding the requirements for the development of compulsory buildings and public infrastructure, in the survey of 400 respondents as shown in Table 5.4.2.1 (B) that, 135 respondents of locals in Nokor Krav Community Village, which accounted for 33.8 percent, requested to have a health care center in the village, and 130 respondents, which accounted for 32.5 percent requested a junior high, a high school and vocational training centers. While 69 of them, which accounted for 17.3 percent, requested a bank. Other 66 respondents, which accounted for 16.5 percent, requested at least one community market to sell local products to tourists.

Table 5.4.2.1 (B): The compulsory of the public buildings

N*	What type of public building do you want to have in the Village?	Frequency	Percent
1.	Health care center in the village	135	33.8
2.	Junior, high school/ vocational training centers	130	32.5
3.	Banking systems	69	17.3
4.	Community Market	66	16.5
Total:		400	100.0

Source: Own survey, 2020.

5.4.2.2 Local Awareness of the Conservation of the Site

The level of local awareness is measured to examine to what extent the community has been aware of the heritage existing around them, and its result can reflect the level of local responsibility in the conservation of the site. In this study, one main question was used for testing and the rest of the four questions were set to get a deeper understanding of the local's awareness. As shown in Table 5.4.2.2 below, the result found that Angkor has been managed and conserved by APSARA National Authority, and the locals in this area were supposed to understand clearly the responsibility and conservation work of the APSARA National Authority. In contrast, only 104 respondents, which accounted for 26 percent, knew this, and the majority of those may have been working in APSARA National Authority while, the rest of the respondents claimed that they used to hear the name of the APSARA, but they had no ideas about the conservation work of the APSARA National Authority. Overall, the locals in Nokor Krav Community Village have little knowledge and low awareness of the World Heritage and the conservation work of the APSARA National Authority, which also reflected the locals' ignorance of conserving the Angkor World Heritage Site. The result also further studied in more detail local's knowledge of the world heritage. It was found that 285 out of 400 respondents, which accounted for 71.3 percent, knew that Angkor became a World Heritage, but they did not know when it was on the UNESCO list. Moreover, the study also found

that 72 of the respondents, which accounted for 18 percent knew the meaning of the term "World Heritage" and most of them were young respondents who have been educated at school. While, only 33 respondents, which accounted for 8.3 percent knew the size of Angkor Park to be protected. When asked whether they knew the government regulation regarding the limit of new construction, 392 respondents, which accounted for 98 percent of the total respondents, knew it because APSARA National Authority has sent staff to every part of the Angkor protected zone to monitor the illegal buildings every day.

Table 5.4.2.2: Level of local awareness of the conservation work

N*	Level of Local Awareness	Frequency	Percent	Total	
				Fre.	Per.
1.	Know about the responsibility of the APSARA National Authority	104	26.0	400	100
2.	Know Angkor is the World Heritage	285	71.3	400	100
3.	Understanding the meaning of "World Heritage"	72	18.0	400	100
4.	Know the size of "Angkor Park" to be protected	33	8.3	400	100
5.	Know about the limit of new constructions	392	98	400	100

Source: Own Survey, 2020.

Note: Data presented are the summary of five separate questions

5.4.2.3. Employment Accessibility

The economy of Siem Reap has been transformed from agriculture as the primary sector to secondary (labor-intensive) and tertiary (service) industries over the past 20 years, since the listing of Angkor as a World Heritage Site in 1992⁴⁷.

The pattern of such economic restoration has produced a change in employment creation as the local economy grows and develops at a steady rate. It has caused an emerging trend among tourism developers and planners. It has also aimed to move beyond conservation issues of conventional management mechanisms for Angkor World Heritage, sustainable development, and poverty reduction. However, in the case of Nokor Krav Community Village, agriculture remains a dominant sector with 62.1 percent, followed by the tourism sector ranked number two with 37.9 percent. Besides counting the number of jobs, it is more important to know how much they can earn from each. According to the survey of 400 households, Table 5.4.2.3 (A) has shown that among 759 people who have jobs, 447 of them, which accounted for 58.9 percent, obtained low-paid jobs of below USD150 per month, 224 people, which accounted for 29.52 percent, obtained medium-paid jobs of between USD150

⁴⁷ Baromey Neth (n.d.) Open Edition Books, Gottingen University Press. *A Study of Tourist Revenue in the Accommodation Sector in Siem Reap-Angkor*.

Retrieved on 29th October, 2021 from:

<https://books.openedition.org/gup/313?lang=en>

to USD300 per month. While 72 of them, which accounted for 9.48 percent, obtained higher paid jobs of between USD301 to USD450 per month. Those who got better-paid jobs of more than USD450 per month were only 16 people, which accounted for 2.1 percent only. As discussed earlier, job employment accessibility may be strongly related to education and experiences in the tourism industry. Unfortunately, local people living in Nokor Krav Community Village have low education and have fewer experiences in tourism and hospitality businesses. Consequently, the majority of them can only access low-paid jobs because it does not require any technical skills.

Table 5.4.2.3 (A): Level of income and type of jobs cross-tabulation

N*	Average Income per month/ Pax	Jobs related to tourism			Not tourism	Total	
		Direct	Induced	Indirect		Frequency	Percent
1.	< \$150 (Low)	140	139	93	75	447	58.9
2.	\$150-\$300 (Medium)	52	106	42	24	224	29.52
3.	\$301 - \$450 (High)	12	27	21	12	72	9.48
4.	> \$450 (Very High)	8	8	0	0	16	2.1
Total		212	280	156	111	759	100

Source: Own Survey, 2020.

Regarding the employment accessibility to work in APSARA National Authority, as shown in Table 5.4.2.3 (B) below, 57 households, which accounted for 14.3 percent out of the total 400 households, have at least one of their family

members working in APSARA National Authority. Most of their works are related to guarding and cleaning the temples. As these kinds of jobs do not require any skills, they have been paid low wages. However, those who have been educated can obtain better jobs and be trained on-site for stone maintenance and other conservation projects of the APSARA National Authority.

Table 5.4.2.3 (B): Local accessibility to jobs in APSARA National Authority

N*	Have anyone in your family have a job in APSARA National Authority?	Frequency	Percent
1.	Yes	57	14.3
2.	No	752	85.7
Total:		759	100

Source: Own survey, 2020.

5.4.2.4. Poverty Rate

Despite three decades of devastating civil conflict, Cambodia has achieved remarkable progress in reducing poverty and boosting shared prosperity. Cambodia has open borders to international trade, and investment has helped attract foreign direct investment to support manufacturing, construction, and tourism. As a result, Cambodia has sustained high growth. According to World Bank (2019), the percentage of Cambodians living under the national poverty line fell from 47.8 percent in 2007 to 13.5 percent in 2014. The result sounded to be positive in terms of Cambodia as a whole. However, Siem Reap clings to its rank as the third poorest province in Cambodia in terms of human development (World Bank 2007; UNDP 2007, cited in Esposito and Nam 2008).

Importantly, in this study, Table 5.4.2.4 indicated that there were 174 out of the 400 selected households, which accounted for 43.5 percent, received IDPoor (support to the identification of poor household program, executed by the Ministry of Planning of Cambodia by giving an equity card to the household indicating its status “1” for extremely poor and “2” for moderately poor)⁴⁸. If compared to the national poverty line in 2007 of 47.8 percent, Nokor Krav Community Village’s poverty rate has fallen by 4.3 percent in 2020.

Table 5.4.2.4: Level of IDPoor in Nokor Krav Community Village

N*	Have you received ID poor from the government?	Frequency	Percent
1.	Yes	174	43.5
2.	No	226	56.5
Total:		400	100.0

Source: Own Survey, 2020.

5.4.2.5 Affordable Access to Quality of Education and Health Care

People with higher levels of education are more likely to be healthier and live longer. Children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination — like bullying — are more likely to struggle with maths and reading [8]. They are also less likely to graduate from high school or college. This means that they are less

⁴⁸ GIZ (n.d.) Identification of Poor Households. Retrieved on 23rd June 2021 from: <https://www.giz.de/en/worldwide/17300.html>

likely to get safe, high-paying jobs and more likely to have health problems like heart disease, diabetes, and depression. In addition, some children live in places with poorly performing schools, and many families can't afford to send their children to college. The stress of living in poverty can also affect children's brain development, making it harder for them to do well in school. Interventions to help children and adolescents do well in school and help families pay for college can have long-term health benefits. In this study, the result has shown that only 31.3 percent of the 400 respondents surveyed, can afford to send their children to school in Siem Reap city and quality health care services. While other 42 percent, cannot support their children to higher education in the city and 26.8 percent are not sure whether they can afford to send their children to higher education in the city. Pragmatically, this group of people seems to understand that education is necessary for their children, but because of poverty, they do not know how much they can patiently still support their children in school but ironically want to request some support.

Table 5.4.2.5: Local accessibility to qualified education and health care

Can your family have access to qualified education and good health care?				
N*	Answer	Frequency	Percent	Valid Percent
1.	Yes	125	31.3	31.3
2.	No	168	42.0	42.0
3.	N/A	107	26.8	26.8
Total		400	100.0	100.0

Source: Own Survey, 2020.

5.4.3 Positive and Negative Impacts of the Management of Angkor on Nokor Krav Community Village

The findings related to the indicators in measuring the positive and negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village have been presented in detail. Overall, they are very descriptive. To assess the impacts of the management of Angkor on Nokor Krav Community Village, Multiple Regression Analysis was carried out as follow: $\hat{Y} = a + \beta x_1 + \beta x_2 + \dots \beta_k + \varepsilon$ or $\hat{Y} = a + \beta x_1 + \beta x_2 + \beta x_3 + \beta x_4 + \beta x_5 + \varepsilon$, where $\hat{Y}$ = Male and Female is a dependent variable represents the locals impacted positively by the Management of Angkor (PI); X_1 = Local Employment Opportunity (EO); X_2 = Level of Local Involvement in Conservation of the site (LC); X_3 = Housing Condition (HC); X_4 = Education Improvement (EI); X_5 = Physical and Mental Healthcare Support (HS); a = Intercept term; and ε = Error term. The regression result of the first hypothesis testing was found to be significant at a 5 percent level of significance ($F = 4.428$, $\text{Sig.} = 0.001$). The ($R^2 = 0.053$) revealed that a 5.3 percent variation in the dependent variable $\hat{Y}$ = Male and female is a dependent variable represents the locals impacted positively from the Management of Angkor (PI) was due to the five independent variables.

Table 5.4.3 (A): Regression results of hypothesis testing 1

Dependent Variable $\hat{Y}$ = Male and Female is a dependent variable represents the locals impacted positively from the Management of Angkor (PI).	R = 0.231 $R^2 = 0.053$	F= 4.428 Sig. = 0.001	
Independent Variables	Regression Coefficients	"t" Value	Sig. level
X_1 = Local Employment Opportunity (EO)	.108	2.195	.029
X_2 = Level of local involvement in Conservation of the site (LC)	.101	2.008	.045
X_3 = Housing Condition (HC)	-.157	-3.175	.002
X_4 = Education Improvement (EI)	.063	1.276	.203
X_5 = Physical and Mental Healthcare Support (HS)	.065	1.288	.198

Source: Own Computation, 2020.

Table 5.4.3 (A) indicates that the independent variables, i.e., X_1 =Local Employment Opportunity (EO), X_2 =Level of local involvement in Conservation of the site (LC), X_3 =Housing Condition (HC), X_4 =Education Improvement (EI), and X_5 =Physical and Mental Healthcare Support (HS) had significant impacts on the local people in Nokor Krav Community. Though X_4 = the Education

Improvement (EI), and X_5 = Physical and Mental Healthcare Support (HS) had no significant impact on the dependent variable, i.e., overall, the first null hypothesis " H_{01} : *There are no positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

To test the second hypothesis " H_{02} : *There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*", the same $\hat{Y} = a + \beta x_1 x + \beta x_2 + \beta x_3 x + \beta x_4 x + \beta x_5 + \varepsilon$, $\hat{Y}$ = Male and female is a dependent variable represents the locals impacted negatively from the Management of Angkor (NI), followed by the five indicators: X_1 = Infrastructure development (ID), X_2 = Level of local awareness on the conservation of the site by APSARA National Authority (AC), X_3 = Employment Accessibility (EA), X_4 = Poverty Rate (PR), and X_5 = Affordable access to quality healthcare and Education (HE).

The regression result of the second hypothesis testing was found to be significant at a 5 percent level of significance ($F = 9.33$, $\text{Sig.} = 0.001$). The ($R^2 = 0.110$) revealed that 11 percent variation in the dependent variable $\hat{Y}$ = Male and Female is a dependent variable represents the locals impacted negatively from the Management of Angkor (NI) was due to the five independent variables.

Table 5.4.3 (B): Regression results of hypothesis testing 2

Dependent Variable $\hat{Y}$ = Male and Female is a dependent a variable represents the locals impacted negatively from the Management of Angkor (NI).	R = 0.332 R ² = 0.110		F= 9.33 Sig. = 0.001	
Independent Variables	Regression Coefficients	"t" Value	Sig. level	
X ₁ = Infrastructure Development ID	-.039	-.785	.433	
X ₂ = Level of local awareness on the Conservation of the site by APSARA National Authority (AC)	.240	4.856	.000	
X ₃ = Employment Accessibility (EA)	-.126	-2.497	.013	
X ₄ = Poverty Rate (PR)	-.058	-1.199	.231	
X ₅ = Affordable access to quality healthcare and Education (HE)	.100	2.083	.038	

Source: Own Computation, 2020.

Table 5.4.3 (B) indicates that the independent variables, i.e., X₁ = Infrastructure development (ID), X₂ =Level of local awareness on the conservation of the site

by APSARA National Authority (AC), X_3 = Employment accessibility (EA), X_4 = Poverty Rate (PR), and X_5 = Affordable access to quality healthcare and education (HE). Though X_1 = Infrastructure Development (ID), and X_4 = Poverty Rate (PR) had no significant impact on the dependent variable; overall, the second null hypothesis "*Ho₂: There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

Based on the above results, the two null hypotheses have determined that there were both positive and negative impacts of the management of Angkor by APSARA National Authority on local people in Nokor Krav Community Village. The positive impacts were related to local employment opportunities, level of local involvement in the conservation of the site, and improvement of the housing condition. While the negative impacts were related to the level of local awareness on the conservation of the site by the APSARA National Authority, employment accessibility, and affordable access to quality healthcare and education.

