Influence of Hierarchy Sustainability Governance in Ecotourism Management: Case Study in Paya Indah Wetlands

Mohamad Fauzi Mohamad Saruman\textsuperscript{a}, Muhammad Rizal Razman\textsuperscript{b}, Sharifah Zarina Syed Zakaria\textsuperscript{c}, Lee Khai Ern\textsuperscript{d}

\textsuperscript{a,b,d} Science and Sustainability Governance Research Centre (SGK), Environment and Development Institute (LESTARI), Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia

\textsuperscript{c} Environment, Economic and Social Sustainability Research Centre (KASES), Environment and Development Institute (LESTARI), Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia

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Abstract
Governance is a very important interaction process involving government, private sector and civil society in decision-making. Knowing the influence of sustainability governance to the ecotourism management is important to make ecotourism objective and Ecotourism Center more successful. Thus, the study was done to assess the hierarchy sustainability governance based on documents analysis on Paya Indah Wetlands (PIW) ecotourism management in so that environmental quality is maintained and generating national income. The study was carried out by identifying and analyzing the themes and sub themes of hierarchy governance that affect the sustainability of PIW ecotourism management. Qualitative study conducted in PIW by analyzing legal documents, guidelines and SOPs related to the ecotourism management in PIW by analyze the data using Nvivo version 11 software. The findings indicate that hierarchy sustainability governance influence PIW ecotourism management through security element according to rules and regulations in the form of legislation and non-legislation; monitoring and top-down bureaucracy approach involving application and approval process. The result is dynamic because every theme that are safety, regulation and bureaucracy cannot stand alone in the management of ecotourism but need help from other themes, creates a complex interdependence. In conclusion, based on documents analysis, hierarchy sustainability governance affect the ecotourism management in PIW.

Keywords: Hierarchy governance, ecotourism, sustainability, Paya Indah Wetlands, complexity interdependency.
INTRODUCTION

Ecotourism which is tourism sub sector help to increase government revenue through foreign exchange amounting to RM53 billion in 2009 as stated in the Malaysia Budget Report (2011). Lindberg et al. (1997) estimated that 7 percent of the world's travel expenses were donated from ecotourism. Mapjabil, J. (2012) claimed that the ecotourism potential to be developed in Malaysia because its rich of forest resources, highlands, lakes, rivers and sea areas suitable for ecotourism. The term governance is still obscure and much disputed by many researchers. Kettl (2002) defines governance as the structure and function of public institutions to enable the government to perform its duties while Bennett (2000) claimed that governance is more than a government. The popular definition of governance is the use of administration, economy and politics to manage the affairs of the state administration in all levels of which citizens and stakeholders to exercise rights under legislation to solve the problem (Development Program of the United Nations Development Programme UNDP, 1970). Hierarchy governance has played a role in the Western Countries administration system since 1950s (Thorelli, 1986; Peters, 1998: Lowndes & Skelcher, 1998). Some of the features identified in the governance hierarchy is security, coercion, compliance with laws and regulations, and administrative practice top-down approach (Kickert, 1997; Weber, 1952; Van Gunsteren, 1976; Heywood, 1997). Sustainability is a broad concept and has a variety of interpretation (Adams, 2001; Williams & Millington, 2004).

Sustainable development was introduced by the World Commission on Environment and Development (WCED) in 1987 through its report entitled Our Common Future (Garrod & Fyall, 1998; Hobson & Essex, 2001). The report was later known as the Brundtland Report defines sustainable development as development that meets the needs of the present generation without compromising the ability of future generations to meet their needs. According to Blowers (1993) sustainable development aimed at conserving resources, physical development, improvement of environmental quality, social equity and political participation. The purpose of ecotourism is often used in the interpretation of Ceballos-Lascurain (1988), namely travel and tours that are environmentally responsible, to nature to enjoy and appreciate nature naturally including the nature of contemporary culture and the past, which promotes conservation, low impact and enable the involvement of local communities in a positive socio-economic activities. Several government agencies are involved in ecotourism in Malaysia and PIW is PERHITAN Department, Ministry of Tourism and Culture Malaysia (MOTAC) and Tourism Malaysia. Pearce (1989) claimed that the assistance and involvement of government agencies in the administration enable more systematic management of tourism. Act and related regulations is also Ecotourism Wildlife Conservation Act 2010, Tourism Industry Act 1992, Malaysia Tourism Promotion Board Act 1992, Standard Operating Procedures (SOP) and the Guidelines on PIW and National Ecotourism Plan 1996 (NEP).

