

# An Importance-Performance Analysis of Bali State Polytechnic's Green Tourism Program

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**Abstract**—Understanding stakeholders' perception on organization social responsibility initiative is very important for the success of the initiative itself. Green Tourism is Bali State Polytechnic (BSP)'s special program to show its social responsibility commitment. In order to succeed, the Green Tourism program should be conducted based on and able to meet the stakeholders' needs and expectations. This study investigates BSP's internal stakeholders' perception on Green Tourism program. A questionnaire is developed based on a literature review and interview which resulted in a total of 59 indicators which was answered by a total of 289 students, lecturers, and administration staff. The data is analysed by using descriptive statistics and important – performance analysis (IPA). The result shows that the stakeholders have a relatively high perception on the importance of Green Tourism programs but perceive that its implementation still requires more improvements. All three themes; green ethics, green business, and green physics are considered both very important and already well implemented but still need more improvements. BSP need to improve efforts on some indicators such as praying before activities, encourage honesty, discipline, and care attitudes, integrate religious values into teaching learning process, encourage work culture, set up discussion groups, encourage voluntary culture, create group work, regularly communicate campus activities to public; and maintain buildings.

**Keywords**—*campus, social responsibility, green tourism*

## I. INTRODUCTION

Social responsibility has become the focus of attention at BSP particularly by the declaration of the centre of technology: Green Tourism program. Launched by Indonesia's minister of research and technology in 2017, Green Tourism is the university program in Indonesia which integrates education and research under the umbrella of tourism referring to the indigenous local value of the region in which the college is located, Bali. Green Tourism is selected because Bali is a tourist destination and the teaching learning process produces graduates who work at tourism sector [1]. Green Tourism reflects the Balinese indigenous value which praises the importance of maintaining harmonious relationship between human and God, human and human, and human and environment, known as Tri Hita

Karana (THK); three sources of harmony [2]. Accordingly, Green Tourism involves three key themes; green ethics, green business, and green physics. Green tourism is also in line with both the green tourism concept which has been widely adopted at global, national, and local context, and Bali tourism program, the Bali Green Growth 20150 roadmap. In addition, Green tourism has been used as a guideline for both regional and tourism development in Indonesia especially in Bali. Green Tourism serves as the implementation guideline of the teaching learning process at BSP. By integrating Tri Hita Karana values into green tourism and teaching learning process, the graduates are expected to possess not only academic knowledge, work competency, but also competency and mentality as based on Tri Hita Karana value. The current tourism industry which focuses on green principle is more likely to accept graduates with the same competency. In other words, BSP graduates who have passed through green tourism-based teaching learning process will be more accepted at the tourism industry.

Considering the important role of Green Tourism for BSP, this program should be fully supported and periodically evaluated in order to meet the stakeholders' expectation and demand especially the internal stakeholders which consists of lecturers, students, and administration staff. They are closely involved in the daily teaching learning process and experience the positive impacts of green tourism. However, there has been limited studies or evaluation of Green Tourism especially about the implementation. Prior to the program launching, there had been no preliminary study related to the expectation and demand of Green Tourism. A preliminary study was conducted by [1] which involved limited respondents; 1 representative of research agency, 1 representative of community agency, and 1 representative of a hotel. There has not been a survey which involves a larger number of respondents to study the general and comprehensive overview of the Green Tourism on-going-implementation. As a highlighted program, it is important to conduct a study which investigates the stakeholders' expectation and evaluation of Green Tourism involving larger number of respondents (survey) in order to understand

their perception related to expectation and evaluation of this program.