5.5 Strategies to Improve the Livelihood of the Locals in Angkor Park

5.5.1 Infrastructure Development

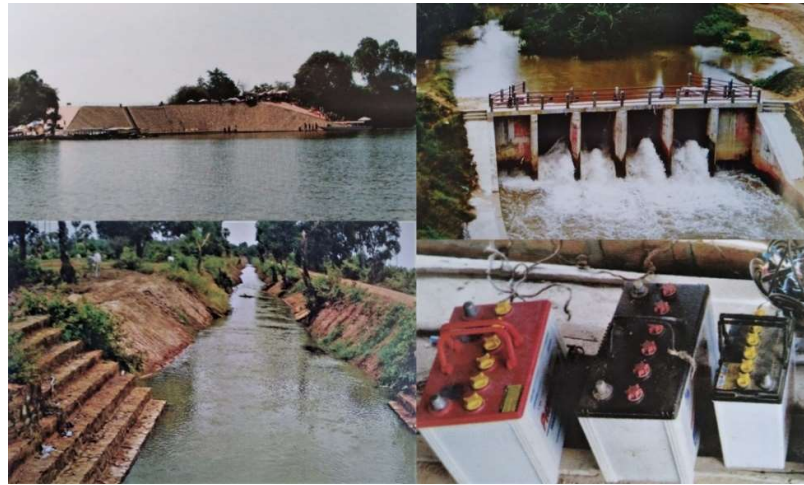
The Revival of the Angkor Irrigation System

One of the prioritized tasks was the restoration of the water irrigation system of West Barray. It is the biggest water reservoir of the Angkor irrigation system, built in the 11th century with a total area of 2.2 kilometer-wide and 8 kilometers in length. In 2015, APSARA National Authority established four new sluices and re-equipped 44 new mechanic boxes to secure Siem Reap City and Angkor Park from flooding. Drainage dams, sluices, dykes, and canals were built in different areas of Angkor Park to help water flow into the surrounding rice farm of Angkor Park. After restoration, the West Baray supplies a 56-million-meter cube of water which can water 13, 00 hectares of agricultural land. It is the main reservoir used as the source of clean water for Siem Reap city.

The Establishment of Solar Power Charging Stations

Starting in 2012, APSARA National Authority has established three solar power charging stations in different locations of the Angkor Protected Zone such as Leang Dai village in Leang Dai Commune, Toul Krolanh Village in Knar Sanday Commune, and La Beouk Village in Doun Keo Commune. The total number of solar power chargers was 40 pieces, which can supply charge 114 batteries per day.

Picture 5.5.1 (A) Infrastructure Development



Source: APSARA National Authority, 2020

Road and Bridge Constructions and Maintenances

To facilitate the land communication network for the local community living in the protected area of Angkor Park, APSARA National Authority has built four new bridges in a different location where necessary and established the ring road to avoid the traffic and heavily loaded trucks inside Angkor Park as described in detail as below:

- One bridge (28m x 5m) in Bangkong Village, Sangkat Ampil, Siem Reap City.
- One bridge (24m x 5m) in Trach Village, Balang Commune, Barkong District
- One bridge (20m x 3.5m) in Doun Tror, Lavear Commune, Pouk District.
- One bridge (25m x 3.5m) in Peam Village connects to Sne Village in Doun Keo Commune, Pouk District.
- Road N^o 60 at T5 (60m x 9679 m) in Bangkong Village, Ampil Sangkat, Siem Reap city.

Picture 5.5.1 (B) Road and bridge constructions



Source: APSARA National Authority, 2020.

5.5.2 Community-based Tourism Development

Establishment of Khmer Habitat Interpretation Center (KHIC)

(KHIC) consists of a plot of land in Angkor Park developed to showcase a traditional Khmer home and courtyard. It is located just north of Banteay Kdei and Srash Srang, and the point where the route through the park divides into either the Grand or the Small circuit. The center consists of a traditional Khmer house serving as an exhibition space for models and photographs of Khmer traditional dwellings. The house is designed and built with traditional materials but contains several innovative features to improve the living conditions of its inhabitants. Examples are a low-cost water filtering system based on sand filtration along with a stove that can burn for longer using less wood or charcoal and the use of solar energy. The land around the house is organized as a traditional Khmer vegetable garden, but instead of growing the usual local

vegetables, it will produce Western vegetables such as lettuce, cauliflower, carrot, basil, and Italian tomato, etc. These items can supply the high-class hotels and restaurants in Siem Reap, which are currently imported from neighboring countries. Fruit trees and flowers are also planted and supported by a small agricultural station for compost making. Behind the house will be a pond for raising fish. The branches of trees collected from their garden can be used as firewood for cooking, giving villagers an alternative to cutting trees in Angkor Park.

Picture 5.5.2: Khmer Habitat Interpretation Center (KHIC)



Source: APSARA National Authority, 2020.

The establishment of (KHIC) is to attract tourists and enhance their visit to understand and experience the locals' way of life. Moreover, villagers can learn about the innovative features of the house and its gardens. With assistance from APSARA technical staff, locals can learn how to grow Western vegetables or raise fish on their land. In addition, starting from this area, APSARA National Authority had organized new tourist itineraries to visit Srah Srang and Rohal

villages, with all benefits distributed directly to the communities. This simple model could encourage the local people to make extra income, instead of selling out their land. This project will play a greater role in safeguarding the heritage, sustaining the development of Angkor Park, enhancing the natural environment, and reducing the poverty of the communities living inside Angkor Park.

5.5.3 Co-operation Projects for Sustainable Tourism Development

Angkor Community Heritage & Economic Advancement (ACHA)

ACHA is a cooperation project between APSARA National Authority and New Zealand Foreign Affairs & Trade Aid Program. To protect the park and use the resources sustainably, the project has set its own goal to offer sustainable management of Angkor Park, protecting heritage while providing economic prosperity and food security for the people who live within the parks. Here are the three outputs to be described in detail below:

1. Village Economic Advancement by heritage, tourism, and other economic activities supported in villages, non-farming economic activities such as small and micro-enterprises, and food production will be supported by the community Liaison Team (CLT).

2. Capacity and Engagement Park Stakeholders: engaged and trained CLT and APSARA capacity is developed by local sub-consultants, and international Technical Assistance (TA). The capacity of CLT and APSARA to manage the park (e.g. CLT as park Ranger) will be developed through a study

tour and training in Cambodia. Other international TA will be provided as requested by the Projects' Technical Committee.

3. Natural Resource Management: natural resources will be managed and infrastructure developed. Water structures are built and ancient hydraulic systems rehabilitated. Participatory land-use planning and land registration. It will also provide solar-powered units to communities. Finally, funding will be provided for community reforestation and other natural resource initiatives in the park.

Kut So Community-based Tourism

Kut So Community-based Tourism Development Project was established by APSARA National Authority and New Zealand Foreign Affairs & Trade Aid Program in 2009. The project has offered various tourism services and activities such as local ox-cart tours, and tracking tours to see the local handicrafts and way of life of the locals in the protected area of Angkor Park. It aims to enhance the direct income from tourism to the local community in the protected area of Angkor Park such as Rohal and Srash Srang North, Srash Srang South, and Krovan Village, in Sangkat Nokor Thom, Siem Reap City.

Establishment of Banteay Srey Community Tourism (BSCT)

(BSCT) was established by people from Banteay Srey and Toul Kralanh village in 2012. The purpose is to conduct boat rides and fishing activities for visitors in the Srae Prey Lake situated the North of Bantey Srey Temple. The project was supported by APSARA National Authority, and New Zealand as part of the Angkor Participatory Natural Resource Management and Livelihood Program

(APNRM&L). All aspects of the tour are run and managed by the community to provide extra income to local people. The initiative of (BSCT) is set up by the community and for the community. It aims to provide benefits to locals living around the temples of the protected area of Angkor. The project has established three more alternative circuits as optional tours besides the Banteay Srey Temple. The two target villages to be benefited from this project are Banteay Srey and Tuol Kralanh communities.

Picture 5.5.2: (B) Banteay Srei Community Tourism (BSCT)



Source: APSARA National Authority, 2018.

Local villagers can benefit from the community development fund in many ways. They can get paid for the local school, English classes, and or for upgrading local infrastructures. It is good to get tourists being in direct contact with locals so that the community can benefit directly and experience the local services.

Community-based Tourism Development in Baray Reach Ta-dark

The community-based tourism development project in Baray Reach Ta-Dark was established in 2013 by APSARA National Authority. It aims to enhance the direct income from tourism to the locals living in the protected area of Angkor Park. APSARA National Authority has organized various tourism services and activities such as local tracking tours, boat tours to view the floating forest, wild birds, natural landscape, and cultural tours to see the way of life of the local community in Leang Dai, Plung Village of the Angkor protected areas.

Picture 5.5.2 (C): Reach Ta-dark Community-based Tourism



Source: APSARA Authority, 2019.

Establishment of Run Ta-Ek Eco-Development Project

Run Ta-Ek Eco-Development Projects is a Cambodian Government Project run under APSARA National Authority. It was established in 2016 to resettle the new couple of the local villagers from the protected area of Angkor Park to live in this village to minimize the high population in the protected area. The project has reserved 1012 hectares of land which can accommodate 850 new families.

Picture 5.5.2 (D): Run Ta-Ek Eco-Development Project



Source: APSARA Authority, 2019.

Recently, 103 families benefited from this village, and they have already been living in this new village since 2016. The projects plan to take 80 new families to live in this village every year until 2020. For new couples, who are willing to live in this new development project, the Royal Government of Cambodia has supported offering free housing land, farming land, construction materials for house building, and seeds for growing, animals, and plants. Moreover, to facilitate the resident's living, APSARA National Authority has built basic infrastructures such as a small pagoda, a primary school, many roads in the village and plantation garden, pond restoration, well diggings, solar power equipped for public roads. To enhance their living standard, APSARA National Authority has also set up five homestay models, one restaurant, one model of Khmer house with vegetable and flower garden, and employed locals to work on-site training related to the agricultural and tourism services skills.

5.6 Local Perception towards the Management of APSARA National Authority

5.6.1 Level of Local Satisfaction

Conservation and sustainable tourism development had always been claimed and put into procedure for practice. However, defining, in theory, is much easier than practicing. The present study has focused on the voice of the locals as a priority to find out about their situation, participation, opinions, challenges, requirement, and satisfaction with the management of APSARA National Authority.

Table 5.6.1: Level of local satisfaction

N*	Level of Local Satisfaction	Frequency	Percent	Subtotal
1.	Very satisfied	4	1.0	27.5
2.	Satisfied	106	26.5	
3.	Neutral	156	39.0	39.0
4.	Dissatisfied	106	26.5	33.5
5.	Very dissatisfied	28	7.0	
Total:		400	100.0	

Source: Own Survey, 2020.

According to the survey of 400 respondents, as shown in Table 5.6.1 above, it was found that there were 110 respondents, which accounted for 27.5 percent are satisfied with the management of APSARA National Authority, and only 1

percent are very satisfied. While 134 respondents, which accounted for 33.5 percent, are dissatisfied, and other 28 of them, which accounted for 7 percent, are very dissatisfied. The study also found that 156 respondents, which accounted for 39 percent, did not want to express their personal opinion, but from eye observation, they intended to feel dissatisfied with the management of APSARA National Authority but pretended to answer neutral.

5.6.2 Local Request to the APSARA National Authority and the Government

Regarding the level of local satisfaction with the management of APSARA National Authority, the result seemed to be negative. Hence, it is good to know the reason for not being satisfied and learn about what they want to provide feedback to the APSARA National Authority. Table 5.6.2 (A) showed that 219 out of 400 respondents, which accounted for 54.8 percent, wanted the APSARA National Authority to formulate specific guidelines, which are not too strict for small shop constructions and upgrade the administration procedure, which is applicable and responded to the need of the local. Other 80 respondents, which accounted for 20.1 percent, wanted the APSARA National Authority to formulate a specific law for the use of agricultural land in such a way that locals can grow vegetables or fruits on their land. Similarly, 71 respondents, which accounted for 17.8 percent, supported having the law of protection, where the procedure should only be strictly applied to outsider residents but less restriction on locals, and 16 respondents, which accounted for 4 percent, seem to have no idea about the management of APSARA National Authority.

While 14 respondents, which accounted for 3.6 percent, requested to improve the administration process, hospitality, and information services to locals. Overall, the majority of the respondents in Nokor Krav Community Village were not happy with the management of APSARA National Authority for being too strict in the implementation of the law of protection. Therefore, the locals in Nokor Krav Community requested APSARA National Authority upgrade the procedure and set clear guidelines for specific types of land use in such a way that can serve the benefit of residents and also can conserve the image of Angkor Park.

Table 5.6.2 (A): Local's request to APSARA National Authority

N*	Local's Request to APSARA National Authority	Frequency	Percent
1.	Formulate specific guideline which is not too strict for small constructions.	219	54.8
2.	Formulate the specific procedure for agricultural land use (rice farm and plantation)	80	20.1
3.	Regulation should apply to outsider residents only, but give more freedom to the locals	71	17.8
4.	No idea	16	4.0
5.	Improve administration process, hospitality, and information services.	14	3.6
Total:		400	100

Source: Own survey, 2020.

Learning about the locals' opinions on how to improve their living standards is very important because the locals themselves know what they need and what

the villagers want. However, not all requests must be 100 percent responded to. They are just the hints and the keys for planners and decision-makers to unlock the problem and pieces of information to report to the government. In this study, as shown in Table 5.6.2 (B), among 400 respondents, there were 145, which accounted for 36.3 percent, requested the Royal Government of Cambodia to establish high school and vocational training centers for international language skills, computer, handicraft, agricultural skills in the village. Other 123 respondents, which accounted for 30.8 percent, requested the government create a health care center and provide health care services for the aged people in the village. While 71 respondents, which accounted for 17.8 percent, requested to review the law of protection, which is responding to build the local income and set clear guidelines for land use in Angkor Park, and it must not be too strict. Moreover, 48 respondents, which accounted for 12.1 percent, requested the Royal Government of Cambodia to create a local market for selling local products in the village so that tourists know where to buy, and the locals can also benefit directly from tourists visiting their village and it is also important to minimize the cost of expense for traveling to sell their products in the city. Moreover, they also request a banking system to be available in the village so that it is easy for business communication between locals and tourists. While the other 13 respondents, which accounted for 3.3 percent, requested the local authorities improve their administration system. They must be fair, transparent, and informative in providing IDPoor (Identification card for the Poor) to the real poor family.

