

Socio-economic Impacts of Heritage Tourism on Its Locality: A Case Study of Borobudur Temple Compounds World Heritage Site, Central Java

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Abstract

The main objectives of this article are to explain the socio-economic impacts of heritage tourism on rural Borobudur and to discuss them in view of the management or the governing process of the World Heritage Site (WHS) and its locality. This study finds that the tourism related sectors had contributed quite significantly to the Gross Regional Domestic Product (GRDP) in the district level, stimulated the development of infrastructure, and provided business opportunities. However, it also finds that there have been limited positive impacts for the majority of local people. Tourism has not encouraged growth in the agricultural sector which is still the main sector in the local economy. The impact on employment has been most significant in the informal sector characterized with low and unstable income. Tourism has had only limited success in stimulating the development of other sectors in the rural economy. Developing other tourism potentials and establishing better linkages between tourism and other sectors in the rural economy are possible ways to obtain greater benefits from tourism. All of these require improved concerted efforts between organizations involved in the management system of the heritage site. However, this study also finds institutional problems such as a lack of planning mechanisms, difficulties in coordination and lack of legal framework that prevent the management system from working together to address the issues.

1. Introduction

This paper focuses on tourism in a cultural World Heritage Site (WHS), Borobudur Temple Compounds in Magelang Regency, Central Java Province, Indonesia. It is one of the prime tourism attractions in Indonesia, and became a World Heritage Site in 1991. The temple compounds comprise Borobudur Temple, the main temple, which has been drawing some average 2 million visitors per year, and Mendut and Pawon Temple, which are smaller but similar in terms of architecture. These Buddhist monuments are situated in a predominantly Muslim community, but until now, they are still used by Buddhist communities, especially for the Vesak ceremony.¹

Since 1985, tourism in the main temple has taken place inside a recreation park named Borobudur

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Temple Recreation Park that has been developed around this magnificent 8th century temple in the Borobudur District. The park covers an area of 87.1 hectares within the Borobudur District which encompasses 5455 hectares. The development of Borobudur Temple Recreation Park caused the relocations of residents from two villages located on the land that is presently the recreation park. The relocations caused a certain amount of friction between government and local people due to disputes about land values and because the residents were worried that they would be deprived of their livelihood if they could no longer access the tourist market from their homes (Black 1997; Winarni 2006).

Around 80% of the visitors each year are domestic tourists. Yogyakarta (43 kilometres from the compounds and the second most important tourism destination in Indonesia) is used by many international and domestic tourists as a base for their visit to the region. Therefore, the length of stay for the majority of visitors is rather short (3–4 hours). Tourists still generally perceive Borobudur Temple as the only attraction in the area despite the fact that there are other attractions in the rural setting that community members have been trying to develop.

The presence of WHS as a tourism asset is especially important for developing countries seeking to utilize these sites as a resource for socio-economic development through tourism (Rizzo and Mignosa 2006). Tourism in Borobudur, for instance, has stimulated the development of infrastructure and provided business opportunities.² In the context of rural areas, Greffe (1994) asserts that tourism can be a possible engine for rural development for the following reasons: tourism can provide employment and income; it requires goods and services that may be provided from the rural area; it utilizes the countryside or natural scenery to which no economic value is attributed; it promotes the demand for craft work and labor intensive products; and it stimulates the flow of tourists' expenditure into the local economy and results in the re-spending of the income in the local area, or as Greffe puts it "traditional multiplier effect".

Apart from tourism's role in stimulating infrastructure development and providing business opportunities as mentioned above, previous studies about Borobudur indicated that tourism benefits for the majority of rural people have been limited in its magnitude to employment and income, and in promoting the development of other sectors in the rural economy. Hampton (2005), whose study in Borobudur was drawn from a number of fieldworks that utilized semi-structured interviews and direct observations, suggested that the informal sector has greatest local significance in providing employment than the recreation park and the private sector.³ The number of people working in this sector, especially the street vendors, can reach 2,000 people or even 3,000 people in the peak seasons (Taylor 2003; Soeroso 2007), despite only getting a modest and unstable income. The number of informal sector workers has been overwhelming for both the management and the workers themselves, who are faced with an increasingly competitive working environment. It was also found that of the numerous products being offered by these street vendors, only a limited number is local

provenance. Soeroso (2007), referring to a list compiled by the Association of Tourism Service of Borobudur (PJWB) of their members and products sold, commented that from about 170 souvenirs offered in the recreation park, only seven are made locally. As such, this indicates a situation opposite to Greffe's (1994) suggestion that tourism requires goods and services from the rural areas and promotes the demand for craftwork and labor intensive products. Hampton (2005) recommended that more research is needed to reveal the magnitude of linkages from tourism to local economy.

In addition, local communities themselves has been raising the issue of limited economic benefit from tourism since 2003, when Borobudur was celebrating its twentieth year since restoration was completed (Adishakti 2006). In particular, they called into question the role of management body, especially the state-owned company Taman Wisata Candi Borobudur, Prambanan dan Ratu Boko Limited, that was given mandate to manage the recreation park, in managing the site and in ensuring tourism benefits for local communities.