## II. THEORETICAL STUDY

### A. Stakeholder Theory

Stakeholder theory believes that a successful organization depends on how the organization manages its relationships with stakeholders which direct or indirectly related to its activity [3]. A stakeholder is an individual or a certain group of people which influence and be influenced by an organization or company activity [4]. A failure in identifying, understanding, and fulfilling the expectation and demand of stakeholders gives a negative impact to the organization. On the contrary, upon successfulness, the stakeholders positively contribute to the organization's successfulness. Based on that rationale, it is important to identify stakeholders' expectation and demand as a strategic input to create a certain strategy in maintaining the relationships. Every stakeholder has its own characteristics, background, expectation, and demand about an organization. For a higher educational institution, for instance, internal stakeholders consist of lecturers, academic staff, and students. As each of them has their own perception about the college, it is important for BSP as a higher education institution to identify their perception about Green Tourism program.

### B. Green Tourism as Social Responsibility Initiative

Corporate Social Responsibility (CSR) concept and understanding varies based on the stakeholders' perception involved or the organization's types of business [5]. Compared to for-profit organizations whose main mission is to gain profit and then conduct CSR, it is compulsory for higher educational institutions to educate the students and conduct social responsibility for their stakeholders [6]. Social responsibility of higher educational institutions is the commitment to fully contribute to internal stakeholders such as students, teaching staff, and academic staff; and external stakeholders such as community where the institution is located. Universities are challenged to give more contribution for the community by focusing more on the content, attitude, and positive values in order to balance the specific skills and the mission to prepare qualified and humanized human resources [7]. In addition, CSR relates to how universities operate in an ethical way through responsible operation in education, cognitive, workforces, and environment impacts through participated dialogue with community for sustainable human resources development [7]. In higher education institutions in Indonesia, every lecturer has to conduct at least one community service per semester integrated with the institution's and each faculty's community service program. Education institutions have four main roles such as (1) focus on innovations to solve societal problems, (2) give more supports to the community and environment nearby, (3) allocate a number of seats for needy students, and (4) emphasize on education process which not only prepare graduates but also soon get jobs after graduating [6].

Scholars emphasizes the importance of Triple Helix ABG (academician, businessman, and government), or ABC (academician, bureaucracy, and corporate) with some opportunities to play the roles as CSR, informant, mediator, motivator, and CSR expert producer [8]. There are still

limited studies on CSR in education institutions. CSR in education institution should include six themes such as alumni programs, inter institutions cooperation, business cooperation for community development, international cooperation on community, programs on social, culture, and environment [9]. A research on 10 world universities indicated that all have conducted social responsibilities related with good governance such as accountability, transparency, fair practice, human rights, work forces practice, environment, and community contribution [10]. In Indonesia, a study of a university in Surabaya indicated that its CSR consists of 33 activities which can be grouped into three themes such as economy, social, and environment [11]. In addition, a study in 12 universities and 12 high schools in Solo found that CSR relates to community training through small and medium organizations, community services, lecturers teaching at high schools, teacher and administration staff training, and scholarships [12]. It indicates that social responsibility focus and implementation in higher education institution are internal policy [13] at BSP, the social responsibility commitment is conducted through a declaration as a centre of technology with Green Tourism concept. As a college in Bali which is a tourist destination with indigeneuous local value, Green Tourism is also in line with Bali tourism's focus and development goal, that is a green tourism [2]. The application of Green Tourism concept in the teaching learning process is expected to give an integrated impact for the environment, social culture, and the college good governance [1]. BSP applies a green governance integrated with the teaching learning process, research, and service excellence to the society. The college becomes a green place for learning and practice activities so that the graduates are able to possess a green competency as an academic excellence related to religion, social activity, and environment [1]. Green Tourism's main mission is to make use of technology in tourism with Balinese indigeneuous local value, Tri Hita Karana. Tourism-related stakeholders expect BSP to integrate the green tourism principles in the curriculum to be a new learning model called as Green Integrated Learning (GIL).

However, the three key themes of green tourism i.e. green ethics, green business, and green physics are still broad, and do not have any clear sub-components and descriptions. There isn't any literature which describes the definition of green ethics, business, and physics and its related activities. Consequently, before the survey was conducted, it was important to have a preliminary study of interview to a senior lecturer who has more knowledge and expertise on Green Tourism program at BSP. Based on the above rationale, the main problem in this research is what are BSP's internal stakeholders' expectation and evaluation about the Green tourism Program?