Table 5.6.2 (B): Local's request to the Royal Government of Cambodia

N*	What is your request to the government?	Frequency	Percent
1.	Established high school, and vocational training centers for different skills.	145	36.3
2.	Health care center and free health care services	123	30.8
3.	Review the law of protection	71	17.8
4.	Local market and banking system.	48	12.1
5.	IDPoor must be fairly given to real poor family	13	3.3
Total:		400	100

Source: Own survey, 2020.

5.7 Conclusion

In conclusion, this chapter described the data analysis and discussion the findings. The Management of the Angkor by APSARA National Authority has brought some significant impacts on Nokor Krav Community Village such as cultural survival and local pride, the opportunity for making incomes for the local people, protection from the invasion of migration of outsiders, security, and safeguarding, enhancement of awareness and education, an opportunity for receiving support for their basic needs from tourists and obtaining a free piece of land in Run Ta-Ek Eco-village from the government.

Nokor Krav Community Village, in particular, has been challenged by many factors, which are concluded into five factors. The first is a low level of education. Second, the jobless people in the family, which includes the family of more children, aged and sick persons. Third, the lack of farmland and fewer economic activities. Locals in Nokor Krav Community Village were farmers for generations. Therefore, they are not skillful in doing business. Being farmers, most of them are dependent mainly on the rice crop from their farms and the natural resources available in the Angkor forest. Unfortunately, they have limited farmlands, and APSARA National Authority has also prohibited the Angkor forest. Fourth, sickness and debt problems. Fifth, the law of protections has a limited opportunity for the locals to make additional incomes for their living such as the limitation for new construction, a limitation for land selling, a limitation for land use, prohibition of some forms of traditional works, and a limitation for a specific business.

The findings on the positive impacts of the management of Angkor World Heritage on Nokor Krav Community Village by APSARA National Authority have been briefly described here.

First, regarding the local employment opportunity in Nokor Krav Community Village, 64 percent of the 400 respondents surveyed have benefited from the tourism development in Siem Reap-Angkor. It was found that 36.5 percent of

the respondents have benefited from direct jobs, 13.3 percent gained induced jobs, and 14.2 percent received indirect jobs.

Second, the result of local involvement in the conservation of the Angkor site was positive because 77 percent of the respondents support the regulation of not allowing locals to sell land to outsiders, and 73.8 percent agreed that not having new residents in their village is good. However, only 28.3 percent supported the government strategies for site protection and wanted to live in Run Ta-Ek Eco-village. Regarding the willingness to respect the law of construction, 33.8 percent of the respondents attempted to respect the law as an obligation, and 55 percent pretended to respect the law with dissatisfaction. The locals in Nokor Krav Community Village understand that the conservation of the Angkor World Heritage is compulsory. However, the application for receiving admission to the construction from APSARA National Authority seemed to be too strict, unfair, and less transparent.

Third, it was found that the living standards of the locals in Nokor Krav Community Village are low due to 76.5 percent of the respondents in Nokor Krav Community Village were living in cottages and small wooden houses, and only 22.5 percent of the respondents were living in brick and wooden houses which are considered to be in medium living standard. While only 1 percent of the locals were living in a big house with a garden which is considered to be higher in the standard of living. Overall, the results indicated a good sign of the

impact because 78.75 percent of the respondents were able to construct their houses in the period after 1993 after Angkor became a World Heritage. However, it was also found from the interview that the majority of the locals, though, their incomes are low, are secure enough to get a loan from micro finances to rebuild and maintain their house.

Fourth, there was a limited improvement in education in Nokor Krav Community Village compared to the illiteracy rate found by Sokun A. in 2006. The study found that 74.5 percent of the respondents indicated that the quality of education in Nokor Krav Community Village has improved. Moreover, the level of children's enrollment has increased from 57.2 percent based on the study by Sokun. A, in 2006 to 76.5 percent in 2020 as revealed by the findings of the present study. Similarly, the number of children having access to high school and higher education has also increased from 2.3 percent based on the study by Sokun, A. in 2006 to 16 percent in 2020 as revealed by the findings of the present study.

Fifth, the physical and mental health care support for local people in Nokor Krav Community has gained some support from the government through offering IDPoor cards, from NGOs and tourists. In some cases, though, were partly funded by the local people themselves for clean water stored at school, domestic water filter boxes, and well and toilet constructions. Overall, the physical and mental health care were still very limited due to the number of sick people and

the sources of clean water the locals consumed as 7.3 percent of the respondents were found to consume direct water from unsafe underground. The finding also revealed 5.3 percent of family violations and 3 percent of divorced families. Overall, the result of the physical and mental health care support to locals in Nokor Krav Community Village is considered to be good.

The findings on the other hand also indicated the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village by APSARA National Authority.

Firstly, infrastructure development in Nokor Krav Community Village is good. It was found that 20 percent of the total 400 respondents indicated that the road construction in their village was good, and 33.8 percent mentioned that it is good only at some specific points. Another 6.5 percent felt acceptable, while 39.8 percent requested the authority to enlarge the road. Though the result sounded acceptable, the local people still prefer to have more development for public buildings as 33.8 percent of the respondents requested a health care center, 32.5 percent suggested a high school and more vocational training centers in their village, 17.3 percent of them asked for a bank, and other 16.5 percent requested at least one community market to sell local products to tourists.

Secondly, the result of local awareness of the conservation of the World Heritage showed that only 26 percent of the total 400 respondents knew clearly about the duty and responsibility of the APSARA National Authority. Though

71.3 percent of them knew that Angkor became a World Heritage, they do not know when it was listed and even the size of the Angkor Park to be protected. Moreover, only 18 percent of them knew the meaning of the word, World Heritage. Overall, the level of local awareness of the World Heritage is very limited which reflects the ignorance of local participation in the conservation of Angkor World Heritage.

Thirdly, the result of employment accessibility of the locals in Nokor Krav Community Village seemed to be moderate. It was found that 58.9 percent of the 400 respondents can have access to low-paid jobs below USD150 per month, and 29.52 percent can have access to medium-paid jobs between (USD150 to USD300) per month, and only 9.48 percent can have access to higher-paid jobs between (USD301 to USD450). The findings also reveal that only a small minority of 2.1 percent have access to better-paid jobs of more than USD 450. The contributory factors may be related to the locals' education and experience required in the tourism industry. In the case of the locals in Nokor Krav Community Village, the findings indicated that low education with less experience in the tourism and hospitality business among the locals meant that they can only have access to low-paid jobs that do not require technical skills and fluency in foreign languages.

Fourthly, the poverty rate is a pressing issue, Nokor Krav Community Village was a poor community even before Angkor became the World Cultural Heritage and has continued to remain poor even though the village has now been

designated as part of Angkor. This is because the Laws of protection became one of the constraints for the economic development of this community. However, the findings of the present study indicated that the locals in this area have also benefited from job employment in the tourism industry and APSARA National Authority, though the majority of the jobs are low-paid. The findings of the survey revealed that 43.5 percent received IDPoor (support for the identification of poor household program, executed by the Ministry of Planning of Cambodia by giving an equity card to the household indicating its status). When compared to the national poverty line in 2007 of 47.8 percent, Nokor Krav Community Village's poverty rate has decreased to 4.3 percent in 2020.

Fifthly, regarding affordable access to qualified education and healthcare, it was found that only 28.3 percent of the respondents can afford to send their children to study in Siem Reap city but 96.75 percent of the respondents still cannot access private and or quality health care centers. Overall, the locals in Nokor Krav Community Village still have limited access to quality education and health care due to their poverty.

The Royal Government of Cambodia, through APSARA National Authority, has been committing to set different strategies to help out the locals living inside Angkor Park. The findings revealed that more infrastructures have been built and restored such as roads, bridges, dykes, mechanic boxes, drainage dams, and canals, and the West Baray irrigation systems to avoid flooding in Angkor Park and Siem Reap city, to supply water to a rice farm in Angkor Park, and to

preserve the clean water for Siem Reap City. To help reduce the difficulty of the poor locals, APSARA National Authority has established three solar power charging stations which can supply charge 114 batteries per day.

To improve the living standards of local villagers and safeguard the Angkor Heritage to be sustainable by enhancing the natural environment and reducing the poverty of Angkor Park communities. APSARA National Authority established the Khmer Habitat Interpretation Centre (KHIC) in the north of Banteay Kdei, Banteay Srey Community Tourism (BSCT) in Banteay Srey and Toul Kralanh villages, Community-Based Tourism Development in Baray Reach Ta-dark in 2013, and Run Ta-Ek Eco-development project, Angkor Community Heritage and Economic Advancement (ACHA), and Kut So Community-based Tourism. However, none of the above projects has responded to the needs of the locals in Nokor Krav Community Village. Angkor, with its massive size of 401 square kilometers has put a burden on APSARA National Authority to carry out and the contribution works of the APSARA National Authority for enhancing the livelihood of the locals inside Angkor Park have not fully benefitted the Nokor Krav Community Village.

In the democratic context of society, the voice of the locals is one of the dominant factors to report to the government. The result of locals' perception toward the management of APSARA National Authority revealed that the majority of the respondents living in Nokor Krav Community Village are not

satisfied with the APSARA National Authority for operating the strict rule of land use planning and construction. To improve the living standards, the locals in Nokor Krav Community Village have requested the Royal Government of Cambodia to establish more public buildings inside their village such as high schools, junior high schools, vocational training centers, health care centers, and community markets, and banking systems. Finally, they also request the APSARA National Authority to reform and regulate clear guidelines for land use in Angkor Park, which are not too strict and more flexible, and for the local administration to be fair and transparent, and informative.

FOOTNOTES:

- ⁴³. Tourism Police Unit is a Co-operation Unit that is under the administration of the Ministry of Interior, Royal Government of Cambodia. Address, Charles De Gaulle, Krong Siem Reap, Cambodia.
- ⁴⁴. The Borgen Project (2017, June) Why is Cambodia Poor? Retrieved on 23rd June 2021 from: <https://borgenproject.org/why-is-cambodia-poor/>
- ⁴⁵. Wikipedia (n.d.) Traditional Khmer Housing. Retrieved on 28th October 2021 from: https://en.wikipedia.org/wiki/Traditional_Khmer_Housing
- ⁴⁶. Long Nary-AKP (2021, July). Report by Minister of Public Works and Transport Sun Chanthol in Khmer Time. Retrieved on 30th October 2021 from: <https://www.khmertimeskh.com/50895581/construction-of-38-roads-in-Siem-reap-reach-66-percent/>
- ⁴⁷. Baromey Neth (n.d.) Open Edition Books, Gottingen University Press, *A Study of Tourist Revenue in the Accommodation Sector in Siem Reap-Angkor*. Retrieved on 29th October 2021 from: <https://books.openedition.org/gup/313?lang=en>
- ⁴⁸. GIZ (n.d.) Identification of Poor Households. Retrieved on 23rd June 2021 from: <https://www.giz.de/en/worldwide/17300.html>
- ⁴⁹. Education Access and Quality (n.d) Healthy People 2030. Retrieved on 26th September 2021 from: <https://health.gov/healthypeople/objectives-and-data/browse-objectives/education-access-and-quality>

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7. Lim Nary – AKP to construct 38 roads in Siem Reap city. As reported by the Minister of Public Works and Transport Sun Chanthol in Khmer Time on 17th July 2021.

8. Sokun, A. (2006), Poverty and Tourism: *A Case Study in Nokor Krav Village*. A project of Mekong Sub-region, Siem Reap, Cambodia.
9. World Bank (2019), Cambodia: Reducing Poverty and Sharing Prosperity. Retrieved on 25th October 2021 from:
<https://www.worldbank.org/en/results/2019/10/30/cambodia>

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

This chapter attempts to summarize the main findings of the present study. For this purpose, the chapter is divided into four sections. The first section deals with the main findings of the study, conclusion is placed in the second section. In the third section, the recommendations are presented, and the fourth section presents the scope for further research and concluding remarks.

6.1 Main Findings of the Study

Chapter 1: presents the introduction of the research study by introducing the historical background of Angkor to become a World Heritage, and its relation to the local economy of the surrounding areas of the temples. The problem statements have been described to provide the reasons for which Nokor Krav Community Village was chosen for this study. Since Angkor became a World Heritage, it was managed and conserved by the APSARA National Authority. To examine the impacts of the management of the Angkor World Heritage on Nokor Krav Community Village, the study has addressed the five main questions as follows:

- i. Why is the management of the Angkor World Heritage of significant importance in Nokor Krav Community Village in Siem Reap Province, Cambodia?
- ii. What are the present challenges of the locals living in the Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iii. What are the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?
- iv. What are the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia?
- v. What are the key strategies of the government towards the improvement of the livelihood of the locals living in the study area affected by the management of the Angkor World Heritage?

The present study deals with the following objectives:

- i. To examine the significant importance of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- ii. To find out the present challenges of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.

- iii. To examine the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- iv. To examine the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- v. To find out the key strategies of the government towards the improvement of livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia.
- vi. To provide recommendations for further improvements of the the livelihood of the locals living in the study area is affected by the management of the Angkor World Heritage.

The present study seeks to test the following hypotheses:

- Ho₁:** There are no positive impacts on the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.
- Ho₂:** There are no negative impacts on the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia.

Chapter 2: attempts to carry out an extensive review of the relevant literature, both conceptual and empirical concerning the impacts of the management of the world heritage site. The conceptual reviews to be summarized are related to:

- The meaning and type of “World Heritage Site”;
- The procedure of listing a heritage as a UNESCO World Heritage Site;
- The impacts of the UNESCO designation are both positive and negative.