During interviews with local government officials that were conducted by the author during her fieldwork, the officials mentioned the issue of the district only having a modest Gross Regional Domestic Product (GRDP) and poverty despite its tourism potential.^{4,5} Local government is responsible for managing areas surrounding the park where residents live, whereas tourism activities mainly take place inside the recreation park that is managed by the state-owned company. The main temple of Borobudur is managed by the Borobudur Heritage Conservation Institute (BHCI).

The lack of benefit felt by the communities suggests an issue of intra-generational equity, one of the principles of sustainable management of cultural resources (Throsby 2003). The principle of intra-generational equity asserts "*the rights of the present generation to fairness in access to cultural resources as well as benefits flowing from them, viewed across social classes and income groups*" (ibid.). In the realm of the WHS, however, universal ownership of a WHS by the peoples of the world often results in stressing more the global interest such as mass tourism at the expense of local people's interest (Millar 2006). In the case of Borobudur, the development of a recreation park as an access to the heritage site and as a place to facilitate visitors' needs, seems to fulfill the global and national interests for conservation, access to the site, and for tourism as an income generator for the country. On the other hand, local people's interest such as the need for a more disperse flow of tourists to the other potential attractions in the rural area has not been accommodated.⁶

The main objectives of this article are to explain the socio-economic impacts of heritage tourism on rural Borobudur and to discuss them in view of the management or the governing process of the World Heritage Site (WHS) and its locality. First, it will explain socio-economic impacts of heritage tourism in Borobudur using primary data obtained from a survey of a sample of households in 2008 and focus group interviews in 2009.⁷ Some secondary data will also be used to support findings from survey and focus group interviews. The study then explores factors that have been affecting the socio-economic impacts of heritage tourism in Borobudur by using data collected from interviews with

representatives of organizations involved in the management of WHS and its vicinity, interviews with experts such as with academics, and from secondary data analysis. For the purpose of this study, these factors have been classified into three different contexts, i.e. policy and legal context; local environment; and organization and management. Policy and legal context covers Indonesian tourism policy in general and the existing legal frameworks on this particular WHS. Discussion on the local environment encompasses socio-demography and area characteristics; whereas discussion on organization and management includes some descriptions of the organizations involved in the management as well as their inter-relationships, and the management process.

By combining the research conducted at the community level and the many influencing factors, the study intends to explain the socio-economic impacts at the community level in light of the management or governing process of the WHS and its vicinity, the institutional arrangement as well as the interactions between organizations, and in the context of policy which is reflected in the current legal framework influencing the site. The study can contribute to currently limited research on WHS in the context of tourism as a strategy for development in developing countries (Ashworth and Larkham in Nuryanti 1996; Timothy and Nyaupane 2009).

This paper is organized into six sections as follows. The theoretical framework will be presented after the introduction section. The third section explains methodology of the study. The fourth section discusses the socio-economic impacts. The fifth section discusses the management process of the WHS and its vicinity, and how it affects the socio-economic impacts at the community level. The last section concludes this paper and provides recommendations based on the findings.

2. Theoretical Framework

Tourism that centered on heritage areas/sites is referred to as heritage tourism. Poria et al. (2006) pointed out that it encompasses any visits to heritage areas/sites, regardless of visitors' motivation and perception on the heritage attributes of the site. Hereinafter, the term that will be used in this paper is heritage tourism, in order to differentiate it from general tourism.

Heritage is the different forms of cultural capital which represents the community's value of its social, historical, or cultural dimension (Throsby in Benhamou 2003). World Heritage Sites, on the other hand, are cultural and natural heritage sites inscribed in the World Heritage List due to their outstanding universal value and international significance for conservation.⁸

While conservation of heritage is the very reason for the adoption of the World Heritage Convention in 1972, the discourse of WHS in recent years had extended to the role of WHS in development and poverty alleviation (Araoz 2008; Matsuura 2008).⁹ Contribution of WHS to development through heritage tourism can be evaluated by assessing the impacts of tourism. Tourism impacts, according to Ritchie and Goeldner (1994) and Mason (2003), include economic, social, and

environmental impacts. Within this study, social and economic impacts are combined as socio-economic impact. While economic impacts such as job creation, income, and increased foreign exchange earnings are definite effects of tourism (Brohman 1996; Telfer 2002); the social aspect of the impacts includes changes in the social fabric which in turn are influenced by economic impacts such as changes in forms of employment, and improved standard of living (Crandall 1994).