## III. METHODOLOGY

This case study uses a mixed method approach of exploratory sequential design combining a qualitative interview with a quantitative survey [14]. The questionnaire combined but mostly contained indicators developed by Sudira about the application of Tri Hita Karana in vocational schools, added with four indicators derived from the interview result [15]. In total, Green Ethics consists of 15, Green Business consists of 24, and Green Physics consists of 20 indicators. Attributes were measured a five-point Likert

type scale ranging from 1, least important to 5, most important, in the Importance part, and from 1, strongly disagree, to 5, strongly agree, in the Performance part. The third part of the questionnaire included respondent demographic information; sex, positions, and departments / working units. The research population is all lecturers, students, and administration staff at BSP; 5.508 people (per March, 2019). A systematic random sampling with a formula developed by Cochran and table of sample minimum number by Bartlett et al. [16] is used to draw the sample number. The data is analyzed by using descriptive statistics and an importance-performance analysis with SPSS 21 version. Importance-Performance Analysis (IPA) is a useful tool to evaluate and identify the stakeholders' perception on the importance and performance of Green Tourism program [17]. It has four quadrants; I is labeled "Keep Up the Good Work" with high importance and high performance; is "Concentrate Here" with high importance but low performance indicating that the organization has low performance and requires improvement to be a top priority; III is "Low Priority" with low importance/low performance; and IV is "Possible Overkill" with low importance/high performance indicating that stakeholders are satisfied with the performance which are not actually important.

IV. RESULT AND DISCUSSION

The questionnaire validity and reliability are tested by using Pearson correlation. The validity is set up at  $\geq r$  table. With a sample number of 30, the R table is calculated from  $t_{table} (n-k; \alpha) = t$  table (30-2; 5%) = 0,306. The valid instrument is tested by using alpha Cronbach with reliability is set up at  $\geq 0.60$ . The analysis shows that the significant values of all indicators of variable company characteristics are  $> 0.306$  and Cronbach alpha value is .917 (Green Ethics), 0.940 (Green Business), and 0.975 (Green Physics), indicating that all indicators are all valid and reliable.

There were 72 lecturers (24.9 %), 150 (51.9 %) students, and 67 (23.1 %) administration staff answered the questionnaire. Both the students and lecturers are from the all six departments at BSP; tourism, business administration, accounting, electrical engineering, civil engineering, and mechanical engineering. The administration staff were representatives of, if not all, varied working units such as finance, publication, information management, human resources, planning, and certification working units.

Table I, II, and III show the mean scores of the perceived importance and performance of the 59 indicators of Green Tourism; ethics, business, and physics (PR = performance, IP = importance, APP = Appropriateness level, and R = remarks). The appropriateness level (APP) is counted with a formula as follow.

$$APP = \frac{Performance}{Importance} \times 100\% \tag{1}$$

The Remarks (R) categories is; 0.81 – 1.00 = very good, 0.66 – 0.80 = good, 0.51 – 0.65 = enough, 0.35 – 0.50 = bad, and 0.00 – 0.34 = very bad.

The three tables below show that the all means of performance are below the means of importance. This

indicates that the implementation of Green Tourism program at PNB has not met the stakeholders' expectation. However, all indicators have an appropriateness level of  $> 0.66$ , which mean that they are all either "good" or "very good". The average of appropriateness level of either Green Ethics, Green Business, and Green Physics are all "very good". It can be inferred that although the internal stakeholders of BSP consider the 'high' importance of Green Tourism program and its implementation is still "lower" than their expectation, they still praise the "very good" performance of the implementation.