While the empirical reviews are about:

- The meaning and type of impacts;
- The impacts of the management of the World Heritage on the local community;
- The impacts of the management of the World Heritage Site on the local community in developing and developed countries;
- Reviews the key indicators in measuring the positive and negative impacts of the management of the site on the local community.

Chapter 3: attempts to explain the methodology employed in the present study. It covers the explanation of the type of analysis, the types and sources of data, the procedure of collecting data, the sample design, statistical tools used, the coverage of the study, and the procedure of analyzing data respectively.

The study is based on two sources of data both primary and secondary. The primary data have been collected from the survey of 400 respondents selected from Nokor Krav Community Village and five key informants from APSARA National Authority and local authorities such as village leaders and commune leaders. While the secondary data have been collected from reports, and documents of APSARA National Authority, statistics documentation of the local administration, ministries, UNESCO website, libraries, tourism journals, previous research studies, and other relevant publications, both in hard copies as well as electronic ones.

To collect the primary data, 400 respondents have been selected from the study area of Nokor Krav Community Village and five key informants such as a). Nokor Krav village leader, b). Sangkat Koukchork leader, c). Three government officials from APSARA National Authority.

To select the target samples of 400 out of the total 3764 people, the Yamane equation (1967) has been used as the formula to determine the target samples for this study. The total number of 933 households recorded in the village census by the local administration of Sangkat Koukchork in 2020 was used as the sampling frame, and the villager's household was used as a sampling unit. One person in each household was used as a sample to represent each household. Those samples were selected randomly based on house structure in the village by choosing one out of every three houses. Moreover, to select the five key informants, restricted and purposive sampling has been used as

methods because they are based on the judgment of the researcher. The village leader and Sangkat leader were selected for the in-depth interview because they both are leaders who worked closely with the Nokor Krav Community Villagers and know exactly about the situation of the locals under their management. While the other three key informants were selected from three relevant departments of the APSARA National Authority because their duties are very much related to the topic under study. They were expected to be able to provide detailed information and documents about the management of the Angkor World Heritage. It is, therefore, two types of interviews have been conducted to collect the primary data. These are a) direct personal interview methods, using a structured questionnaire to survey 400 respondents; b) in-depth interview methods, using a separate checklist to interview each key informant.

To examine the Impacts of the Management of Angkor, the world heritage site governed by the APSARA National Authority, a Multiple Regression Analysis was carried out as follows: $\hat{Y} = a + \beta x_1 + \beta x_2 + \dots \beta_k + \varepsilon$ or

$\hat{Y} = a + \beta x_1 x + \beta x_2 + \beta x_3 x + \beta x_4 x + \beta x_5 + \varepsilon$. To test the hypothesis, F test statistics and P-value were also used to test for overall significance. Two computer software programs have been used as tools to analyze the data quantitatively; these include Statistical Package for the Social Sciences (SPSS), and Excel. SPSS was used as a tool for data access and preparing, analyzing, reporting, predicting, and testing the statistical model. Simple statistical

calculations such as averages, frequencies, and percentages and cross-tabulation, graphs, charts, and tables were carried out for the analysis, to some extent, Microsoft Excel has also been used as an optional tool for calculation.

Chapter 4: presents the profile of the study area of the present study, which includes the historical background of Angkor, the profile of the APSARA National Authority, and the living conditions of the local people in the Nokor Krav Community Village. A summary of the profile has been highlighted below:

(1) Historical Background of Angkor

Angkor is not Angkor Wat. Angkor is a park of 401 square kilometers, while Angkor Wat is only one of the hundred temples of Angkor Park. Angkor is more than the temples, but it is very significant as “the heart of Cambodia.” It is the symbol of the Khmer nation and its civilization. In 1992, it became the World Heritage in Danger. With the strong commitment of the Cambodian Government, managed by the APSARA National Authority, it was successfully taken out of the list of World Heritage in Danger and became the World Cultural Heritage in the list of UNESCO in 2004. With its outstanding universal value as a fabulous wonder, it became the most favorable tourist attraction in the world in 2007 on the Trip Advisor site.

(2) Background of APSARA Authority

APSARA Authority was created in 1995 to manage and conserve the Angkor Region. The term APSARA is an acronym in French (Autorité pour la Protection

du Site et l' Aménagement de la Région d' Angkor), which means Authority for the Protection of the Site and Management of the Region of Angkor. Moreover, APSARA in the Khmer language meant, celestial dancers. Today, thousands of the APSARA sculptures were presented on the walls of the temples of Angkor. Later in 2020, APSARA Authority was renamed to APSARA National Authority, which has five main missions as follows:

1. Ensure, in the region of Siem Reap-Angkor, the protection, the preservation and the valuation of national cultural property;
2. Conceive and lead the development of cultural tourism of the region of Siem Reap-Angkor;
3. Carry out sustainable development to contribute to the implementation of the policy of the Royal Government of Cambodia for poverty reduction;
4. Establish partnerships with provincial and territorial authorities;
5. Cooperate with institutions and organizations, both Khmer and Foreign, which have objectives answering the vocation of APSARA Authority and are operating in the region.

The General Department of the APSARA National Authority is led by one president and managed by one director-general and assisted by many deputy director generals and functionally operated by 14 departments. Personnel management in APSARA National Authority has been categorized into three

specific groups: the government officials, the permanent staff (staff has been employed with unlimited contract), and the contracted staff.

For conservation, APSARA National Authority has established the management zone and set the functional guidelines for a different levels of land use for each protected zone. International Coordinating Committee for the Safeguarding and Development of the historic site of Angkor (ICC-Angkor) was created in 1993, to ensure the coordination of the successive scientific, restoration, and conservation-related projects, executed by the Royal Cambodian Government and its international partners. To build a good communication network and provide transparent services to the public and local people living in Angkor Park, Service Center's APSARA-SCA was created in a form of one window service system, where the price, duration, and type of services were announced to the public. For sustainable development, APSARA National Authority has created many training courses and projects related to community-based tourism development, sustainable development, and international cooperation projects.

(3) Background of Nokor Krav Community Village

Nokor Krav Community Village is located 6 kilometers from Angkor Wat and 14 kilometers away from downtown, in Sangkat Koukchork, Siem Reap city, Siem Reap Province, Cambodia. The total population of this village is 3,764 people, which includes 933 families in 2020. Originally, the local villagers relied on rice cultivation and benefiting the natural forest of Angkor Park by collecting the resin from a tree, making resin torches, collecting the firewood, picking

seasonal wild fruits, raising plants, fishes, and animals, engaging in petty business in the district, and provincial towns. Later, when Angkor was listed with a total area of 401 square kilometers by UNESCO, Nokor Krav Community Village became part of it. The majority of traditional economic activities have been prohibited for the sake of conservation of Angkor Park as well as the Angkor forest itself. In compensation for the strict rules of the protection of Angkor, APSARA National Authority has given priority to employing locals from the protected areas of Angkor Park to work in APSARA National Authority and created several community-based tourism projects, both local and international cooperation that aim to provide benefits to local directly through tourism and hospitality services. Nokor Krav Community Village is considered to be one of the identical and indigenous Khmer communities left over after the Angkor Empire. It is not only rich in the authenticity of its own culture, traditions, beliefs, and customs but also optionally unique.

Locals in Nokor Krav Community Village still hold strong beliefs, customs, and religious activities that commonly combined both Buddhist theories with Hinduism in their daily practices. Emerging from the zero regimes of the Khmer Rouge Regime, the majority of locals in Nokor Krav Community Village have very low education. In the beginning, there was only one primary school in the middle of the village, and later in 2008, there were three more vocational training centers sponsored by Non-Governmental Organizations. Five years later in 2013, another junior high school called Bayon Junior High School was

established in the Kouk Beng Village, which bordered with Nokor Krav Community Village. It is sponsored by Joint Support Team for Angkor Community Development (JST) with the cooperation of the National Federation of UNESCO Association in Japan (NFUAJ), and technical cooperation from JASA and facilitated by APSARA National Authority. In 2016, this school has been upgraded to Bayon High School and officially recognized as a public school run under the government system.

Though the Royal Government of Cambodia has been committing to upgrade the public health care services at the provincial and communal levels by having at least one health care center in one commune. Moreover, the Cambodian Ministry of Planning has developed the "Identification of Poor Households" (IDPoor) mechanism, with support from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. It identifies poor and vulnerable households so the locals can benefit from social transfers, healthcare, and other targeted services. The majority of the Nokor Krav Community Village, with no alternatives, have to travel to the commune health care center, about 10 kilometers away from the village, and or seek free medical consultations or treatments at the provincial hospitals. Regarding the hygiene of drinking water, locals in Nokor Krav Community Village have consumed different sources of water such as clean water from school, water from personal filters, boiling water, water from the underground, and drinking water bought from the markets. Notably, there was no water supply network available in this village.

Therefore, all villagers pumped the water from the underground for their daily consumption. Regarding the toiletry facilities, it was found that 92 percent out of 933 households have at least one toilet. Nokor Krav Community Village is not only part of the Angkor World Heritage but also potentially has plenty of resources that can attract tourists. These include the pristine rain forests, wildlife, local cultures, festivals, rituals, and the other four historic temples such as Banteay Thom, Tropeang Virn, Chann Ta Oun temple, and Tole Sngout temple.

Chapter 5: presents all findings of the research project, which response to the research objectives. Firstly, the significant importance of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia. Secondly, the constraint factors for poverty and the current issues that affect the living standard of the locals in Nokor Krav Community Village in Siem Reap Province, Cambodia. Thirdly, the presentation of findings related to the five indicators to measure the positive impacts of the management of Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia. Fourthly, additional presentation of the findings related to another five indicators to measure the negative impacts of the management of Angkor World Heritage on Nokor Krav Community Village. Fifthly, the strategies of the government and or APSARA National Authority towards the improvement of livelihood of the locals living in Nokor Krav Community Village in Siem Reap Province, Cambodia. Sixthly, local perception

toward the livelihood improvement of the locals in Nokor Krav Community Village, their suggestions and requests to the government and or APSARA National Authority. The summary of the main findings of the present study is presented below:

i. Nokor Krav Community Villagers are locals whose ancestors were probably the builder of Angkor and generated from the Khmer Empire. They have a family size of five to six members. They are very family-oriented and prefer to marry the locals Khmer villagers of the same region because they can live close to their parents and share the same culture. The majority of the housewives have no education and stay home to take care of their children and sick parents.

ii. The Management of the Angkor World Heritage by APSARA National Authority has brought some spiritual significant impacts on Nokor Krav Community Village. These include the survival of local culture and pride, the protection from the invasion of migration of outsiders, security, and safeguarding, and the enhancement of local awareness, and education.

iii. The significant impacts of the management of the Angkor World Heritage by APSARA National Authority related to the economic benefits to locals in Nokor Krav Community Village are the opportunity for making incomes from tourists, job employment in APSARA National Authority, jobs in the tourism industry of the Siem Reap-Angkor, receiving supports for their basic needs from

tourists, and receiving a piece of land in Run Ta-EK Eco-village from the Royal Government of Cambodia.

iv. Nokor Krav Community Village, in particular, has been challenged by five main factors low level of education, more jobless people in each family, more sickness and debts, and the constraints of the law of protection which include the limitation of new construction, land selling, land use, some forms of traditional works, and some specific business activities.

v. Nokor Krav Community Village has benefited from employment opportunities in tourism. The result found that 64 percent of the 400 respondents surveyed have benefited from the tourism development in Siem Reap-Angkor. Those include 36.5 percent have received direct jobs, 13.3 percent gained induced jobs, any jobs resulting from the development of the tourism industry, and 14.2 percent received indirect jobs in tourism which refer to any jobs indirectly created by tourism, arising from the spending of money by residents from their tourism incomes.

vi. The result of local involvement in the conservation of the site was positive because 77 percent of the respondents support the regulation of not allowing locals to sell land to outsiders, and 73.8 percent agreed that not having new residents in their village is good. However, only 28.3 percent supported the government strategies for site protection and wanted to live in Run Ta-Ek Eco-village.

vii. The result related to the locals' willingness to respect the construction law was negative because 33.8 percent of the respondents attempted to respect the law as an obligation, and 55 percent of the respondents also pretended to respect the law with dissatisfaction. In addition, the locals in Nokor Krav Community Village also believed that the conservation of the Angkor World Heritage is compulsory. However, the application for receiving admission to the construction from APSARA National Authority seemed to be too strict, unfair, and less transparent.

viii. The living standards of locals in Nokor Krav Community Village have slightly increased after listing Angkor as a World Cultural Heritage as measured by the condition of the local's house and the period of its construction. The survey found that 76.5 percent of the 400 respondents in Nokor Krav Community Village were living in cottages and small wooden houses, and 22.5 percent of the respondents lived in brick and wooden houses, which are valued at medium standard. Only 1 percent of the locals lived in a big house with a garden, which is considered to be higher and richer. Regarding the period of its construction, the result indicated a good sign of economic improvement because 78.75 percent of the respondents were able to construct their houses after 1993. It was in the period after Angkor became a World Heritage. However, with their low-paid income, the locals have been putting their efforts to secure loans from micro finances to rebuild and maintain their houses.

ix. The study indicated that 74.5 percent of the 400 respondents mentioned that the quality of education in Nokor Krav Community Village has improved. Moreover, the level of children's enrollment has increased from 57.2 percent based on the study by Sokun. A, in 2006 to 76.5 percent in 2020 as revealed by the findings of the present study. Similarly, the number of children having access to high school and higher education has also increased from 2.3 percent based on the study by Sokun, A. in 2006 to 16 percent in 2020 as revealed by the findings of the present study.

x. The result of the physical and mental health care support was good because 64 percent of the 400 respondents received support for clean water, water filter, well and toilet construction, and IDPoor Cards (for getting free healthcare services from several specific hospitals and clinics) from the government. Additionally, regarding hygiene and clean water consumption, the study found that 83.6 percent of the respondents consumed the clean water brought from school, using their filter, and drinking water bought from the market, and the other 9.3 percent consumed boiled water. Only 7.3 percent of the locals use unsafe water which was pumped directly from the underground. The finding also revealed 5.3 percent of family violations and 3 percent of divorce families, which is very low.