Ashley (2000) states that an assessment of tourism's impacts on local people must not include only direct cost and benefits, such as profits and jobs generated, but should also include a range of indirect, positive and negative impacts. Such a view is embedded in the livelihoods framework approach, developed for pro-poor tourism impact assessment in several African countries (*ibid*). Livelihoods framework approach assesses the impact of tourism in terms of:

1. Impacts on household assets (land value, skills, natural resources, social capital), in which assets are the building blocks on which people develop their activities.
2. Impacts on other household activities and strategies. Tourism is often seen as an additional activity to combine with existing livelihood activities such as agriculture. In addition, this study also tries to capture perceptions toward entrepreneurship opportunities and assistance for local product development. If tourism is perceived as opening these opportunities, it may affect households' strategies in achieving their goals by diversifying their activities through small business.
3. Contribution to a variety of household goals; i.e., well-being and income.
4. People's capacity to influence the external policy environment (participation).

Previous studies using the livelihoods framework approach used qualitative data collection through interviews (Ashley 2000; Novelli and Gebhardt 2007). However, this study adopted the framework into a questionnaire so that standardized answers could be obtained thus making it possible for some quantification and comparison. Table 1 lists working variables developed specifically for data collection in the survey.

3. Methodology

An exploratory research approach is applied in this study. This approach relies more on qualitative analysis for describing and identifying underlying relationships between the socio-economic impacts with factors affecting them. Data collection methods involved household survey, focus group interviews, interviews with representatives from relevant organizations and experts, and secondary data collection.

The scope of this research is Magelang Regency, Central Java, focusing on the Borobudur District

Table 1 Working variables developed for assessing socio-economic impacts

Livelihoods Framework Approach	Working Variables/Indicators	
	Economic Impacts	Social Impacts
Impacts on household assets and income ¹ - Financial assets - Physical assets - Human resources - Natural resources - Social capital	Increased income* Increased land value*	Opportunity for skill improvement* Tourism impacts on the social and natural environment* Sense of pride toward the heritage site* Sense of ownership toward the heritage site* Preservation of local culture* Changes in social relationships induced by tourism*
Impacts on household activities and strategies	Opportunity for starting small business (entrepreneurship opportunity)* Tourism promotes assistance for local product development** Access to the heritage site (recreation park) for engaging in economic activities* Tourism jobs have substituted former work** Tourism jobs function as complementary work**	Access to the heritage site (recreation park) for recreational purpose*
Contribution to household goals	Improved well-being* Household receives fixed or regular income from tourism jobs? **	Tourism impacts on rural infrastructure development* Tourism impacts on improvement of public facilities*
Participation		Opportunity to participate in forums or meetings on tourism development in the area**

Note: ¹Modification was made to the first element of this approach to include income, since income was the direct economic benefit felt by people from their involvement in tourism. *Presented in the questionnaire as a Likert scales questions (five scales). **Samples chose either Yes or No as answers.

Source: Questionnaire prepared by author, based on Ashley (2000), Crandall (1994), Novelli and Gebhardt (2007).

for the survey and site observation, but covering four districts that can be defined as Borobudur area (Borobudur, Muntilan, Mertoyudan and Mungkid Districts) in the fieldworks.¹⁰ Borobudur District has a population of 55,163 with an approximate number of households of 15,169 (BPS 2006).

For the survey, non-probability sampling (a combination of purposive and convenient sampling strategy) was used instead of probability sampling to anticipate the following obstacles: obstacles in language (some people had difficulty in comprehending Indonesian due to the widespread use of Javanese in their daily life) and adult illiteracy still found in the rural areas.

The sample size was determined to be a minimum of 115.¹¹ The survey was aimed at people who were 20 years old or older. In the end, 119 respondents participated in the survey; one respondent represented one household. Seven villages and the Borobudur Temple Recreation Park were chosen in which to conduct the surveys. These seven villages were chosen because they fit into at least one of the following criteria: (1) there are significant numbers of people working in tourism-related jobs; (2) the village has village tourism activities; (3) the village has specific rural industries related to tourism (such as handicrafts); or (4) the village has specific home-based industries, which although not directly related to tourism, have become rooted in the village livelihoods.

In the Borobudur District, the number of people whose age is more than 20 years old is 35,075 (BPS 2006). Thus the 119 respondents represent about 0.34% of that number. Even though the sample size seems small, the total number of people who is more than 20 years old does not represent the number of people who are eligible to be surveyed as many does not meet the criteria developed for choosing the sample. These criteria are, for example, for the respondents to understand Indonesian to a reasonable standard and are literate.

4. Socio-economic Impacts of Heritage Tourism

This section will be divided into two sub-sections. The first one explains the survey results, which was the main method that was used to investigate the socio-economic impacts from the point of view of the community. The second one discusses limitations of the socio-economic impacts of heritage tourism in Borobudur that could be identified from this study. The discussion incorporates findings from other data collection methods such as focus group interviews to selected respondents and interviews with representatives from relevant organizations involved in the management of the heritage site and its vicinities.