TABLE I. GREEN ETHICS

No	Indicators	PR	IP	APP	R
1	Praying before campus	3.3	4.3	78.3	G
2	Praying before any activity	3.8	4.4	85.3	VG
3	Appreciate human kind	4.0	4.7	84.7	VG
4	Being grateful	4.1	4.6	89.1	VG
5	Religion activities	3.8	4.5	86.0	VG
6	Honest, discipline, care attitude	3.8	4.6	84.4	VG
7	Set up "plangkiran" at work	3.9	4.4	88.6	VG
8	Set up religious statues	3.1	4.0	77.5	G
9	Maintain praying sites	4.3	4.7	91.4	VG
10	Campus anniversary ceremony	4.4	4.6	97.7	VG
11	Saraswati holiday	4.2	4.5	94.6	VG
12	Meditation, Yoga	3.1	3.9	79.4	G
13	Holy water before activity	3.4	4.2	80.1	VG
14	Reading holy books	2.9	3.8	76.3	G
15	Dance and play music	3.9	3.6	105.6	O
	Average	3.7	3.3	86.2	VG

As shown in Table I, among 15 indicators of Green Ethics, 10 are categorized as very good, 4 are good, but 1 is overkill. The indicator of "dance and play music" is not considered as that important but has been well implemented. The table also indicates the importance of being grateful, appreciate people, maintai praying sites, be honest and discipline, and conduct ceremony for campus anniversary. Those indicators are integrated and supporting each other as important elements of human beings' fundamental concepts on building and maintaining relationship with God.

As shown in Table II, 23 of 24 indicators are categorized as "very good", and only one is "good". It means that nearly all indicators of Green Business has been considered as very well implemented by the stakeholders. It is only the indicator of "develop discipline system" is categorized as "good". Above all, they consider that celebrate holidays to encourage sense of tolerance, wear proper dresses, set up special rules to avoid violence conducts, and to be respectful and loving each other. Celebrating holy days has been one of the most important activities in a religiously-driven country as Indonesian through which people take the momentum to appreciate and respect other people's religion. With this

principle, the people especially stakeholders of BSP can live together in harmony. This has been considered as the most important way of maintaining good relationships between human and human or among people (lecturers, students, and administration staff).

TABLE II. GREEN BUSINESS

No	Indicators	Pr	Ip	App	R
1	Good work atmosphere	3.7	4.5	82.3	VG
2	Religious values into teaching learning process	3.5	4.2	85.2	VG
3	Religious values into research	3.5	4.2	83.5	VG
4	Make group work	3.6	4.4	81.6	VG
5	Encourage research culture	3.7	4.5	81.2	VG
6	Encourage work culture	3.6	4.4	82.5	VG
7	Encourage service culture	3.5	4.4	82.9	VG
8	Set up discussion sites	3.7	4.3	82.6	VG
9	Encourage volunteer culture	3.7	4.4	83.5	VG
10	Working together	3.9	4.4	84.0	VG
11	Ethical communication	3.8	4.4	87.2	VG
12	Polite language	3.6	4.5	85.1	VG
13	Open culture for adaptation	3.6	4.5	81.1	VG
14	Develop discipline systems	3.6	4.5	79.9	G

TABLE III. GREEN PHYSICS

No	Indicators	Pr	Ip	App	R
1	Community services	3.7	4.4	84.9	VG
2	Programs for community Empowerment	3.5	4.2	84.6	VG
3	Research and publication	3.4	4.3	78.3	G
4	Be grateful to the God	3.7	4.4	81.7	G
5	Sport and wellness	3.5	4.3	81.6	VG
6	Health checks up	3.2	4.2	75.6	G
7	Exercise of key body functions	3.1	4.3	73.6	G
8	Practice motoric skills	3.6	4.1	88.2	VG
9	Practice professional Sports	3.2	4.2	77.7	G
10	Tumpek Landep ceremonies	3.8	4.3	87.9	VG
11	Tumpek uduh ceremony	3.4	4.4	80.1	VG
12	Do not harm trees	3.7	4.4	82.8	VG
13	Maintain trees	3.8	4.5	86.0	VG
14	Maintain campus parks	3.8	4.4	86.5	VG
15	Organic garbages bins	3.7	4.5	82.1	VG
16	Put garbage Appropriately	4.0	4.4	86.6	VG
17	Environment-concern Culture	4.0	4.5	83.7	VG
18	Maintain campus Buildings	3.5	4.4	76.5	G
19	Art and culture Appreciation	3.4	4.3	78.1	G
20	Art-related programs	3.7	4.3	83.7	VG
	Average	3.6	4.3	82.0	VG

In terms of Green Physics' 20 indicators, BSP's stakeholders consider the importance of maintaining trees, preparing organic garbage box, and encouraging culture of environment-concern.