xi. The result of infrastructure development in Nokor Krav Community Village is fairly good. Due to the survey on 400 respondents, 20 percent of them indicated that the road construction in their village was good, and 33.8 percent

mentioned that it is good only at some specific points. Another 6.5 percent felt acceptable, while 39.8 percent requested the authority to enlarge the road. Regarding the development of public buildings and infrastructure, 33.8 percent of the respondents requested a health care center, 32.5 percent suggested a high school and more vocational training centers in their village, 17.3 percent of them asked for a bank and the other 16.5 percent requested a least one community market to sell local products to tourists.

xii. The level of local awareness on the conservation of the World Heritage seemed to be limited. The result showed that only 26 percent of the total 400 respondents knew clearly about the duty and responsibility of the APSARA National Authority. Though 71.3 percent of them knew that Angkor became a World Heritage, they do not know when it was listed and even the size of the Angkor Park to be protected. Moreover, only 18 percent of them knew the meaning of the word, World Heritage. Overall, this low level of local awareness of the World Heritage reflects the ignorance of local participation in the conservation of Angkor World Heritage.

xiii. Locals in Nokor Krav Community Village have limited access to high-paid jobs in the tourism industry. The results of the survey of the 400 respondents found that 58.9 percent of them can only have access to low-paid jobs of below USD150 per month, 29.52 percent can have access to medium-paid jobs of between (USD150 to USD300) per month, and only 9.48 percent can have access to higher-paid jobs of between (USD301 to USD450) per

month. The findings also reveal that only a small minority of 2.1 percent have access to better-paid jobs of more than USD450 per month. The contributory factors may be related to the locals' education and experience required in the tourism industry. The findings indicated that low education with less experience in the tourism and hospitality business among the locals meant that they only have access to low-paid jobs that do not require technical skills and fluency in foreign languages.

xiv. Nokor Krav Community Village was a poor community even before Angkor became the World Cultural Heritage and has continued to remain poor even though the village has now been designated as part of Angkor. This is because the law of protection became one of the constraints for the economic development of this community. However, the present study indicated that the locals in this area have benefited from low-paid jobs in the tourism industry and APSARA National Authority. The survey of the 400 respondents revealed that 43.5 percent received IDPoor (support for the identification of poor household program, executed by the Ministry of Planning of Cambodia by giving an equity card to the household indicating its status) compared to the national poverty line in 2007 of 47.8 percent, Nokor Krav Community Village's poverty rate has decreased to 4.3 percent in 2020 as revealed by the present study in 2020.

xv. The locals in Nokor Krav Community Village still have limited access to quality education and health care due to their poverty. The present study found that only 28.3 percent of the 400 respondents can afford to send

their children to study in Siem Reap city, and only 11.5 percent can access the private clinics in Siem Reap town, hospitals in Phnom Penh, and very few exceptional cases to the neighboring countries.

xvi. To assess the positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village quantitatively, a Multiple Regression Model was used to test the first hypothesis. The regression result was found to be significant at a 5 percent level of significance ($F = 4.428$, $\text{Sig.} = 0.001$). The ($R^2 = 0.053$) revealed a 5.3 percent variation in the dependent variable, $\hat{Y}$ = Male and female is a dependent variable represents the locals impacted positively from the Management of Angkor (PI), was due to the five indicators: X_1 = Local Employment Opportunity (EO), X_2 = Level of local involvement in Conservation of the site (LC), X_3 = Housing Condition (HC), X_4 = Education Improvement (EI), and X_5 = Physical and Mental Healthcare Support (HS) had significant impacts on the local people in Nokor Krav Community Village. Though X_4 = the Education Improvement and X_5 = Physical and Mental Healthcare Support had no significance on the dependent variable, overall, the first null hypothesis "*Ho₁: There are no positive impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

xvii. To assess the negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village quantitatively, a Multiple Regression Model was also used to test the second hypothesis. The regression

result was found to be significant at a 5 percent level of significance ($F = 9.33$, $\text{Sig.} = 0.001$). The ($R^2 = 0.110$) revealed that 11 percent variation in the dependent variable, $\hat{Y}$ = male and female is a dependent variable represents the locals impacted negatively from the Management of Angkor (NI) was due to the five indicators: X_1 = Infrastructure development (ID), X_2 = Level of local awareness on the conservation of the site, X_3 = Employment accessibility, X_4 = Poverty Rate, and X_5 = Affordable access to quality healthcare and education). Though Infrastructure Development and Poverty Rate had no significant impact on the dependent variable; overall, the second null hypothesis "*Ho₂: There are no negative impacts of the management of the Angkor World Heritage on Nokor Krav Community Village in Siem Reap Province, Cambodia*" is rejected.

xviii. Based on the above results, the two null hypotheses have determined that there were both positive and negative impacts of the management of Angkor by APSARA National Authority on the local people in the Nokor Krav Community Village. The positive impacts were related to local employment opportunities, level of local involvement in the conservation of the site, and improvement of the housing conditions. While the negative impacts were related to the level of local awareness on the conservation of the site by APSARA National Authority, employment accessibility, and affordable accessibility to quality healthcare and education.

xix. Regarding the key strategies of the government and or the APSARA National Authority toward the improvement of livelihood of the locals

living in Nokor Krav Community Village in Siem Reap Province, Cambodia. APSARA National Authority has built and maintained more infrastructures. These include roads, bridges, sluices, mechanic boxes, drainage dams, dykes, and canals, stations of solar power chargers, and West Baray irrigation systems in the different parts of Angkor Park. The APSARA National Authority focused on improving the living standards of local villagers and safeguarding the Angkor World Heritage to be sustainable by enhancing the natural environment and reducing the poverty of Angkor Park communities. It has established the Khmer Habitat Interpretation Centre (KHIC), Banteay Srey Community Tourism (BSCT), Community-Based Tourism Development in Baray Reach Ta-dark, and Run Ta-Ek Eco-development Project, Angkor Community Heritage and Economic Advancement (ACHA), a cooperation project between APSARA National Authority and New Zealand Foreign Affairs & Trade Aid Program, and Kut So Community-based Tourism. However, none of the above projects has responded to the needs of the locals in Nokor Krav Community Village. Angkor, with its massive size of 401 square kilometers has put a burden on APSARA National Authority to carry, and the contribution works of the APSARA National Authority for enhancing the livelihood of the locals inside the Angkor Park have not fully benefitted the Nokor Krav Community Village.

xx. Concerning the perceptions toward the management of the APSARA National Authority, the findings revealed that the majority of the respondents living in Nokor Krav Community Village are not satisfied with the APSARA National Authority for the strict rule of land use planning and

construction. Most of them request the APSARA National Authority to reform and regulate clear guidelines for land use in Angkor Park, which are not too strict and more flexible, and the local administration must be fair, transparent, and informative.

xxi. To improve the living standard of local people in Nokor Krav community Village, the local people have also requested the Royal

Government of Cambodia to:

- establish more public buildings inside the village such as high schools, vocational training centers, health care centers, and community markets;
- provide training skills on the computer, international languages, handicrafts, and modern agriculture;
- reformulate clear guidelines with its procedure for land use (housing, farming, and plantation land) inside Angkor park;
- improve the local administration to be transparent and fairly treated everybody to be equal.

6.2 Conclusion

In conclusion, the management of the Angkor World Heritage by APSARA National Authority has brought both positive and negative impacts on locals in Nokor Krav Community Village. The significant impacts were intangibly related to cultural survival, local pride, preservation of the origin of the locals,

security, safeguarding, and protection from the invasion of new outside residents. From the economic perspective, 64 percent of the locals in Nokor Krav Community Village have benefited from job employment in the tourism industry and APSARA National Authority. Though the majority of them can have access only to low-paid jobs due to the low level of their education. This, however, provides an opportunity for the villagers to seek employment to earn additional income. The level of local involvement in the conservation of the Angkor was positive due to the positive attitude of their original culture.

The study also found an improvement in the housing conditions, though, to some extent, the locals still get some loans for the construction but at least, it was better than the period before 1993 when Angkor has not yet become a World Heritage. On the other hand, the study also found the negative impacts of the management of Angkor World Heritage on Nokor Krav Community Village by the APSARA National Authority. As mentioned earlier, the majority of the locals in Nokor Krav Community Village have participated in the conservation of the site. However, the level of their awareness of the World Heritage was still limited due to the low level of their education, and maybe the information shared with locals by the APSARA National Authority is not enough causing them not to realize the management and responsibility of the APSARA National Authority and the value of the Angkor World Heritage. Most of them respected the law just for the sake of obligation rather than from their understanding with personal commitment.

The present study revealed that 58.9 percent of the respondents in Nokor Krav Community Village obtained low-paid jobs of below USD 150 per month and 29.52 percent gained jobs of below USD300 per month. While only 11.58 percent can have access to jobs of above USD300 per month. Regarding the level of poverty rate, it was found that 43.5 percent of the 400 respondents remained poor in 2020 compared to the national poverty line of 47.8 percent in 2007, Nokor Krav Community Village's poverty rate has decreased to 4.3 percent. Besides, it was also found that only 31.3 of the respondents in Nokor Krav Community Village can afford to send their children to qualified education and access to private and or quality health care centers in Siem Reap town. Originally, Nokor Krav Community Village was a poor community even before Angkor became the World Cultural Heritage and has continued to remain poor even though the village has now been designated as part of Angkor.

The present study also found five main factors which lead to poverty that impact this particular village due predominately to the low level of education, more jobless people, more sickness and debts, and later being challenged with the law of protection of the Angkor World Heritage Site.

In response, APSARA National Authority has committed to restoring the ancient infrastructure and further developing extra roads, bridges, dykes, solar power stations, community-based tourism attractions, and eco-development projects in Run Ta-Ek to enhance livelihood of the local

community living in Angkor Park. However, none of the above projects has responded to the needs of the local people in Nokor Krav Community Village. Angkor, with its massive size of 401 square kilometers has put a burden on APSARA National Authority to carry, and the contribution works of the APSARA National Authority for enhancing the livelihood of the locals inside Angkor Park have not yet responded to the need of the local in Nokor Krav Community Village. In regards to the perceptions toward the improvement of the livelihood of the locals, the majority of the respondents have requested the Royal Government of Cambodia to provide training skills, establish more public buildings, reformulate clear guidelines with its procedure for land use (housing, farming, and plantation land) inside Angkor park and improve the local administration to be flexible, fair and transparent.

6.3 Recommendations

Conservation does not mean to say "NO" but rather to say "HOW". In the same way, for the sake of conservation of Angkor Park, and the preservation of authentic Khmer culture of the original locals in Nokor Krav Community Village, prohibition is not the only way to do it but rather how we can deal with it and find out the best solution where Angkor Park has been preserved and local people can also benefit from the management of Angkor, the World Heritage Site. Based on the above findings of the study and requests from the local community in Nokor Krav Community, the following recommendations are

made to enhance the livelihood of the locals in Nokor Krav Community Village as below:

- i. APSARA National Authority should regulate a standard model for space management of the housing land inside Angkor Park by turning the model of **the Khmer Habitat Interpretation Center** into practice. Nokor Krav Community Village is part of Angkor Park, so the locals' houses are also part of the Angkor Monuments, which are attractive to tourists.
- ii. APSARA National Authority should allow locals living in Angkor Park especially, the Nokor Krav Community Village to offer services in their own homes to tourists in such a way that is not harmful to the image of Angkor by following the technical guidelines of the APSARA National Authority.
- iii. APSARA National Authority should regulate a standard guideline for plantation land use in which the identical trees are well preserved, but the locals can still use the allocated land to grow wild fruits or even vegetables. To preserve the existing identical trees of Angkor forest, APSARA National Authority should do tree inventory and set the penalty regulation for tree cutting. The locals should be encouraged and supported with technical assistance to grow new wild fruit trees for conservation as well as for economic benefits to earn extra income from selling these wild fruits.

- iv. To avoid the conflict of interest, APSARA National Authority should expedite the land mapping of the Angkor Park Project to be completed as soon as possible. More practical guidelines and advanced monitoring systems should be applied. The land title should be coded in such a way to provide freedom for economic activities to locals who reside in this particular village but under the specific monitoring guidelines of the APSARA National Authority.
- v. APSARA National Authority has limited some of the local's economic activities and new constructions due to the law of protection. In return, to compensate for the loss and enhance the living standard of locals in the protected area of Angkor Park, APSARA National Authority should provide more training courses and skills for the locals related to tourism and services to enable them to earn some additional incomes from the tourists.
- vi. APSARA National Authority has already employed many locals living in Angkor Park as workers in the temples, both permanent and temporary. However, most of the jobs were only low-paid and temporary. APSARA National Authority should therefore prioritize by giving preferences on employing the locals for higher-paid jobs to work permanently both in the office and on the site of Angkor Park.
- vii. The Royal Government of Cambodia, through APSARA National Authority, has spent so much money and effort to conserve and

restore the Temples of Angkor (the Tangible Cultural Heritage). Similarly, the locals living inside Angkor Park, especially the Nokor Krav Community Village, are also (the Living and Intangible Cultural Heritage), whose living standards needed improvement. Therefore, the Royal Government of Cambodia should pay more attention to these locals, by enforcing APSARA National Authority to regulate the applicable guidelines of the law of protection in such a way responding to the real needs of the locals in the Nokor Krav Community Village. These include the irrigation system for rice cultivation and plantation, the promotion of education, the integration of the technology and communication network, health care facilitation, and public infrastructure development.

- viii. The Royal Government of Cambodia should upgrade the quality of education for the locals in Nokor Krav Community Village to minimize the parents' spending on transportation for their children. It is envisaged that a junior high school, a high school, and vocational training centers be built inside the village for this aforesaid purpose.
- ix: The Royal Government of Cambodia should provide free basic training courses to children and adults in Nokor Krav Community Village on international languages, computer, and business skills in tourism and hospitality for obtaining jobs in the tourism industry more effectively. Similarly, training in handicraft skills should be given

to elderly women and housewives to help them earn extra income for the family by selling their handicrafts to tourists.