4a. Survey Results

Among 119 respondents (each representing one household), 80 are involved in tourism-related jobs, whether as a main or side occupation, 37 are not involved in any tourism-related jobs, while two respondents did not answer this question. Respondents consisted of 85 males and 34 females. Table 2

Table 2 General profiles of the samples

Variable	Percentage of the Sample
Age	
20–29 years	23
30–39	37
40–49	25
50–59	11
60 or more	5
Occupations	
Self-employed	55
Farmer	8
Public sector	6
Employee	15
Teacher	5
Housewife	7
Other	4
Education	
Less than elementary school	5
Elementary school	20
Junior high school	30
Senior high school	34
College	11
Households' monthly income	
≤ 500,000 Indonesian Rupiah	43
> 500,000–1,000,000 Indonesian Rupiah	41
> 1,000,000–1,500,000 Indonesian Rupiah	7
> 1,500,000–2,500,000 Indonesian Rupiah	6
≥ 2,500,000 Indonesian Rupiah	3
Land size (other than house and house yard)	
≤ 0.5 hectare	46
0.5–0.99 hectare	10
1–1.99 hectare	3
No land other than house and house yard	41

Notes: 1 United States Dollar equals 9,300 Indonesian Rupiah by the time of survey (August 2008).

Source: Survey conducted by author

summarizes the general characteristics of the sample.

Respondents whose ages are between 30-39 years old make up the highest proportion of the sample. 55% of the samples are self-employed, many as street vendors and sellers in kiosks located in the recreation park. The highest proportion of samples is high school graduates (34%), although they only account for 11% of the total population in Borobudur District (BPS 2003). In the district, the majority (42%) of the population only graduates from elementary school (BPS 2003). The non-probability sampling method, in which the author targeted people who could read, write, and communicate well in the national language, seemed to contribute to the samples being composed of people with relatively higher education level than the average population. Regarding income, 51 respondents, or the highest proportion of the sample (43%), are in the lowest income band of less than 500,000 Indonesian Rupiah. Of the 51 respondents, 46 were involved in some tourism-related jobs and five people were not. They can be considered low-income households because their monthly income is lower than the regional minimum wage set by the government of Magelang Regency at 650,000 Indonesian Rupiah per month. On the land size, the majority of respondents (46%) have less than 0.5 hectare for farming purpose.

Survey results indicate that respondents' opinions towards tourism impacts were generally positive. Strong positive responses (more than 50% agree or strongly agree) toward the perceived impact of tourism were in the following items: improvement of households' income; improvement of skills; preservation of local culture; sense of pride towards Borobudur; sense of ownership towards Borobudur; positive impact on rural infrastructure; positive impacts on improvement of public facilities; and improvement of well-being (see Table 3a). The generally positive perceived impacts might be attributed to the fact that the number of respondents who were involved in tourism related jobs (68.4%) was significantly more than those who were not involved in any tourism related jobs (31.6%). According to Perdue, Long and Allen (1987), attitudes to tourism vary with dependency on the industry. These authors pointed out that those who work in tourism or benefit from it would be likely to identify more positive than negative impacts. A notable exception, however, can be observed in the response to the "tourism has negative impacts on the social and natural environment", to which the majority (more than 40%) of the sample agreed.

Table 3b lists responses for another type of question presented in the questionnaire. In Table 3b, 28% of respondents confirmed that tourism related jobs had substituted for previous jobs, whereas 48% said that these jobs had not substituted former work. Follow up interviews revealed that some of those 48% had been in tourism jobs since they started working, while others maintained other work, particularly in agriculture. For 29% of the respondents, jobs in tourism functioned as a complementary work, while 47% were involved full time in tourism jobs. However, although the majority of respondents regarded tourism jobs as their main source of income, only 8.75% of 80 respondents involved in tourism have been receiving a more or less fixed monthly income from their

Table 3a Respondents' opinions on the various aspects of livelihoods affected by tourism (in percentages, based on the scale item questions)

Economic Impacts	Respondents' Responses					Social Impacts	Respondents' Responses				
	SA	A	N	D	SD		SA	A	N	D	SD
Increased income	4.2	57.3	13.7	14.6	10.2	Opportunity for skill improvement	9	53	18	18	2
Increased land value	7.5	30.5	40	22	0	Sense of pride toward the heritage site	43	52	4	0	1
Opportunity for starting small business (entrepreneurship opportunity)	4.3	25.5	36	33	1.1	Sense of ownership toward the heritage site	33.4	53	12	0	1.6
Improved well-being	14.5	55	18	11	1.5	Preservation of local culture	24	67.5	3.4	4.3	0.8
Decreased access to the heritage site (recreation park) for engaging in economic activities*	6	36	12.6	41.2	4.2	Changes in social relationships induced by tourism	7.6	12	29	49	2.4
						Tourism has positive impact on rural infrastructure development	30	52	13	4.3	0.7
						Tourism has positive impact on improvement of public facilities	24.8	47	19.7	8.5	0
						Decreased access to the heritage site (recreation park) for recreational purpose*	2.5	28.6	19.3	46.2	3.4
						Tourism has negative impacts on the social and natural environment*	7	41.4	20.7	30.2	0.7

Note: SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree. Scale used for most statements: 5 for SA, 4 for A, 3 for N, 2 for D, 1 for SD; except in statements marked with *, which were negative statements; thus: 1 for SA, 2 for A, 3 for N, 4 for D, 5 for SD.

