

**AN ASSESSMENT OF THE RELATIONSHIP OF  
THE PRIVATE SECTOR TO  
THE NATIONAL IMPLEMENTATION OF  
THE CONVENTION ON BIOLOGICAL DIVERSITY:  
A CASE STUDY OF THAILAND**



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A Thesis Submitted in Partial Fulfillment of the Requirements  
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การประเมินความสัมพันธ์ของภาคเอกชนกับการดำเนินการ  
อนุวัติตามอนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ :  
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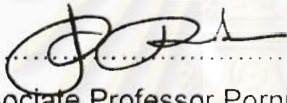
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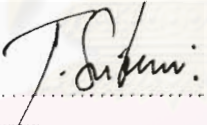
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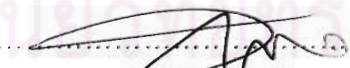
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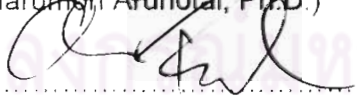
  
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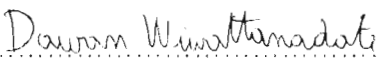
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ประเทศไทยในฐานะภาคีสมาชิกของอนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ ได้ดำเนินการอนุวัติตามอนุสัญญา และข้อมติต่างๆ ที่ได้รับความเห็นชอบจากสมัชชาภาคีในระดับชาติ อย่างไรก็ตามการดำเนินการของภาคเอกชนตามอนุสัญญานับว่ามีความสำคัญยิ่งตามข้อมติที่ 8/17 ในการประชุมสมัชชาภาคีครั้งที่ 8 ลิ้มจิรกาล และคณะ (2552)ได้ระบุถึงการมีส่วนร่วมของผู้มีส่วนได้เสียในการดำเนินการอนุวัติในระดับชาติตามอนุสัญญาว่าด้วยความหลากหลายทางชีวภาพอยู่ในระดับต่ำโดยเฉพาะภาคเอกชน

จากการทบทวนเอกสารและการสัมภาษณ์ เพื่อทำความเข้าใจบริบทของภาคเอกชนในการดำเนินการจัดการสิ่งแวดล้อมและโครงการต่างๆ เช่นบริษัท ปตท. จำกัด(มหาชน) และ บริษัทเครือเจริญโภคภัณฑ์ ซึ่งเป็นสองบริษัทใหญ่ที่สุดในประเทศไทยพบว่ามีกรดำเนินการและมีความเกี่ยวข้องกับมาตราและข้อมติของอนุสัญญา

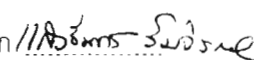
ได้ทำการสำรวจโดยใช้แบบสอบถามเพื่อให้เข้าใจถึงการรับรู้ของภาคเอกชนในประเทศไทย ที่มีต่อความรับผิดชอบต่อสังคม อนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ และความร่วมมือระหว่างภาครัฐกับภาคเอกชน ผลการศึกษาแสดงให้เห็นว่าภาคเอกชนในประเทศไทยมีความสนใจในการดำเนินการสนับสนุนกิจกรรมและโครงการที่เกี่ยวกับความหลากหลายทางชีวภาพ และร่วมเป็นหุ้นส่วนกับภาครัฐในโครงการจัดการสิ่งแวดล้อม โดยสามารถเพิ่มระดับการดำเนินงานร่วมในกิจกรรมที่ภาคเอกชนต้องการมีส่วนร่วม เช่นการเสริมสร้างสมรรถนะและการให้คำปรึกษา โดยภาคธุรกิจจำนวนมากได้ดำเนินการปลูกป่า การให้ทุนสนับสนุนด้านสิ่งแวดล้อม และการประเมินผลกระทบสิ่งแวดล้อม และพบว่าภาคธุรกิจส่วนใหญ่ขาดองค์ความรู้ของอนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ หน่วยประสานงานกลางของประเทศ เช่นสำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม ควรสร้างความเชื่อมโยงกับภาคธุรกิจ และควรทำการวิจัยถึงความต้องการของภาคธุรกิจเอกชนในการดำเนินการร่วมกับผู้มีส่วนได้ส่วนเสียอื่น ๆ เช่นหน่วยงานภาครัฐ เป็นต้น