According to Razman, M.R. (2002), the laws, regulations or any guidelines provided for the purpose of protecting the environment to be preserved and to ensure eco-tourism continues to thrive in Malaysia. Paya Indah Wetlands (PIW), the study area is located in Mukim Dengkil, Sepang, Selangor. Sign in to PIW is free and visitors can carry eco-tourism activities like...
watching birds, crocodiles, rhino hippo, gibbon, porcupine, beaver, feeding crocodiles, rhino hippo and fish, biking, jungle trekking, wildlife watching at night, camping, fishing and photography. Facilities available at PIW is an information counter, chalet, meeting rooms, surau, canteen, campsites, hostels, site activity, lookout tower, an ecological, family park, rest area, pier, walkway bamboo, the fauna, a sustainable and shelf view (PERHILITAN, 2016). Jahi, J. (1995) claimed that in addition to ecotourism center, PIW serves to control flooding, prevent coastal erosion and help raise and stabilize the precipitated material is smooth on the coast. Thus the government's move PIW as ecotourism center is timely to ensure environmental tatatapan preserved for future generations. Accordingly, based on the analysis of documents and studies carried out to identify and analyze the themes contained in hierarchies of governance that affect the sustainability of ecotourism management in PIW. Figure 1.1 shows a map of the location of PIW.

Figure 1.1: PIW Location Map. Source: PERHILITAN (2016)
Methods and Study Area

Research conducted is qualitative in PIW based on analysis of documents to obtain secondary data. The researchers used a technique document analysis in qualitative methods for the purpose of obtaining the results of the study help to understand the phenomenon of a small but known or obtain more in depth data that is difficult to explain if the study made use of quantitative methods and to gain a new perspective on something that has been known for general (Maxwell, 2005). The technique used involves analysis, 5 documents from secondary data sources related to ecotourism. The document was given the code to facilitate the discussion in Table 1.1 below:

<table>
<thead>
<tr>
<th>DOCUMENT NAME</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wildlife Conservation Act 2010 (716 Act)</td>
<td>Document number (1)</td>
</tr>
<tr>
<td>2. Tourism Industry Act 1992 (482 Act)</td>
<td>Document number (2)</td>
</tr>
<tr>
<td>4. Standard Operating Procedure (SOP) and Guidelines</td>
<td>Document number (4)</td>
</tr>
<tr>
<td>for Wildlife in PIW</td>
<td></td>
</tr>
<tr>
<td>5. Malaysia Tourism Promotion Board Act 1992</td>
<td>Document number (5)</td>
</tr>
</tbody>
</table>

The analysis was done based on institutionalism theory based on the degree of thought Idealism and Realism. According to Powell (2007), Theory of institutionalism arises findings of sociology which states that the organization exists is bounded by institutionalism. The scope of the study is in PIW and research done is to preserve the hierarchy of governance, because governance, sustainability is a very broad field of science (Adams 2001, Williams & Millington, 2004). PIW is selected as the study area for ecotourism center has been strong and well known either inside or outside the country for more than 10 years of operation, managed systematically and has many basic facilities and eco-tourism activities that can be done there.