Source: Survey conducted by author

tourism related jobs.

In terms of tourism impact on local product development, nearly 60% of respondents said that tourism development has not contributed much to local product development. Table 4 shows correlations between some variables. The aim of doing these correlation tests is to see the relationship between direct tourism benefits, i.e. improved income and improved well-being (quality of

Table 3b Respondents' opinions on the various aspects of livelihoods affected by tourism in percentages, based on the close-ended Yes or No questions

Economic Impacts	Respondents' Responses			Social Impacts	Respondents' Responses			
	Yes	No	N/A		Yes	No	Some times	Not sure
Tourism job have substituted former work*	28	48	24	Residents have opportunities to be involved in tourism planning	28.6	13.4	36.6	21.4
Tourism job function as complementary work*	29	47	24	Have you ever been involved in forums, meetings that discuss tourism in Borobudur area?	Yes		No	
Does household receives fixed/regular income from tourism jobs? *	9	67	24		24		76	
	Yes		No					
Tourism promotes assistance for local product development	40		60					

Note: *These particular sentences were designed only for respondents working in tourism related jobs, thus respondents who were not involved in tourism are represented in the "N/A" or not applicable category.

Source: Survey conducted by author

Table 4 Spearman correlation coefficient among variables representing direct and indirect benefits of tourism

Direct Tourism Benefits	Indirect Tourism Benefits		
	Opportunities for skill improvement for respondent	Opportunities to start a business because of tou-rism	Assistance for local product development
Improvement of household income	.552**	.460**	.014
Improvement of well-being	.475**	.465**	.109

Notes: Spearman's rank correlation coefficient was used due to the data being ordinal data.**Correlation is significant at the .01 level (2-tailed). N=117.

Source: Survey conducted by author

life) and indirect benefits. The indirect benefits of tourism are as follows: (a) opportunity to start a small business, which according to Fleischer and Felsenstein (2000) is influenced by a conducive policy for SME development, assistance and facilitations from the local government and other stakeholders; (b) opportunity for skill improvement for local people, for example through training provided by outsiders or the government (Ashley 2000); and (c) financial and skill development assistance for local product development.

As a rule of thumb, a correlation coefficient between .00 and .30 is considered weak, a coefficient between .30 and .70 is moderate, and between .70 and 1 is high.¹² The closer it is to 1 the stronger the

correlation. Improvement of income has a significant but very moderate correlation with both opportunity for skill improvement and opportunity to start small business ($r = .552, p < .01$; $r = .460, p < .01$ respectively). Improvement of income, however, has hardly any correlation with the promotion of assistance for local product development. The same goes for tourism impact to improvement of well-being, which has a significant but moderate correlation with both opportunity for skill improvement and opportunity to start a small business ($r = .475, p < .01$; $r = .465, p < .01$ respectively), but a weak correlation with the promotion of assistance for local product development.

The result worth noting is that the positive perceptions on direct tourism benefits, i.e. improvement of household income and well-being, have little correlation with respondents' perceptions on tourism's impact on promoting assistance for local product development. Small business development refers more loosely to the starting of any business, regardless of where the products come from. On the other hand, the term "local product" refers to those products specific to the area, for example, pottery or handicraft.

Regarding participation, the current mechanism in heritage tourism management in Borobudur has not been perceived as providing much chance for people to participate in the decision-making process, which affects their life as the main stakeholder of the heritage site. Only 24% of respondents said they had the chance to participate in such forums or meetings that discuss tourism development in their area.

4b. Discussion

Apart from the positive perceptions on tourism impacts that were obtained from the survey, most respondents were still on the lowest income range that was below the minimum regional wage determined by the local government. Only a small portion of respondents working in tourism has relatively fixed income from their jobs. During the focus group interviews, it was found that many participants found working as street vendors was attractive due to the potential to earn cash everyday, although not as a fixed income. Some participants preferred earning small amounts of cash everyday rather than waiting, in the case of farming, until the harvest season. Cukier-snow and Wall (1993), in their study on street vendors in Bali, explained that tourism jobs might be highly prized by local residents when compared to farming small plots of land. From the focus group interviews, some participants also raised the issue of scarce employment opportunities as a problem in their area. Some even said that if there were more jobs that could provide them with a more stable income, they would go for those jobs.