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ลายมือชื่ออ.ที่ปรึกษาวิทยานิพนธ์ร่วม 

## 5187641120 : MAJOR ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY  
 KEYWORDS : CONVENTION ON BIOLOGICAL DIVERSITY (CBD)/PRIVATE SECTOR  
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WALKER YOUNG: AN ASSESSMENT OF THE RELATIONSHIP OF THE  
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As a Party to the Convention on Biological Diversity (CBD), Thailand has to comply at the national level of the Convention as well as the decisions adopted by the Conference of the Parties (COP). However, private sector engagement with the Convention is vitally important for proper implementation, as described in COP 8 Decision VIII/17. Limjirakan et al. (2009) has indicated that stakeholders involved in national implementation of the CBD have experienced low levels of interaction with the private sector.

Literature review and interviews were conducted to understand the context of private sector engagement in environmental management and the projects of private sector entities such as PTT Public Company Limited and the Charoen Pokphand Group, two of Thailand's largest corporations, are summarized and linked to relevant CBD Articles and COP decisions.

In addition, an on-line survey using questionnaire was undertaken to understand the sentiment of the private sector in Thailand towards CSR, the CBD, and public-private partnerships. Findings demonstrate that the private sector in Thailand is interested in supporting actions and programmes related to biological diversity and in partnering with the Thai government on environmental management projects. Partnerships could be enhanced by focusing on the areas of work where businesses want to contribute, such as capacity building and advisory services. Numerous businesses are already implementing relevant projects in the areas of reforestation, environmental finance and environmental impact assessment. Since most businesses lack knowledge of the CBD, the CBD national focal point of Thailand, namely the Office of Natural Resources and Environmental Policy & Planning, should reach out more to establish linkages with the business community. Additional research is recommended to understand how private sector businesses prefer to be engaged by other stakeholders like government.

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Field of Study : Environment Development  
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## LIST OF ABBREVIATIONS

ABS	Access and Benefit-sharing
BRT	Biodiversity Resources Management Project
CBD	Convention on Biological Diversity
CEO	Chief Executive Officer
CEPA	Communications, Education, Public Awareness
COP	Conference of the Parties
CP	Charoen Pokphand
CPF	Charoen Pokphand Foods PCL
CSR	Corporate Social Responsibility
DLD	Department of Livestock Development
GDP	Gross Domestic Product
GEF	Global Environment Facility
GRI	Global Reporting Initiative
IISD	International Institute for Sustainable Development
IUCN	World Conservation Union
JBA	Japan Bioindustry Association
MASCI	Management System Certification Institute of Thailand
METI	Ministry of Economy, Trade and Industry
MNC	Multi-national Corporation
MONRE	Ministry of Natural Resources and Environment
NCSA	National Capacity Self Assessment
NGO	Non-governmental Organization
ONEP	Office of Natural Resources and Environmental Policy and Planning
PPP	Public-Private Partnership
PTT	PTT Public Company Limited
R&D	Research and Development
SCBD	Secretariat of the CBD
SET	Stock Exchange of Thailand
SMEs	Small and Medium-sized Enterprises

THB	Thailand Baht (unit of currency)
UN	United Nations
UNDP	United Nations Development Programme
URL	Uniform Resource Locator
USA	United States of America
USD	United States Dollar (unit of currency)
WBCSD	World Business Council for Sustainable Development



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

# CHAPTER I

## INTRODUCTION

The Convention on Biological Diversity (CBD) is an international environmental agreement which came about through the collaborative efforts of the 172 governments which participated in the United Nations Conference on Environment and Development (also known as the 'Earth Summit') from June 3 to June 14, 1992. As stated in Article 1 of the Convention (SCBD, 2006a), the objectives of the CBD

are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

More than simply a multilateral agreement on environmental management, the CBD can be envisaged as the major international agreement governing sustainable development in that it goes into trade and development alongside sustainable use of natural resources.

Thailand signed the Convention on June 12, 1992, and undertook ratification on January 29, 2004. As a Party to the CBD, Thailand has to comply at the national level of the Convention as well as the decisions reached by the Conference of the Parties (COP). Since 1992, Thailand has made significant efforts to implement strategies, actions and programmes which are called for under the CBD. Even with the progress made, there are a number of areas of compliance which Thailand has not yet fulfilled and which require capacity development.