Comparing the three green programs; ethics, business, and physics, the stakeholders perceive that green ethics has the highest appropriateness level (86.2), followed by green business (83.5), and then green physics (82.0).

Figure 1, 2, and 3 below are the summary of the quadrant analysis on Green Ethics, Green Business, and Green Physics

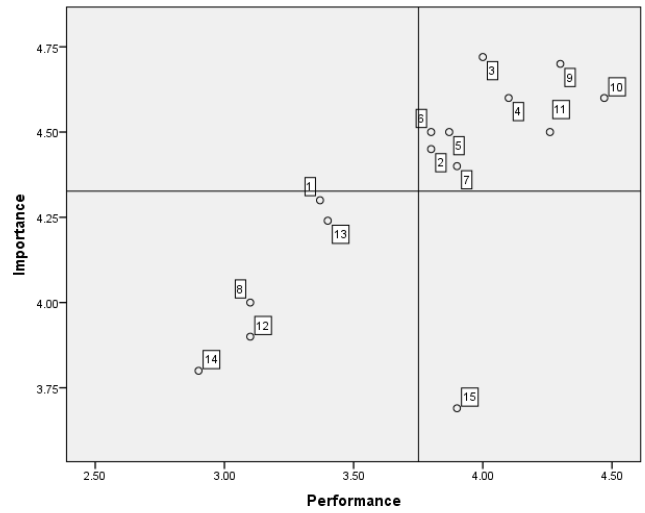


Fig. 1. Importance performance analysis diagram of green ethics.

Green Ethics emphasizes the importance of maintaining a harmonious relationship between human and God. As shown in Fig. 1, in Quadrant I, BSP has a very good performance on two Green indicators such as praying before campus activities and honest, discipline, and care attitudes. These are the two indicators which are considered very important and need more improvement, as important ethical attitudes to maintain a relationship with God. BSP needs to focus and give more efforts in encouraging the internal stakeholders on the importance of praying before campus activities and awareness of good attitudes such as honesty discipline, and careness. Quadrant II places some indicators such as appreciate human kind, religious conducts, put "Plangkiran", maintain praying sites, campus anniversary pray, "Saraswati" holiday. These indicators are considered as important, well performed, and need to be maintained. Quadrant III places some indicators which are considered not important and also not well implemented, such as set up religion-related statues in the workplace, yoga and meditation, having a holy water before activity, and reading holy books. In the last Quadrant, indicator of dancing and playing musical instrument is considered not important but is already well implemented.



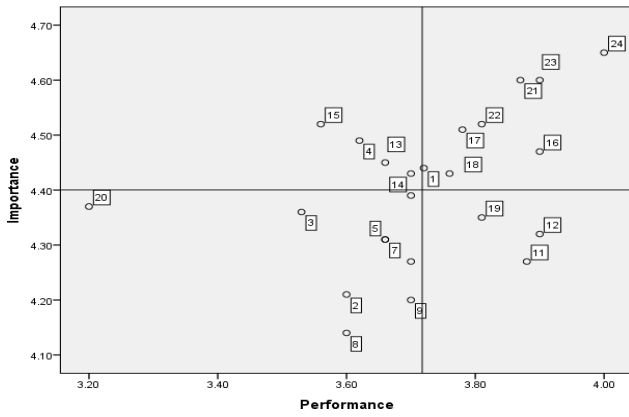


Fig. 2. Importance performance analysis diagram of green business.