Focus group interviews also suggested that some people left their farms to work in the tourism sector. Results from the focus group interviews indicated that tourism had prompted a shift from agriculture-based occupation to other occupations related to tourism, whether trading or service jobs. This gradual undermining of agriculture as labor and capital are drawn into tourism is, as Urry (1996)

Table 5 Share of GRDP by Industrial Origin at Constant 2000 Price Borobudur District (2003–2007)

Industrial Origin	Share of GRDP					GRDP in million Indonesian Rupiah		Average Growth (2003–2007)
	2003	2004	2005	2006	2007	2003	2007	
Agriculture	36.19%	35.03%	33.46%	30.86%	30.42%	51,635	52,049	0.20%
Mining & Quarrying	6.26%	6.24%	6.17%	6.84%	7.04%	8,930	12,049	7.78%
Manufacturing	2.57%	2.58%	2.53%	2.62%	2.57%	3,668	4,395	4.63%
Electricity, Gas & Water	0.25%	0.26%	0.26%	0.27%	0.27%	361	463	6.43%
Construction	5.31%	5.51%	5.66%	6.14%	6.31%	7,583	10,800	9.24%
Trade, Restaurant & Hotel	23.38%	23.46%	23%	23.21%	23.05%	33,362	39,428	4.26%
Transportation & Communication	6.09%	6.15%	6.08%	6.32%	6.26%	8,697	10,701	5.32%
Financial, Ownership & Business Services	2.79%	2.76%	2.64%	2.71%	2.64%	3,982	4,518	3.21%
Services	17.15%	18.01%	20.19%	21.02%	21.44%	24,473	36,678	10.64%
Total GRDP						142,691	171,080	4.64%

Source: Regional Planning Agency of Magelang Regency (2007); modified by author

pointed out, one of the effects of tourism upon pre-existing agricultural activities. The focus group interviews revealed that in certain cases this was partly because some people do not have land for farming, or if they do have, the area size is small (less than 0.5 hectare for the majority of respondents as listed in Table 2). However, other cases showed that there were people who chose working as vendors rather than farmer although they still had some lands for cultivation. In addition, parts of the district have been facing the problem of water scarcity that also affects cultivation land (Soeroso 2007) and influences people to search for other sources of income.

In the Borobudur District, agriculture is still the main sector because it is the biggest contributor to the district's Gross Regional Domestic Product (GRDP) and it employs 40% of the workforces. Nevertheless, the average growth of the value added coming from this sector is smaller than the growth of the services-related sector, especially those related to the tourism sector, such as trade, restaurants and hotels.

Average growth rate of the agriculture sector in Borobudur District is lower than the average growth of the same sector in Magelang Regency, 2.02% from 2003 to 2007 (BPS 2006), which indicates an average growth in the regency as a whole. The harvested area has also been decreasing at an average rate of 10.6% from 1999 to 2006; whereas rice production has been decreasing at an

average rate of 12.54% during the same period (BPS 2006). Winarni (2006), by analyzing land use maps for detecting land use change over the years, pointed out that the conversion of land from rice fields to other purposes accelerated from the mid 1990s, after Borobudur was inscribed in the World Heritage List.

The fact that agriculture is growing much slower than tourism related sectors, i.e. trade, restaurant and hotel; transportation and communication; and services sector in Borobudur, could be an indication that the expansion of tourism does not encourage development in agriculture. Growth in tourism could be expected to induce growth in other sectors, especially agriculture, the main income source for the majority of people living in the district, because tourism may utilize local agriculture products for consumption in the tourism sector. However, this does not seem to be the case in Borobudur District. This suggests that tourism has a limited impact for the majority of the local people who still rely mainly on the agriculture sector. In addition, it indicates that tourism impact is not evenly distributed across different economic activities.

In addition, the survey results revealed that 60% of respondents said that tourism had not promoted assistance for local product development in their villages. From interviews and the author's observations, tourism has encouraged some development in certain economic activities that are closely related with tourism, such as the tourism villages and handicrafts. Some forms of assistance from the local government were evident in one village with tourism village activities and two others which had handicrafts industry. However, other important sectors, which are rooted in the rural livelihoods, for example agriculture and food production have been largely neglected. For instance, when the author interviewed some people working in a home-based industry dealing with food production, none of them saw the link between their products and the tourism market, except that some tourists came to watch the production process. The products are sold to their usual buyers or to the market but there has not been any agreement, for instance with hotels, to supply these local food ingredients. From the agriculture sector, well performing commodities such as papaya, *rambutan*, and orange have not been promoted as some of the area's specialties to the visitors.

Based on the focus group interviews in a village that has just started developing village tourism activities and another one with a home-based pottery industry, the development of these local industries often encountered problems such as a shortage of skilled human resources, difficulty in accessing capital and lack of attention from the organizations involved in managing the WHS. Unfortunately, it is not clear which of the three organizations involved in the management of Borobudur heritage and its surrounding areas will lead the efforts to overcome those constraints. Utilizing local products in developing rural industries (for consumption in the tourism market) is actually one of the keys in establishing better linkages to tourism and for ensuring that the benefits of tourism are more widespread (Greffé 1994; Hampton 2005; Boccardi et al. 2006). Furthermore, lack of promotion of rural products in the area is actually in contrary to statements found in the JICA (Japan

International Cooperation Agency) Master Plan for Borobudur (1979), which pointed out that promotion of other local industries is important if incomes are to be increased and if the natural population increase of these areas are to be absorbed by them.

5. Management Process of Borobudur WHS and Its Surrounding Rural Areas

From survey results and the discussion in the previous section, it can be concluded that the heritage tourism in Borobudur faces the challenges of finding a way to raise the standard of living for the majority of local people. These challenges include how to have better linkages between tourism and the agriculture sector, in which more than 40% of workforce are involved; how to promote the development of other rural potentials, such as local home-based industries using tourism as the lever; and how to create more employment opportunities.