- x. The Royal Government of Cambodia should establish one community market for Nokor Krav Community Village so that the local people can have the opportunity to sell their products such as local fruits, wild fruits, vegetables, meats, handicrafts, and other local products directly to tourists who visit and or pass through their village. The one-community market will also act as a wholesale distribution center for supplying fresh vegetables, fruits, and other local produce to the tourism industry in the city.
- xi. The Royal Government of Cambodia should establish one health care center inside the Nokor Krav Community village so that the locals can have access to it easily, as this will save time, money, and life in the case of an emergency.

6.4. Scope for Further Research and Concluding Remarks

Based on the limitations of the present study as mentioned in Chapter I, the positive and negative impacts of the management of the Angkor World Heritage have been confined to the period of 2018 to 2020 only. The positive impacts were measured based on the five main indicators: (1) Employment opportunity; (2) Level of local involvement in the conservation of the site; (3) Housing

condition; (4) Education improvement; (5) Physical and mental Healthcare Support.

Similarly, the negative impacts were measured based on another five indicators: (1) Availability of infrastructure development; (2) Level of local awareness of the conservation of the Angkor World Heritage; (3) Employment accessibility; (4) Poverty rate; and (5) Affordable access to quality healthcare and education only.

The present study is a case study rather than a country-wide representative. It predominantly covered only one specific Nokor Krav Community Village, the only one of the 112 village communities of Angkor Park, which bordered Kouk Tachan village in the South, Kouk Kreoul village in the North, Plung village in the East, and Kouk Beng village in the West in Siem Reap Province, Cambodia for the study. Hence, the study has considered selecting 400 respondents as the sample population from the entire population of 3, 764 people in Nokor Krav Community Village. The selected respondents have represented the study area of Nokor Krav Community Village only. Therefore, this in itself is another limitation.

Moreover, to analyze both the positive and negative impacts, the study has also used secondary sources of information based on the availability of data. Therefore, the known limitations applicable to the secondary resources are quite applicable to the present study.

A further limitation can be attributed to the fact that the present study had only measured the level of local employment based on the various types of jobs related specifically to tourism, that is, jobs that the villagers' livelihoods are dependent predominately on tourism and, excluding other types of jobs that are not related to tourism. Hence, it is a limitation as the study did not measure all types of jobs that might provide a more accurate perspective of the villagers' employment in the study area.

Further, it did not attempt to cover all aspects of the APSARA National Authority's management tasks. But rather to study only the key factors, which could affect the living standards of the local people in Nokor Krav Community Village both positively and negatively. The limitation is narrow to interpret the impact of the management of the Angkor World Heritage by APSARA National Authority on Nokor Krav Community Village that is based mainly on the benefits the locals received from the development of tourism in Angkor as measured by the aforesaid ten study indicators.

A final limitation is that the present study aims to find out the negative impacts attributed by the management for the conservation of Angkor, the World Heritage, governed by the APSARA National Authority. However, due to the insufficiency of the primary data collected as a result of the COVID-19 pandemic, the data collection period from February 2019 to 2020 was disrupted. Due to the sudden emergence of this pandemic, the questionnaire survey and the interviews conducted are somewhat affected by the pandemic as the respondents are

reluctant to meet with the researcher and her team. Particularly, the interview being carried out with the selected respondents have met with a rather considerable low rate of turnouts. This is a limitation as the data collected during the aforesaid period may affect the overall findings of the present study.

The scope for further research is presented below:

- i. Further research of this same topic in other village communities of Angkor Park.
- ii. Further study on the impacts of tourism on the host community.
- iii. Further study on the impacts of becoming a World Heritage Site.
- iv. Local perceptions towards the development of tourism in Siem Reap-Angkor.
- v. Role of residents living in Angkor Park and their participation in sustainable tourism development in Angkor-Siem Reap, Cambodia.

Thus, the limitations of the present study have provided insights for further research in this field. Overall, the present study has attempted to examine the impacts of the management of Angkor on Nokor Krav Community Village as one of the case studies. It aims to support academics, researchers, planners and policy-makers, key stakeholders, and other governmental relevant bodies to use it as guidelines to formulate the regulations and implementation as well as for decision making. It is also feedback to report to the APSARA National Authority as this particular study area, Nokor Krav Community Village is part of the Angkor Park, there are potential benefits to further improve the livelihood of the locals in the study area. Thus, it is believed and hopeful that the APSARA

National Authority and all relevant stakeholders will put in their concerted efforts in a coordinated way to ensure conservation is made for the sustainable development and the standard of living of the original locals of Angkor Park especially, Nokor Krav Community Village has been enhanced. In other words, People, Temples, and Nature are safely living together in peace and harmony.

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APPENDICES

Appendix 1: Cover letter & Questionnaire Survey Part I & 2

Dear Respondents,

I am presently a doctoral candidate at Build Bright University, Siem Reap Campus. As a requirement for completing my doctor of philosophy degree, I am presently conducting a survey on the topic **"Examining the Impacts of the Management of Angkor World Heritage on Nokor Krav Community Village in Siem Reap, Cambodia"**. I have also obtained written permissions from BBU University, Siem Reap Campus.

You are chosen randomly from the list of the census of Commune Administration documents. The purpose of this survey is **to examine the impacts of the management of Angkor World Heritage on Nokor Krav Community Village in Siem Reap, Cambodia**. The survey is beneficial for identifying the impacts, both positive and negative on the host's living in the Nokor Krav community village as well as the local people living in the protected area of Angkor Park. Your completion of the questionnaire survey will be most useful for the present study.

I would, therefore, appreciate it very much if you could be kind enough to participate in this survey by completing the attached questionnaire and to be followed up with a personal interview. Please also be informed that this survey is only for my academic research and individual responses will be treated as strictly confidential. All other aspects of this research will be conducted strictly following Build Bright University's Research Code of Conduct.

Please kindly read the questions carefully and answer them according to how you feel about them and there are no right or wrong answers. For the research to be meaningful, it is very important that you complete all the questions in the survey.

Please kindly return the completed questionnaire to me.

Yours sincerely,

Sokun Ang

cc: Build Bright University, Siem Reap Campus
Head, Graduate School Office, Build Bright University, Siem Reap Campus.
Attached is: Letter of Permission from Build Bright University, (BBU).

Questionnaire Survey on “Examining the Impacts of the
Management of the Angkor World Heritage on Nokor Krav
Community Village, Siem Reap Province, Cambodia.”

LOCAL COMMUNITY IN NOKOR KRAVE COMMUNITY VILLAGE,
SIEM REAP CAMBODIA

(Respondent-filled Questionnaires)
PART I

Date of interview:

Respondent ID:

SECTION A: Respondent Background

Q.N*	Questions	Answer	Coding	Skip to Q
A. 1	Sex	Male	1	
		Female	2	
A. 2	Age	<18 years old	1	
		18-36 years old	2	
		37-54 years old	3	
		>54 years old	4	
A. 3	Education	Not attend school	1	
		Primary school	2	
		Junior High school	3	
		High school	4	
		University/ Postgraduate	5	
A. 4	Occupation	.....		
A. 5	How long have you been living here?	Before 1993 (Residents)	1	<i>Go to sec. B</i>
		After 1993 (New resident)	2	
A. 5	Where did you live before 1993?	Other villages, commune	1	
		Other provinces	2	
		Other countries	3	
A. 6	Reasons for moving to live in this village	Marriage	1	
		Family condition	2	
		Economic purpose	3	
		Other	4	

SECTION B: Positive Impacts of the Management of the Angkor World Heritage

B (1): Local Employment Opportunity

B1. 1	What is the type of your job?	Direct Job	1
		Induced Job	2
		Indirect job	3
		Not related to tourism	4
B1. 2	How many people in your family get jobs?	Total family members:	.....
		Number of people who have jobs	.....
		Jobless (aged person, kids, etc.)	.....
B1. 3	Have anyone in your family got direct jobs in tourism?	Tourist Guide	.....
		Driver	
		Tourism services in the city and temple	
		Workers in the Angkor park (company)	
		Workers in Apsara Authority	
		Souvenir Seller	
B1. 4	Have anyone in your family got indirect jobs in tourism?	Other	
		Handicraft maker	.....
		Food & Vegetable supplier to tourism	
		Construction worker/carpenter	
		Staff in a private company or bank	
B1. 5	Have anyone in your family got induced jobs in tourism?	Other	
		Street vendor	.....
		Self-employed	
		Village seller	
B1. 6	Have anyone in your family got jobs not related to tourism?	Government officers, soldier, teachers, etc.	.....
		Animal raiser/farmer	
		Other	

B (2): Level of Local Involvement in the Conservation of the Site

B2. 1	Are you willing to respect the construction law?	Yes, highly respect	1
		Respect as obligation	2
		Respect with dissatisfaction	3
B2. 2	Do you agree that "not allowing locals to sell land to outsider residents" is good?	Yes	1
		No	2
		N/A	3

B2. 3	If there is no protected law, do you want to have new residents living in your village?	Yes	1
		No	2
		N/A	3
B2. 4	Do you want your children to live in the Run Ta-Ek eco-village organized by APSARA National Authority?	Yes, but not enough information	1
		No, it is too far away	2
		N/A	3

B (3): Housing Condition

B3. 1	What is the type of your house?	The cottage is "very poor"	1
		Small wooden house "poor"	2
		Wood & Brick with a medium size "medium"	3
		Big villa with garden "Rich"	4
B3. 2	When was your house built?	Built before 1993 (before listing Angkor)	1
		Built after 1993 (after Angkor became a world heritage)	2
B3. 3	What is the condition of your house building now?	Yes, just rebuild/maintain	1
		Need to be maintained but not receiving admission from APSARA Authority	2
		It's too old but no money to repair it.	3

B (4): Educational Improvement

B4. 1	Has the education in your village been improved recently?	Yes	1
		No	2
		N/A	3
B4. 2	Have all your children been to school?	Yes	1
		No, not all of them	2
		No, not at all	3
		Not matured to attend school	4

B4. 3	At what highest level do your Do children drop school?	Primary School	1
		Junior High School	2
		High School	3
		University	4
		Still learning	5
		No children attend school	6

B (5): Physical and Mental Healthcare Support

B5. 1	Have you ever received any of the following supports?	clean water, water filter, well, toilet, etc.	1
		Id Poor from government	2
		Not receiving anything	3
B5. 2	What source of drinking water has your family consumed every day?	Clean water from the school	1
		Clean water from the personal filter	2
		Pure drinking water bought from the market	3
		Boiled water	4
		Direct water from underground	5
B5. 3	Have you ever got any family violations?	Yes	1
		No	2
		Divorce	3

Section C: Negative Impacts of the Management of the Angkor World Heritage

C. (1): Availability of Infrastructure Development

C1. 1	What is the road condition in your village?	It is very good recently	1
		It is good only at some specific points	2
		I don't mind. It is usable.	3
		More improvement would be better	4
C1. 2	What public buildings should be available for your village?	Health care center in the village	1
		Educational institutions	2
		Bank/banking system	3
		Community Market	
C1. 3	How is the farming condition for your family?	I grow rice depending on rainy water	1
		I don't grow because it is too small and it doesn't cover the cost.	2
		My farmland is in an area to be protected	3
		I don't have any farmland	4

C (2): Level of Local Awareness on the Conservation of the Angkor

C2. 1	Do you know about the responsibility of the APSARA National Authority?	Yes	1
		No	2
C2. 2	Do you know, that Angkor is World Heritage?	Yes	1
		No	2
C2. 3	Do you understand, what is World Heritage?	Yes	1
		No	2
C2. 4	Do you know the size of Angkor Park to be protected?	Yes	1
		No	2
C2. 5	Do you agree with the regulation of protecting new construction in your village?	Yes	1
		No	2
		No idea	3

C (3): Employment Accessibility

C3.1	How much do you per month on average?	<\$150	1
		\$151-\$300	2
		\$301-\$450	3
		>\$451-\$600	4
C3.2	What seems to be the main challenges for your family to access jobs?	No, education, No experience	1
		No communication, too poor	2
		There are small kids and aged people to take care	3
C3. 3	Have anyone in your family got jobs in APSARA National Authority?	Yes	1
		No	2

C (4): Poverty Rate

C4.1	Have you received ID poor from the government?	Yes	1
		No	2
C4.2	What seems to be the main challenges for causing poverty in your family?	Less education	1
		Jobless, single parent, handicapped	2
		No farmland, no business skills	3
		Sickness and debts	4
		Laws of protection	5
C4.3	Have you got any debt problems recently?	yes	1
		No	2

C (5): Affordable Access to Quality Healthcare and Education

C 5.1	Can your family have access to qualified education and good health care?	Yes	1
		No	2
		N/A	3

C 5.2	Can you afford to send your children to a private school in town?	Yes	1
		No	2
		Not sure yet	3
C 5.3	Have your children been learning in any of the NGO schools?	Yes	1
		No	2
C 5.4	If you get sick, where will you normally go?	Free health care centers/hospitals	1
		Clinic in town (paid services)	2
C 5.5	In case of serious illness, have you ever been to Phnom Penh or a neighboring country?	Yes	1
		No	2
C 5.6	Do you often use the traditional herbal medicine collected from your village?	Yes	1
		No	2

Overall, are you satisfied with the management of APSARA National

Authority?

¹.Very satisfied ². Satisfied ³.No idea ⁴. Not satisfied ⁵.Not very satisfied

Thank you for your kind co-operation in participating
in the interview survey!

**Questionnaire Survey on “Examining the Impacts of
the Management of the Angkor World Heritage on Nokor Krav
Community Village, Siem Reap Province, Cambodia.”**

LOCAL COMMUNITY IN NOKOR KRAV COMMUNITY VILLAGE,
SIEM REAP CAMBODIA

(Personal Direct interview: Open-ended questions)

PART II

Date of interview:

Respondent ID:

Obj. (1): Significant Importance of Angkor World Heritage

O1.1 Do you want Angkor to become a world heritage? Why?

.....
.....

O1.2 Have you received any benefits from the development of tourism in Angkor?

.....
.....

O1.3 Why is the management of the Angkor by APSARA National Authority
of significant importance in your village?

.....
.....

**Obj. (2): Living Conditions and the Challenges of the Locals in
Nokor Krav Community Village**

02.1 How has your living condition changed since Angkor became the
World Heritage?

.....
.....