Green Business emphasizes the importance of maintaining a harmonious relationship between human and human. The Figure 2 shows that in Quadrant I, four indicators have been considered to be very important and already well implemented so that need to be maintained. The indicators here are integrating religious values into teaching learning process, encourage work culture, set up discussion sites, encourage voluntary culture, create group work, and regularly communicate campus activities to public. BSP should give more focus and effort to improve the performance of these activities because of the high stakeholders' concern. The Quadrant II places three indicators which are considered as important and already well implemented such as encouraging research culture, open culture for adaptation, and create discipline rules to avoid any violence conducts. The Quadrant 3 places some indicators such as good work atmosphere, ethical communication, celebrate holidays, giving donations, proper dress, sense of service, respect and love each other. These are considered neither important nor well implemented. There isn't any indicator in the Quadrant 4.

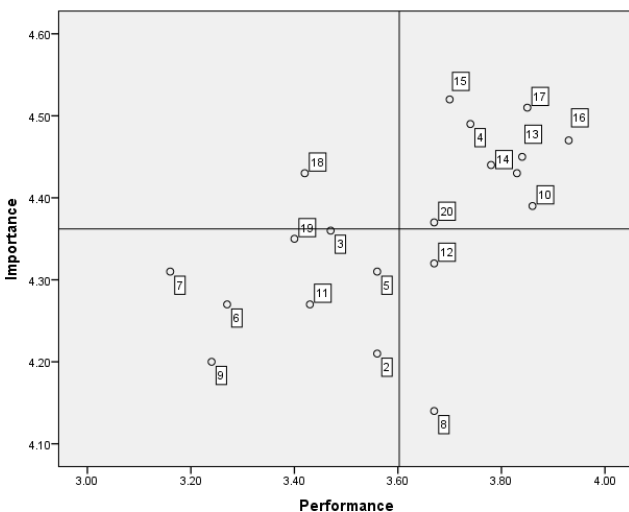


Fig. 3. Importance performance analysis diagram of green physics.

Green Physics emphasizes the importance of maintaining a harmonious relationship between human and environment. As seen in Fig. 3, there is only 1 indicator in Quadrant I; Maintaining campus buildings with competitions. It indicates

that stakeholders perceive this indicator to be very important but still “lack of performance”. Consequently, it is highly recommended for BSP to improve this issue. In Quadrant 2, Some indicators such as community services, be grateful to God, Tumpek Landep ceremonies, maintain trees, maintain campus parks, provide organic garbages bins, put garbage appropriately, encourage culture of environment-concerns, and conduct programs of art and cultures, are considered to be important and already well implemented. Therefore, these performances need to be maintained. Quadrant 3 has some indicators such as special programs for community empowerment, research and publication, sport and wellness, health checks up, exercise for key body functions, Tumpek uduh ceremony, and give appreciation for art and cultures. These indicators are considered as neither important a well implemented. Quadrant 4 places only two indicators such as practicing motoric skills and the attempts of not harming trees. These two are considered not important but well implemented.

## V. CONCLUSIONS

Green Tourism as a social responsibility initiative by BSP has been very well responded by its internal stakeholders; students, lecturers, and administration staff. They all consider that this program is very important seen from the high mean for the 59 indicators. Although they consider that this program has been well implemented, they still perceive that it is still below their expectation of performance. Green Ethics has the highest average score of appropriateness level, followed by green business, and green physics. This is supported by the result of IPA analysis which shows that most indicators are in Quadrant I, II, and III with only a few are in Quadrant IV, meaning that Green Tourism programs are generally well implemented although some indicators still need to be either improved and “overkilled”. This study recommends BSP to improve efforts on some indicators such as praying before activities, encourage honesty, discipline, and care attitudes, integrate religious values into teaching learning process, encourage work culture, set up discussion groups, encourage voluntary culture, create group work, regularly communicate campus activities to public; and maintain buildings.

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