The themes are made on Reliability Index Cohen Kappa (Cohen, 1960) as suggested by Yin (1994) and believed to be due to a number of qualitative researchers in Malaysia also use the same method to analyze the interview data and documents (Mahamod, 2004; Nik Yusoff, 2005). Approval of two expert assessors in qualitative research was obtained to determine the reliability is higher for every unit used to describe a theme (Steven, 1958). Cohen's Kappa values were 0.95, which is very good. Secondary data were analyzed using content analysis method using NVivo software version 11 for the purpose of processing the information and interviews. This software is used to facilitate the theme established by the research questions.
to facilitate the analysis process is carried out to achieve the objectives of the study (Richards, 1999, 2005).

**Data Analysis Research**

The information obtained from the documents listed above were analyzed using the appropriate Nvivo 11 software in qualitative research. By using the software, researchers have established and test coding scheme, coding scheme The purpose of this test is to assess his credit. According to Richards (1999, 2005) and Maxwell (2005), steps taken to carry out the analysis of the document are:

(i) The document analyzed using NVivo 11 in accordance with the objectives and research problems.

(ii) The theme and sub-themes will be built using the data concerned.

(iii) All documents are read and reviewed the transcript repeatedly carefully so that the theme and sub-themes that build in the future is appropriate.

(iv) The theme and sub-theme will be changed to display the model diagram analysis software NVivo 11. Researchers have read paragraph by paragraph to identify themes and sub-themes that focus on the preservation of the hierarchy of governance in the management of ecotourism in PIW.

Document analysis process flow is shown in figure 1.2 below.
RESULTS AND DISCUSSION
Document Analysis Findings

The findings of the analysis document sustainability governance hierarchy has identified 3 themes and 8 sub-themes. The theme were security, regulation and bureaucracy while sub-themes were investigations, instruction, compliance, legislation, non-legislation, monitoring, approval and top-down approach. All themes and sub-themes are shown in Figure 1.3 below:
Security Theme

Security is an important element in the preservation of the hierarchy governance. Analysis found that the security aspect is emphasized by management PIW in the management of ecotourism. In terms of safety, some things are provided by the management of PIW is providing a guard at the main entrance; security guards at strategic locations and exposed to danger; PIW and a fence around the animal; signboard written "warning" or "danger" in a poolside crocodiles, hippos and hedgehogs hippo and billboards navigation for driving tourists. To enforce the rules and laws, especially with regard to safety, security officers often patrol to deter catch birds or fish in a pond that is not allowed. Tourists who disobeys regulations will be arrested and taken to the PIW management for further action. Sub themes found under the theme of security are instructions, compliance and investigations. All documents analyzed are expressed regarding aspects of safety through the sub theme of conformity, instruction or inquiry as the following example:

"Subject to this Act, no person shall hunt or keep protected wildlife; take or keep any part of a protected wild animal; collecting bird's nest; import or export any protected wildlife or any part of protected wildlife unless a license granted under this act "[Section 9, Document Number (1)].

"Control of the mines and exploration cannot be carried out in the National Park except as provided in subsection (2) which states if the state authorities have reason the National Park there are valuable mineral deposits, the PBN may with the consent of the Minister undertake mining activities in respect of" [Section 10 (1) Document No. (2)].
"Do not get too close to the hippos. Visitors must be at least 0.5 meters from the wall bracket hippopotamus "[4.1 Rules and Regulations Feeding Hippos, Document No. (4)].

"The Board shall furnish the Minister with any information about the property and activities as required or directed by the Minister from time to time" [Section 9 (1), Document No. (5)]

The document clearly shows that governance affects the sustainability of ecotourism management in PIW through security approach with emphasis on compliance with the directive, act and carry out the investigation if the SOP and receive complaints and ensure that travelers comply with the rules provided. The purpose of the rules is provided to ensure safe and comfortable environment to take care of the animals found in PIW. This can be proved by passages in the upper section and the regulations of the sub-themes for the security role for the PIW ecotourism management.