02.2 What seems to be the most difficult problem you face before and after
Angkor became the World Heritage?

.....
.....

02.3. How would you want the problems to be solved?

.....
.....

Obj. (3): Positive Impacts of the Management of “Angkor”

(1): Local Employment Opportunity

03.1 Can you explain in brief the type of employment of the following group
of locals benefiting from the tourism development in Angkor?

N*	Social Class	Type of jobs locals received
1.	The local elite (rich local)	
2.	The medium class	
3.	The poor locals	

(2). Level of Local Involvement in the Conservation of the Site

03.2 Are you proud of living in Nokor Krav Community Village, which is part of the Angkor World Heritage?

.....

.....

03.3 What is your opinion about the management of APSARA National Authority?

.....

.....

(3) Housing Condition

03.4 What is your opinion about the law of construction in your village as it is protected by APSARA National Authority?

.....

.....

03.5 Have you got any suggestions or requests from the APSARA National The authority regarding the law of protection in your village?

.....

.....

.....

.....

(4) Education Improvement

03.5 How has the quality of education in your village been improved?

.....

.....

03.6 Do you have any requests to improve the education in your village?

.....

.....

(5) Physical and Mental Healthcare Support

03.7 Have you got any requests to improve the physical and mental
healthcare support in your village?

.....

.....

Obj. (4): Negative Impacts of the Management of “Angkor”

(1) Availability of Infrastructure Development

04.1 Have you got any requests to develop the infrastructure such as roads,
water supply, electricity in your village?

.....

.....

04.2 Have you got any requests regarding the development of public
infrastructure in your village?

.....

(2). Level of Local Awareness on the Conservation of the World Heritage

04.3 If there is training about the conservation of the world heritage site,
would you like to participate?

.....

.....

(3) Employment Accessibility

04.4 What seems to be the big barrier for you and your family for not
receiving job in tourism?

.....

.....

(4) Poverty Rate

04.5 If there is a fund to support your village, what would the compulsory
need do you want to request?

.....

.....

(5) Affordable Access to Quality Healthcare and Education

04.6 For what reason that your children drop school?

.....

.....

04.7 Have you experienced selling property to cure the sickness of your
family member?

.....

Obj. (5): Local Perception toward the Management of “the Angkor”

05.1 What is your opinion about the management of the APSARA National Authority?

.....

.....

**Obj. (6): Recommendations for Further Improvements of the
livelihood of the Locals in Nokor Krav Community Village**

06.1 From your own opinion, what would you suggest to APSARA National
Authority and or government to improve their management?

.....

.....

06.2 What is your request to APSARA National Authority and or government
to improve your living condition?

.....

.....

Thank you for your kind co-operation in participating
in this in-depth interview survey

Appendix 2: Cover letter and Interview Checklist to Government
Officials of APSARA National Authority

Dear Sir/ Madam,

I am presently a doctoral candidate at Build Bright University, Siem Reap Campus. As a requirement for completing my doctor of philosophy degree, I am presently conducting a survey on the topic **"Examining the Impacts of the Management of Angkor World Heritage on Nokor Krav Community Village in Siem Reap, Cambodia"**. I have also obtained written permissions from BBU University, Siem Reap Campus.

You have been selected for an interview to know about your views (as you are currently top management of APSARA Authority) on the impacts of management of Angkor, governed by APSARA Authority's management on the local community living in the protected areas, especially Nokor Krav Community Village in Siem Reap province, Cambodia as a case study. Protecting and conserving "Angkor", the world heritage site is important but enhancing the local's living standard is also another importance. For this reason, the study aims to examine the impacts of the management of "Angkor", which is governed by the APSARA Authority on local people in Nokor Krav Community Village in Siem Reap, Cambodia.

I would, therefore, appreciate it very much if you could be kind enough to provide your views by responding to the questions in the checklist as well as providing any related documents. Please also be informed that this survey is only for my academic research and individual responses will be treated as strictly confidential. All other aspects of this research will be conducted strictly following Build Bright University's Research Code of Conduct.

Thank you for your kindness to allow me to do the interview.

Yours sincerely,

Sokun Ang

Build Bright University, Siem Reap Campus
cc: Head, Graduate School Office, Build Bright University, Siem Reap Campus.
Attached is: Letter of Permission from Build Bright University, (BBU).

**In-depth interview about his/her perception of the Impacts of
the Management of the Angkor World Heritage on Nokor Krav
Community Village in Siem Reap Province, Cambodia.**

DEPARTMENT OF ADMINISTRATION, PERSONNEL, AND MATERIALS
OF APSARA AUTHORITY

Interview Checklist (1)

Date of interview:

Respondent ID:

SECTION A: Respondent's Background

Q.N*	Questions	Answer	Other
A.1	Name of Department:		
A.2	Name of interviewee:		
A.3	Position:		
A.4	Main duty:		
A.5	Type of staff under the supervision	Number of staff	
	Senior management	Pax	
	Technical staff in the office	Pax	
	Technical staff on site	Pax	
	Workers/ guardian	Pax	
	Other	Pax	
A.6	Education of Technical Staff	Number of staff	
	Doctorate	Pax	
	Master degree	Pax	
	Bachelor degree	Pax	
	High school/equivalent	Pax	
	Junior high school/illiterate	Pax	

SECTION B: Positive Impacts of the Management of “Angkor”

(1) Local Employment Opportunity

B.1 How many people were employed to work in APSARA Authority from Nokor Krav Community Village?

1.	Male	Pax
2.	Female	Pax

B.2 How many staff have been employed to work in APSARA National Authority from Nokor Krav Community Village?

1.	Male	Pax
2.	Female	Pax

(2) Level of Local Involvement in the Conservation of the Site

B.3 How many people were involved in working as conservators from Nokor Krav Community Village?

1.	Temple conservation agents	Pax
2.	Park rangers	Pax
3.	Order agents	Pax
4.	Tourist agents	Pax
5.	Technical temple conservators	Pax

(3) Housing Condition

B.4 How many houses have been requested to renovate or built-in Nokor Krav Community Village?

1.	Extending the size/renovated	.....
2.	Rebuilt	.....
3.	Newly built	.....

(4) Education Improvement

B.5 What does APSARA National Authority do to improve the education in Nokor Krav Community Village?

N*	Project Title:	/year
1.		
2.		
3.		

(5) Physical and Mental Healthcare Support

B.6 What does APSARA National Authority do to enhance the physical and mental healthcare of locals in Nokor Krav Community Village?

N*	Project Title:	/year
1.		
2.		
3.		

SECTION C: Negative Impacts of the Management of the Angkor World Heritage

(1) Availability of Infrastructure Development

C.1 What does APSARA National Authority do to develop the infrastructure in Nokor Krav Community Village?

N*	Description of infrastructure	Year of construction
1	Road construction	
2	Water Supply	
3	Electricity supply	

(2) Level of Local Awareness on the Conservation of the World Heritage

C.2 What does the APSARA National Authority do to enhance the awareness of the conservation to locals in Nokor Krav Community Village?

1.	Meeting with local villagers	/month	/year
2.	Website		
3.	Facebook		
4.	Radio		
5.	Newsletters		
6.	TV program		
7.	Direct consultant		
8.	Include in the school curriculum		
9.	Short Course training		
10.	On-site training		
11.	Other		

(2) Employment Accessibility

C.3 How many staff from Nokor Krav Community Village get a high-paid job of (>\$300/month)?

1.	Male	Pax	%
2.	Female	Pax	%

(3) Poverty Rate

C.4 How many staff from Nokor Krav community village get the low-paid or medium jobs?

1.	Low-paid job (<\$150/month)	Pax	%
2.	Medium-paid job (\$151-\$300/month)	Pax	%

(4) Affordable Access to Quality Healthcare and Education

C.5 How many staff from Nokor Krav Community Village have higher education?

1.	High school level	Pax	%
2.	Bachelor degree	Pax	%
3.	Master degree	Pax	%

Finally, what is your perception to improve the living standard of local people in Nokor Krav Community Village?

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Thank you for your kind co-operation in participating
in this in-depth- interview!

**In-depth interview about his/her perception of the Impacts of
the Management of the Angkor World Heritage on Nokor Krav
Community Village in Siem Reap Province, Cambodia.**

DEPARTMENT OF CONSERVATION OF MONUMENTS IN ANGKOR PARK AND
ARCHEOLOGICAL PREVENTION OF APSARA AUTHORITY

Interview Checklist (2)

Date of interview:

Respondent ID:

SECTION A: Respondent's Background

Q.N*	Questions	Answer	Coding
A.1	Name of Department:		
A.2	Name of interviewee:		
A.3	Position:		
A.4	Main duty:		
A.5	Type of staff under the supervision	Number of staff	
1.	Senior management	Pax	
2.	Technical staff in the office	Pax	
3.	Technical staff on site	Pax	
4.	Workers/ guardian	Pax	
5.	Other	Pax	

A.6	How many projects have the temples in Angkor Been restored or maintained?			
	International Projects	Local Govt. Projects	Cooperation Projects	Year
N* of projects				
AA.7	Which countries have been involved in the restoration and maintenance?			
	Countries	International projects	Cooperation Projects	Year
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				

SECTION B: Positive Impacts of the Management of The Angkor World Heritage

(1) Local Employment Opportunity

B.1 How many people were employed to work in your department of APSARA Nationality Authority from Nokor Krav Community Village?

1.	Male	Pax
2.	Female	Pax

B.2 What type of job do they do?

1.	Senior management	Pax
2.	Technical staff in the office	Pax
3.	Technical staff on site	Pax
4.	Workers/ guardian	Pax
5.	Other	Pax

(2) Level of Local Involvement in the Conservation of the Site

B.3 How many people were involved in working as conservators from Nokor Krav Community village in your department of APSARA Authority?

1.	Temple conservation agents	
2.	Technical temple conservators	
3.	Other	

(3) Housing Condition

B.4 How many houses have been conserved in Nokor Krav Community Village by APSARA National Authority?

1.	Extending the size/renovated	
2.	Rebuilt (preserving the Khmer architecture)	

(4) Education Improvement

B.5 What does APSARA National Authority do to improve the education in Nokor Krav Community Village?

1.	Project Title:	/year
2.		
3.		

(5) Physical and Mental Healthcare Support

B.6 What does the APSARA National Authority do to enhance the physical and mental healthcare of local people in Nokor Krav Community Village?

1.	Project Title:	/year
2.		
3.		
4.		
5.		

SECTION C: Negative Impacts of the Management of the Angkor World Heritage

(1) Availability of Infrastructure Development

C.1 What does APSARA National Authority do to develop the infrastructure in Nokor Krav Community Village?

N*	Description of infrastructure	Year of construction
1.	Road construction	
2.	Water Supply	
3.	Electricity supply	

(2) Level of Local Awareness on the Conservation of the World Heritage

C.2 What does the APSARA National Authority do to enhance the awareness of the conservation to locals in Nokor Krav Community Village?

1.	Meeting with local villagers	/month	/year
2.	Website		
3.	Facebook		
4.	Radio		
5.	Newsletters		
6.	TV program		
7.	Direct consultant		
8.	Include in the school curriculum		
9.	Short Course training		
10.	On-site training		
11.	Other		

(3) Employment Accessibility

C.3 How many staff are in your department of APSARA Authority from Nokor Krav Community Village gets the high-paid job (>\$300/month)?

1.	Male	Pax
2.	Female	Pax

(4) Poverty Rate

C.4 How many staff are in your department of APSARA Authority from Nokor Krav Community Village gets the low-paid job?

1.	Low-paid job (<\$150/month)	pax
2.	Medium-paid job (\$151-\$300/month)	pax

(5) Affordable Access to Quality Healthcare and Education

C.5 How many staff are in your department of APSARA Authority from Nokor Krav Community Village gets higher education?

1.	High school level	Pax
2.	Bachelor degree	Pax
3.	Master degree	Pax

Finally, what is your perception to improve the living standard of local people in Nokor Krav Community Village?

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Thank you for your kind co-operation in participating
in this in-depth- interview!

**In-depth interview about his/her perception of the Impacts of
the Management of the Angkor World Heritage on Nokor Krav
Community Village in Siem Reap Province, Cambodia.**

DEPARTMENT OF PUBLIC ORDER AND COOPERATION
OF APSARA AUTHORITY
Interview Checklist (3)

Date of interview:

Respondent ID:

SECTION A: Respondent's Background

Q.N*	Questions	Answer	Other
A.1	Name of Department:		
A.2	Name of interviewee:		
A.3	Position:		
A.4	Main duty:		
A.5	Type of staff supervision	Number of staff	
1.	Senior management	Pax	
2.	Technical staff in the office	Pax	
3.	Technical staff on site	Pax	
4.	Workers/ guardian	Pax	
5.	Other	Pax	

SECTION B: Positive Impacts of the Management of “Angkor”

(1) Local Employment Opportunity

B.1 How many people were employed to work in your department of Apsara National Authority from Nokor Krav Community Village?

1.	Male	Pax
2.	Female	Pax

B.2 What type of job do they do?

1.	Senior management	
2.	Technical staff in the office	
3.	Technical staff on site	
4.	Workers/ guardian	
5.	Other	

(1) Level of Local Involvement in the Conservation of the Site

B.3 How many people were involved in working directly with locals as a park protectors from Nokor Krav Community village?

1.	Male	Pax
2.	Female	Pax

B.4 What seems to be the most difficult problem you face with local people to apply the protected law of construction?

1.	Problem 1:	
2.	Problem 2:	
3.	Problem 3:	

B.5 In what percentage do you think the locals in Nokor Krav Community Village involved in the conservation of the Angkor World Heritage?

N*	Type of Local	Level of respect for the law of protection
1.	Original local people	%
2.	Outsider residence	%
3.	Powerful resident/local elite	%

(2) Housing Condition

B.6 What is the situation of the construction in Nokor Krav Community Village?

1. Legal house building

.....

2. Legal shop buildings

.....

3. Illegal buildings which were broken down by Apsara Authority

.....

4. Illegal buildings which were protected by powerful people

.....

B.7 Do you sometimes have a conflict with local villagers in Nokor Krav Community Village?