Mason (2003) stated that how tourism is planned and managed would affect its impact. Thus, as stated earlier in this article, this study intends to explain the socio-economic impacts at the community level in light of the management or governing process of the WHS and its vicinity. The management or governing process consists of the institutional arrangement as well as the interactions between organizations, and the current legal framework influencing the site.

One of the problems that has been identified from interviews with community members and with representatives from organizations involved in the management system of the WHS is that it is not clear who will lead the efforts to overcome the challenges mentioned above. The local government of Magelang District, which is responsible for the management of residential areas, has carried out some assistance programs to promote rural industries. However, there is a lack of continuity and long-term vision in the assistance programs carried out by the local government.¹³

In the context of the existing legal framework, Presidential Decree No. 1/1992 on the management of Borobudur Temple Recreation Park—mentioned earlier in this article—does not specify the three organizations' obligations towards community development through tourism. The Decree does not have bylaws that are needed to give guidance on the rights and obligations of each organization and coordination mechanism between organizations. This has been one factor contributing to the lack of coordination between the local government, the state-owned company, and the conservation institute in tackling local issues that relate to the communities.

Another important issue in the realm of planning and management is the absence of a formal management plan of Borobudur. Management plans typically consist of some shared purpose, mechanisms such as the presence of a leading body, steering committee, annual action plan, monitoring measures, performance indicators and consultation arrangement (Wilson and Boyle 2006). It became a prerequisite for inscription as a WHS in 1997 and all sites listed before 1997 were

required to prepare and submit a management plan by 2005 (*ibid.*). However, no sanction has actually been imposed for sites that have no management plans. It is likely because the World Heritage Convention is a “soft law”, which as Hall (2006) puts it, is not legally binding. Thus the degree of compliance depends on each government. In addition, although the management plan for WHS has been required since 1997, there is little guidance in the Operational Guidelines on how it should be developed let alone assistance for developing the plan, which may be needed by developing countries.

The absence of a management plan in the case of Borobudur has led to there being no shared organizational purpose between the organizations, especially one concerning community development. Hence, local people’s concerns are largely overlooked in the management process. It has also resulted in there being no continuous heritage tourism planning mechanisms between the three organizations, and also no integrated planning between tourism and other sectors, for example agriculture. Gunn (1994) stated that such a situation is a constraint for tourism development that should actually be integrated in to the wider development context if it is to bring maximum benefit for local people.

The Master Plan completed in 1979 with the assistance of JICA is a comprehensive document, which includes conservation strategies, environmental management, landscaping, infrastructure redevelopment, village improvement, a land use plan, entrances, additional facilities, as well as a proposed schedule, a budget and administrative structure for each site. However, it has not included strategy for integrative site management between organizations, which is the essence and the rationale of WHS management (Wilson and Boyle 2006). Furthermore, the Master Plan has never been given more legal power through the process of institutionalization¹⁴ and the recommendation to develop other rural industries has not been realized optimally.

Tourism development in Borobudur, which is concentrated inside the recreation park and on Borobudur Temple as the major part of the WHS, is a reflection of a tourism policy that emphasizes macro-economic benefits. A considerable amount of the revenue generated from entrance fee and other fees collected by PT Taman can be considered central government revenue due to the company’s position as a state owned enterprise. PT Taman, at least up to the end of 2008, contributed to Magelang Regency’s original income through paying the entertainment tax. However, since 2009 the central government has revoked the regulation that obliges PT Taman to pay entertainment tax to the local government; this has resulted in a considerable loss of income for Magelang Regency.¹⁵ Moreover, heritage tourism development that concentrates in the main temple and the fact that there are different authorities managing the main temple with the other two smaller ones (located in a different zone and managed by the Local Government of Magelang Regency), has also resulted in the link between the three temples not really being feasible in the daily flow of tourists. There is only limited information about the other temples once tourists have reached the main temple.

6. Conclusion

This study finds that heritage tourism in Borobudur has contributed quite significantly to the growth of value added from services and tourism related sectors' shares in the Gross Regional Domestic Products (GRDP) within Borobudur District.

Survey results suggests that overall, local people have received only limited benefit from heritage tourism in the Borobudur Temple Compounds WHS, a situation that can be explained as follows. Monthly households' income for the majority of respondents who are involved in tourism related jobs is still below the minimum regional wage. Only a small portion of respondents working in tourism has a relatively fixed income from their jobs, which is probably due to most respondents are involved in tourism as informal sector workers, especially being street vendors.

This study also found that tourism in Borobudur had not greatly stimulated the development of other sectors in the local economy. Its impact on other sectors is limited to certain economic activities that are closely related with tourism, such as tourism villages and handicrafts. However, other important sectors, which have become rooted in the rural livelihoods, for example agriculture and food production have been largely neglected. This may explain why the growth in the service sector, which has been induced by tourism, has not been concomitant with the growth in the agriculture sector.