**Regulations Theme**

Regulation is an important consideration in relation to the influence of sustainability governance in the management of PIW Ecotourism Centre. Sub themes of regulation are legislation and non-legislation. Analysis of the documents clearly found that the management of ecotourism in PIW is based on three laws, namely the Wildlife Protection Act, 2010 (716 Act), the Tourism Industry 1992 Act and the Malaysian Tourism Promotion Board Act 1992. Two non-legislation document is also adopted in the management of ecotourism in PIW that are National Ecotourism Plan 1996 (NEP) and Standard Operating procedures (SOP) and the Guidelines for Wildlife in PIW. To illustrate elements relevant regulations, visitors who wish to enter PIW compound should fill in their personal information in guestbook and get the vehicle passes from the main guardhouse in compliance with the regulations. All documents are reviewed and analyzed to find that there were elements in the regulation aspects of preservation and conservation of the environment and the wildlife that is closely related to ecotourism contained in legal documents, as the following example:

"A licensed dealer, licensed taxidermist and collector of bird’s nest at the time of each sale shall issue a receipt of sale to the buyer". [Section 44 Document Number (1)] - Sub theme legislation].

"Any person who carries or handles accommodation premises shall apply to the Commissioner to register premises as tourist accommodation premises". [Part IVA Sekseyen Document No. 31A (2) - Sub-theme legislation].

The analysis of non-legislative document that affect the management of ecotourism in PIW as the following example:

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"Do not trample, kill, take or disturb wildlife / insects" [4.3.1 Prohibition When Fishing, Fishing SOP, Document No. (4) - Sub-theme non-legislation].

"Please try to land your fish as quickly as possible, the avoidance of lactic acid levels become too high in fish and possibly killing the fish" [4.4 Practice Catch And Release Fishing, Fishing SOP, Document No. (4) - Sub-theme non-legislation].

Legislation and non-legislation document analyzed above clearly shows the element of hierarchy governance of sustainable ecotourism management in PIW influence through regulation enforcement in the form of legislation and non-legislation. Although visitors can enter for free to PIW but will be charged a small fee in the form of coupons or permits for certain activities such as camping, jungle trekking or fishing. Proceeds will be accounted for as government revenue. This fact is proved by passages in the document that indicate the legislation and non-legislation elements are used for the management of PIW Ecotourism Centre.

**Bureaucracy Theme**

Bureaucracy is a theme that includes sub-themes of monitoring, approval and top-down approach. As an example of the application must be submitted to the management of PIW later than one month if there are agencies that want to implement a family day activities. The application and approval process is happening is that there are elements of the bureaucracy in the management of ecotourism in PIW. Some examples of passages that describe the existence of the bureaucratic elements are as follows:

"An application for the grant of a license under this Part shall be made in writing to the Commissioner in such form as may be prescribed" [Section 6 Document Number (2) - Sub themes approval].

"After the inspection done by the staff of the Department, the horseman asked to fill out evaluation forms to enable the Department to monitor and improvements" [Article 4.1, Document No. (3) - Sub theme of monitoring and approval].

"Monitoring the use of Family Day to make sure the site does not exceed the time set and maintained site cleanliness" [2.6 Procedure Rental Site Family Day, Document No. (4) - Sub themes monitoring].

Based on the analysis of the above documents, clearly revealed that the management of ecotourism in PIW influenced by the bureaucracy involved in sustainability governance hierarchy. This can be proved by the example quoted above, showing the elements of monitoring, approval and administration using a top-down approach in the bureaucratic aspects of the management of ecotourism in PIW.