1	Yes, very often	The number of cases.....
2	Yes, very few	The number of cases.....
3	No, never	

(3) Education Improvement

B.8 What seems to be the cause of problem for conflict between Apsara National Authority and locals in Nokor Krav Community Village?

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.....

.....

B.9 What is your idea to solve that problem?

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.....

(4) Physical and Mental Healthcare Support

B.10 Do you think that APSARA National Authority has the ability to provide the support of physical and mental health care to locals in Nokor Krav Community Village?

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.....

BP.11 Please give reasons

.....

.....

.....

SECTION C: Negative Impacts of the Management of “Angkor”

(1) Availability of Infrastructure Development

C.1 Since you work closely with locals in Nokor Krav Community Village, What would you suggest to Apsara National Authority to develop the infrastructure such as road, water, and electricity supply?

N*	Description of infrastructure	How
1.	Road construction	
2.	Water Supply	
3.	Electricity supply	

(2) Level of Local Awareness on the Conservation of the World Heritage

C.2 What is the strategy of APSARA National Authority to enhance the awareness of the conservation to locals in Nokor Krav Community Village?

1.	Meeting with local villagers	/month	/year
2	Website		
3	Facebook		
4	Radio		
5	Newsletters		
6	TV program		
7	Direct consultant		
8	Include in the school curriculum		
9	Short Course training		
10	On-site training		
11	Other		

(3) Employment Accessibility

C.3 How many staff are in your department of APSARA Authority from Nokor Krav Community Village gets the high-paid job (>\$300/month)?

1.	Male	pax
2.	Female	pax

(4) Poverty Rate

C.4 How many staff in your department of APSARA National Authority from Nokor Krav Community Village gets a low-paid job?

1.	Low-paid job (<\$150/month)	Pax
2.	Medium-paid job (\$151-\$300/month)	Pax

(5) Affordable Access to Quality Healthcare and Education

C.5 How many staff are in your department of APSARA Authority from Nokor Krav Community Village gets higher education?

1.	High school level	Pax
2.	Bachelor degree	Pax
3.	Master degree	Pax

Finally, what is your perception to improve the living standard of local people in Nokor Krav Community Village?

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Thank you very much for your kind co-operation in participating
in this in-depth interview!

Appendix 3: Cover letter and Interview Checklist to Local Authority
(Sangat leader and Village Leader)

Dear Sir/ Madam,

I am presently a doctoral candidate at Build Bright University, Siem Reap Campus. As a requirement for completing my doctor of philosophy degree, I am presently conducting a survey on the topic **"Examining the Impacts of the Management of Angkor World Heritage on Nokor Krav Community Village in Siem Reap, Cambodia"**. I have also obtained written permissions from BBU University, Siem Reap Campus.

You have been selected for an interview to know your views on the impacts of Apsara Authority's management on the local community living in the protected area, especially Norkor Krav Community Village in Siem Reap Province, Cambodia is under your authorization and management. To protect and conserve the Angkor World Heritage Site, it is important to know the impacts of the management and the challenges they faced to develop the welfare of the local people living in Angkor Park. The aim is to find out the effectiveness of the APSARA Authority in enhancing the living standard of the local people living in the protected areas, particularly the Nokor Krav Community Village, where this present study is being carried out.

It would be greatly appreciated if you could kindly provide your views by responding to the questions during the interview as well as providing any related documents. Please also be informed that this survey is only for my academic research and individual responses will be treated as strictly confidential. All other aspects of this research will be conducted strictly following Build Bright University's Research Code of Conduct.

Thank you.

Sokun Ang

CC: Build Bright University, Siem Reap Campus
Head, Graduate School Office, Build Bright University, Siem Reap Campus.
Attached is: Letter of Permission from Build Bright University, (BBU).

**In-depth interview about his/her perception of the Impacts of the
Management of Angkor World Heritage governed by APSARA
National Authority on local people in Nokor Krav Community Village
in Siem Reap Province, Cambodia.**

LEADER OF SANGKAT KOUK CHORK, SIEM REAP CITY,
SIEM REAP PROVINCE CAMBODIA

Interview Checklist (4)

Date of interview: Respondent
ID:

SECTION A: Respondent's Background

Q.N*	Questions	Answer	Other
A.1	Name of interviewee:		
A.2	Position:		
A.3	Duration in your present position		
A.4	Number of Villagers under your control?		
A.5	Villages in Side the protected area of Angkor park		
A.6	Villages outside the Angkor park		

SECTION B: Positive Impacts of the Management of “Angkor”

(1) Local Employment Opportunity

B.1 Could you give me a copy of the census result of Nokor Krav Community Village in the year 2018-2020?

.....

(2) Level of Local Involvement in the Conservation of the Site

B.2 How would you think about the local involvement in the conservation of the site?

1.	Reason to be involved	
2.	Reason for not being involved	

B.3 Have you received any complaint feedback from your local about the protected law in Nokor Krav Community Village?

1.	Problem 1:	
2.	Problem 2:	
3	Problem 3:	

B.4 In what percentage do you think the locals in Nokor Krav Community Village involved in the conservation of the Angkor World Heritage Site?

N*	Type of Local	Level of respect for the low protection
1	Original local people	%
2	Outsider residence	%
3	Powerful residence/local elite	%

(3) Housing Condition

B.5 What is the condition of the house construction in Nokor Krav Community Village by APSARA National Authority?

1.	Legal house building	
2.	Legal shop buildings	
3.	Illegal buildings which were broken down by APSARA National Authority	
4.	Illegal buildings which were protected by powerful people	

(4) Education Improvement

B.6 Do you think that education in the village you control is getting improved?
If so, how?

.....
.....

(5) Physical and Mental Healthcare Support

B.7 Does the government of Cambodia give any support to local people in Nokor Krav Community Village to enhance physical and mental healthcare?

.....
.....

B.8 Could you briefly describe the procedure/principle for getting this support?

.....
.....

SECTION C: Negative Impacts of the Management of “Angkor”

(1) Availability of Infrastructure Development

C.1 Since you work closely with the locals in Nokor Krav Community Village, what would you suggest to APSARA National Authority to develop the infrastructure such as road, water, and electricity supply?

N*	Description of infrastructure	How
1.	Road construction	
2.	Water Supply	
3.	Electricity supply	

(2) Level of Local Awareness on the Conservation of the World Heritage

C.2 To enhance the awareness of the conservation among locals in Nokor Krav

Community Village, APSARA National Authority used the following media type to inform locals, which of them do you think is the most effective?

1.	Meeting with local villagers	/month	/year
2.	Website		
3.	Facebook		
4.	Radio		
5.	Newsletters		
6.	TV program		
7.	Direct consultant		
8.	Include in the school curriculum		
9.	Short Course training		
10.	On-site training		
11.	Other		

(3): Employment Accessibility

C.3 How would you think about the employment accessibility of the locals in Nokor Krav Community Village?

1.	High paid (\$301-\$450 or more)	%
2.	Medium paid (\$150-\$300)	%
3.	Low paid (<\$150)	%

(3) Poverty Rate

C.4 How many local villagers in Sangkat Kouk Chork, under your control, get on the list of poverty?

N*	Year	Village tittle	N*of poor family	N* total population
1.	2018			.....
2.	2019			.....
3.	2020			

(4) Affordable Access to Quality Healthcare and Education

C.5 How would describe the quality of healthcare that local villagers in Nokor Krav Community Village can access?

1	Local healthcare center in the commune	%
2	Provincial Hospital in Siem Reap town	%
3	Private Clinic	%
4	Hospital in Phnom Penh	%
5	Hospitals in the neighboring countries	%
6	Traditional medicine	%

Finally, what is your perception to improve the living standard of local people in Nokor Krav Community Village?

.....
.....

Thank you very much for your kind co-operation in participating in this in-depth interview!

**In-depth interview about his/her perception of the Impacts of the
Management of Angkor World Heritage governed by APSARA
National Authority on Nokor Krav Community Village in Siem Reap
Province, Cambodia.**

LEADER OF NOKOR KRAV COMMUNITY VILLAGE, SANGKAT KOUK CHORK,
SIEM REAP CITY, SIEM REAP PROVINCE CAMBODIA

Interview Checklist:(5)

Date of interview:

Respondent ID:

SECTION A: Respondent's Background

Q.N*	Questions	Answer	Other
A. 1	Name of interviewee:		
A. 2	Position:		
A. 3	Duration in your present position		
A. 4	The number of villagers under your control?		
A. 5	Number of households in your village		
A. 6	Number of outsider residence		

SECTION B: Positive Impacts of the Management of “Angkor”

(1) Local Employment Opportunity

- B.1** Could you give me a copy of the census result of Nokor Krav Community Village in the year 2018-2020.

.....

(1) Level of Local Involvement in the Conservation of the Site

- B.2** How would you think about the local involvement in the conservation of the site?

1.	Reason to be involved	
2.	Reason for not being involved	

- B.3** Have you received any complaint feedback from your local about the protected law in Nokor Krav Community Village?

1.	Problem 1:	
2.	Problem 2:	
3.	Problem 3:	

- B.4** In what percentage do you think the locals in Nokor Krav Community Village involved in the conservation of the Angkor World Heritage?

N*	Type of Local	Level of respect for the low protection
1.	Original local people	%
2.	Outsider residence	%
3.	Powerful residence/local elite	%

(3) Housing Condition

B.5 What is the condition of the house construction in Nokor Krav Community Village by APSARA National Authority?

1.	Legal house building	
2.	Legal shop buildings	
3.	Illegal buildings were broken down by Apsara Authority	
4.	Illegal buildings which were protected by powerful people	

(2) Education Improvement

B.6 Do you think that education in the village you control is getting improved?
If so, how?

.....

.....

(3) Physical and Mental Healthcare Support

B.7 Does the government of Cambodia give any support to locals in Nokor Krav Community Village to enhance physical and mental healthcare?

.....

.....

B.8 Could you briefly describe the procedure/principle for getting this support?

.....

.....

SECTION C: Negative Impacts of the Management of “Angkor”

(1) Availability of Infrastructure Development

C.1 Since you work closely with a local in Nokor Krav community village, what would you suggest to Apsara National Authority to develop the infrastructure such as road, water, and electricity supply?

N*	Description of infrastructure	How
1.	Road construction	
2.	Water Supply	
3.	Electricity supply	

(2). Level of Local Awareness on the Conservation of the World Heritage

C.2 To enhance the awareness of the conservation among locals in Nokor Krav Community Village, APSARA Authority used the following media type to inform locals, which of them do you think is the most effective?

1.	Meeting with local villagers	/month	/year
2.	Website		
3.	Facebook		
4.	Radio		
5.	Newsletters		
6.	TV program		
7.	Direct consultant		
8.	Include in the school curriculum		
9.	Short Course training		
10.	On-site training		
11.	Other		

(3). Employment Accessibility

C.3 How would you think about the employment accessibility of the local villager in Nokor Krav Community Village?

1.	High paid (\$301-\$450 or more)	%
2.	Medium paid (\$150-\$300)	%
3.	Low paid (<\$150)	%

(4) Poverty Rate

C.4 How many villagers in Nokor Krav Community Village get on the list of poverty?

N*	Year	Very poor	Poor	N* total population
1.	2018			.....
2.	2019			.....
3.	2020			.....

(5) Affordable Access to Quality Healthcare and Education

C.5 How would you describe the quality of healthcare and the accessibility of the locals in Nokor Krav Community Village?

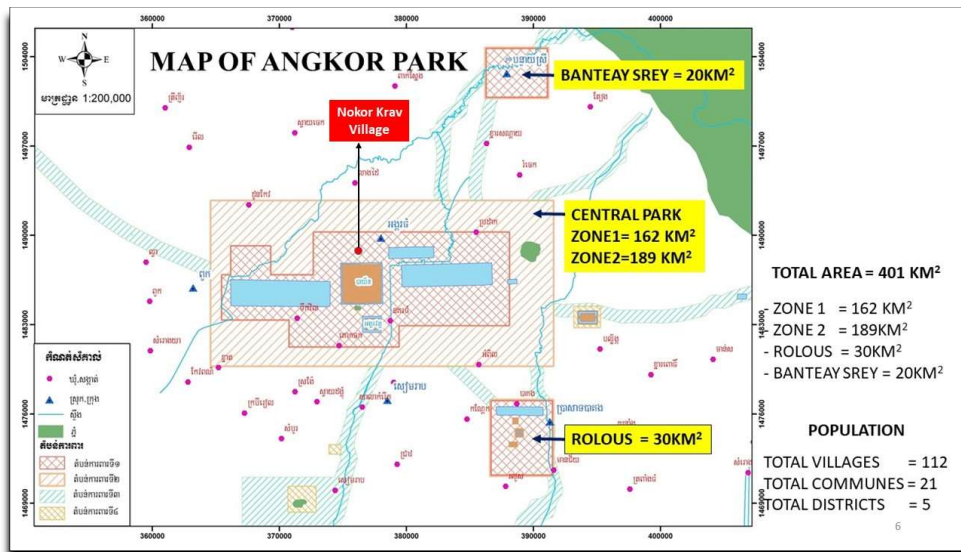
1.	Local healthcare center in the commune	%
2.	Provincial Hospital in Siem Reap town	%
3.	Private Clinic	%
4.	Hospital in Phnom Penh	%
5.	Hospitals in the neighboring countries	%
6.	Traditional medicine	%

Finally, what is your perception to improve the living standard of local people in Nokor Krav Community Village?

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Thank you very much for your kind co-operation in participating
in this in-depth interview!

Appendix 4: Map of Angkor Protected Zone



Source: GIS of Royal Angkor Foundation 1995

Filename: PHD FINAL REPORT 110623
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Template: C:\Users\CTT\AppData\Roaming\Microsoft\Templates\Normal.do
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Author: Ang Sokun
Keywords:
Comments:
Creation Date: 11/6/2023 9:31:00 PM
Change Number: 7
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Last Saved By: CTT
Total Editing Time: 259 Minutes
Last Printed On: 11/7/2023 1:05:00 PM
As of Last Complete Printing
Number of Pages: 365
Number of Words: 71,119
Number of Characters: 403,001 (approx.)