Developing other industries or sectors in the rural economy and integrating them with tourism whenever possible is important to create more employment opportunities, to provide an alternative to farming, and to increase the re-spending of tourism receipts at the local level. This study also found that local industries face problems such as a lack of skilled human resources, capital, access to credit and other assistance. Thus efforts to overcome these constraints are urgently needed.

Despite this need, the study found a lack of coordination between organizations involved in the management system to develop the rural industries or other tourism attractions in the rural area. At present, a coordination mechanism is lacking due to the absence of a legal framework that specifies the coordination mechanisms between the three organizations, including a mechanism for tackling local problems. Coordination is also lacking because there is no management plan that is actually required for every WHS.

To conclude, this study recommends that a management plan be developed to improve coordination between organizations and tourism planning be integrated with the planning of other sectors. There is also a need to improve the current legal framework to specify more coordination between organizations in resolving problems found in the tourism domain and for tourism policy to accommodate the need of communities in the local level.

Note

- 1 Vesak ceremony is a celebration of the birth of Buddha.
- 2 Winarni (2006), who did a longitudinal study on spatial changes in Borobudur, recorded that facilities offering various services to visitors, such as restaurants, accommodations and shops had been flourishing in the Borobudur Village (in the Borobudur District) along with tourism development.
- 3 The informal sector can be defined as a process of income generation that is unregulated by the institutions of society, such as the government (Timothy and Wall 1997).
- 4 Separate personal interview with Wibowo Setyo Utomo, Head of Tourism and Culture Office of Magelang Regency and Utoyo, Secretary for Magelang Regency Local Government, in Magelang, August 8, 2008.
- 5 Based on data from the Central Bureau of Statistics — BPS (1999–2006), the percentage of poor households in the district in 1999 was 31.2%, whereas it was 18.9% in 2006. BPS' criteria of poor households are those households whose per capita expenditure is less than 175,000 Indonesian Rupiah per month.
- 6 Kompas Newspaper, 28 August 2005 edition, reported in one of its articles that villages administrators in the Borobudur District believed the state-owned company had been concentrating tourism within the park and rarely promoted nearby villages, which according to these administrators, should be promoted as thematic villages for tourism.
- 7 Focus group interview is an interview with a small group of people on a specific topic (Patton 1987). Six to ten people with tourism jobs, who had participated in the previous survey, joined each focus group interviews. The aims were to understand participants' perceptions of tourism development in the area, significance and expectations, and reasons for choosing tourism jobs.
- 8 Outstanding universal value means cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity (Operational Guidelines for the Implementation of the World Heritage Convention, 2005).
- 9 The World Heritage Convention aims at the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage of outstanding universal value (Operational Guidelines for the Implementation of the World Heritage Convention, 2005).
- 10 Borobudur and Mungkid Districts are where the temple compounds are located, whereas Muntilan and Mertoyudan is an urban area serving as an access to the previous two districts.
- 11 The sample size was determined using a formula developed by Watson et al. (1993: 360) for population with unknown parameter. In this case, although the population of Borobudur District was known, it was not possible to ascertain the number of people that were literate and did not have difficulty in understanding the national language used in the questionnaire. The author wanted to use the survey as a chance to also conduct informal interviews with respondents whenever rapport could be established and the situation permitted; therefore she determined a minimum of 100 respondents to allow more time for each survey process. Based on a suggestion by Soeroso (2007), this minimum number was then added with 15 (15% of 100), resulting in 115 as the sample size, to achieve an acceptable sampling error (5%–10%). Watson's formula is as follow:

$$n = \frac{4 \cdot Z_{1/2\alpha}^2 \cdot \rho (1-\rho)}{(\omega)^2}$$

n is the sample size; $Z_{1/2\alpha}$ is confidence coefficient, where α represents sampling error; ρ is the degree of success expected from the sample; $(1-\rho)$ is the degree of failure; $\omega = L + R$ is the size of error that can be tolerated from the population in the left and right side of a normal distribution curve.

In this study, the sample size (n) is 115; the degree of success is expected to reach 90%; the size of error that can be tolerated is set at 6% for each side (between 5% to 10% is commonly used). Thus, using the above formula, sampling error (α) is obtained at 0.0676 or 6.7%. Acceptable sampling error is between 5%–10%, hence 115 of minimum sample can be accepted.

- 12 http://www.visualstatistics.net/Visual%20Statistics%20Multimedia/correlation_interpretation.htm

- 13 For example, training on product development in several villages have not been followed by further guidance

and assistance on capital provision and marketing strategies.

14 Institutionalization promotes rule of law and transparent, accountable enforcement of standards (Gera 2008).

15 Information from separate personal interviews with Wibowo Setyo Utomo, Head of Tourism Office Magelang Regency, March 25, 2009, and with Pantjaranigtyas Putranto, officer in the Regional Planning Agency (Bappeda) of Magelang Regency, March 26, 2009.

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