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Dependence on Hierarchy Sustainability Governance Themes

The analysis of the documents shows that there is dependence on the themes of hierarchy sustainability governance. All documents show the themes of security under the direction of hanging elements with the theme of regulation under the legal element in the hierarchy governance, sustainable management in PIW is described as the following example:

"(1) No person shall: (a) have or keep any snare; or (b) install, place or use any trap for the purpose of hunting any wildlife. (2) Any person who contravenes subsection (1) commits an offense and shall, on conviction: (a) in relation to an offense under paragraph (a), a fine not exceeding one hundred thousand ringgit or to imprisonment for a term not exceeding three years or both; and (b) in relation to an offense under paragraph (b), a fine not less than fifty thousand ringgit and not more than one hundred thousand ringgit and to imprisonment for a term not exceeding two years "[Section 29, Document Number (1)].

"Regulations under this section: (a) may provide that any act or omission in contravention of any provision thereof shall be an offense; and (b) may provide for the imposition of penalties for the offense, and the penalty shall not exceed five thousand ringgit or one year imprisonment or both "[Section 24 (3), Document Number (5)].

The theme of safety under the direction of dependency with elements of the bureaucracy under the theme of graduation element in sustainability governance hierarchy described as the following example:

"(1) Subject to the provisions of this Act, no person shall: (a) hunt or keep any protected wildlife; (B) take or retain any part or derivative of any protected wildlife "[Section 9, Document Number (1)].

Next document number (4) also showed the existence of interdependence theme under the theme of non-legislation elements of the theme of the bureaucracy under the monitoring element as the following example:

"An inspection of the hostel made to ensure they are not damaged or missing. Pillowcases, blankets and dirty sheets sent to laundry. Hostel swept and rubbish dumped in the dustbin "[Chapter 7 of Article 1.2, Document number (4)].

The findings of the study show the interdependence important themes of safety, regulation and bureaucracy through the analysis of documents in respect of governance, sustainability hierarchy. The document number (1) shows the interdependence three themes, namely through security (investigations) regulations (legal aspects) and bureaucracy (top-down approach) as follows:
"Not allowed anyone hunt or keep any wildlife or part of any protected wildlife, import or export any wildlife or parts of protected wildlife, hunting wildlife during the close season, conduct research or study wildlife protected and any use of protected wildlife for controlling zoo, circus or wildlife exhibition or commercial captive breeding except with a special permit issued under this act "[Section 11, Document Number (1)].

Based on the above discussion clearly shows that hierarchy sustainability governance is dynamically influenced the management of ecotourism in PIW through dependencies themes such as safety, regulation and bureaucracy. Themes concerned cannot stand alone (independent) but need the support of another theme and then create the concept of interdependence theme in influencing sustainable ecotourism management in PIW.

Recommendation
The management of PIW recommended to provide more directions and notice boards to guide the visitors. Security guards are on site at risk of accidents such as poolside crocodiles and hippopotamus (hippo) so that visitors feel safer. In order to maintain safety and protect the PIW environment, the management should create more activity such as monitoring and bringing intruders who disobeys the rules to justice. PIW management should strengthen law enforcement and regulations to ensure the environment is maintain in PIW and remain reserved for the inheritance to the next generation. To attract more visitors, stakeholders should increase promotion using internet website, social networking sites like facebook, blog and other media. The involvement of local communities with PIW ecotourism activities should be enhanced as open up more business opportunities, selling crafts and accordance with the definition of ecotourism itself.

Conclusion
The document clearly shows the hierarchy governance influence PIW ecotourism management via bureaucratic administrative and enforcement elements of the guidelines, SOPs, regulations and laws. The study found that there was interdependence of the themes in hierarchy sustainability governance in the management of PIW Ecotourism Centre. The themes are identified, namely safety, regulation and bureaucracy seen cannot stand on its own (independent) instead requires the support of other themes in sustainability governance hierarchy. Complex interdependence is a dynamic in the hierarchy of governance sustainability through documents analysis that affect the management of PIW Ecotourism Centre.

Corresponding Author
Mohamad Fauzi Mohamad Saruman, Science and Sustainability Governance Research Centre (SGK), Environment and Development Institute (LESTARI), Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia. Email: mfms744@yahoo.com.my.

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