Because of the need for capacity building, Thailand completed a national capacity self-assessment (NCSA) report in 2009 under facilitation of

the United Nations Development Programme (UNDP) with the financial support of the Global Environment Facility (GEF). The NCSA report highlights the barriers and challenges that hamper the national implementation of the CBD and identifies national priorities for capacity building. One of the challenges identified in the NCSA report on CBD implementation in Thailand was the low level of collaboration with the private sector. Of 100 survey respondents who work in careers related to biodiversity and environmental management, 35 responded that they experienced low levels of collaboration with the private sector; only 20% of respondents enjoyed a high level of collaboration with the private sector (Limjirakan et al., 2009). The report also identified that Thailand had not begun implementation of COP decision III/18 which calls for the promotion of private-sector initiatives for building incentive measures which could further aid CBD implementation.

This lack of engagement of the private sector is a weakness which must be resolved if the Convention is to be effectively implemented in Thailand. Indeed, “effective implementation of the Convention needs the active involvement of civil society (including nongovernmental organisations, local and indigenous communities, and the private sector)” (SCBD, 1998, para. 6). The CBD specifically calls for private sector engagement in a number of sections. Article 10 of the Convention states that “each Contracting Party shall, as far as possible and as appropriate . . . encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources” (SCBD, 2001: 10). Article 16 of the Convention requires Contracting Parties to adopt measures which facilitate the private sector in transferring technology and providing access to technology for the benefit of governmental institutions and other private sector institutions in developing countries (SCBD, 2001: 14). COP decision VIII/17 mentions that the private sector is “arguably the least engaged of all stakeholders in the implementation of the Convention, yet the daily activities of business and industry have major impacts on biodiversity” (SCBD, 2006b). Further, the agenda at the Ninth Meeting of the COP focused extensively on the private sector.

Although the research from the NCSA report showed that the governmental and academic sectors are not actively collaborating with the private sector on biodiversity concerns, there are still Thai businesses taking action on their own accord. Examples include the Charoen Pokphand (CP) Group and PTT Public Company Limited.

The CP Group consists of 250 companies and employs nearly 200,000 people with operations in 20 countries. This multinational corporation is Thailand's largest business in the food and agricultural sector and one of Asia's leading conglomerates. As such, the CP Group has a substantial impact on biodiversity. Aware of its responsibility towards the environment, the company has implemented a number of research and development projects which preserve native species of chickens, buffalo and native cattle and share the benefits of such conservation programmes with local farmers. The CP Group also utilizes the waste from its pig farming operations to create biofuel, thereby reusing the excrement which would otherwise pollute the freshwater resources and increase the level of methane gas in the atmosphere.

PTT Public Company Limited ("PTT") is Thailand's largest petroleum company with a fully integrated gas business which spans both oil and petrochemical products (PTT Public Company Limited, 2009). As part of its corporate social responsibility (CSR) programme, PTT undertook the "One-Million-Rai" Reforestation Project in honor of His Majesty the King of Thailand. The project's goal included the restoration of degraded lands through reforestation initiatives. Under the project, PTT partnered with the local community of Pranburi to restore an abandoned shrimp farm to its natural state as a mangrove ecosystem. Over 786 rai of mangrove forest has been revitalized under the project. PTT also established the Sirinath Rajini Mangrove Forest Ecology Learning Center to educate the public about the mangroves and the rich biodiversity contained in the local forests.

The environmental and biodiversity projects of the companies mentioned above can be tied directly to CBD articles and COP decisions to validate that their actions are contributing towards national implementation of



the CBD. However, many questions remain about the relationship of the private sector and the national implementation of the Convention. For instance, what is the general sentiment of Thai businesses towards conservation of biological diversity? Are Thai businesses interested in collaborating with the governmental and academic stakeholders on environmental management and biodiversity concerns? Are Thai businesses receptive to CSR, and if so, would they consider engaging in projects focused on biodiversity conservation and sustainable use?

Answering these kinds of questions would be extremely helpful for Thailand's national implementation of the CBD. Because gaining the participation of the private sector is so crucial for effective implementation, the governmental institutions and academia need to know the current sentiments and interest of the private sector towards biodiversity and the environment in order to enhance their approach at collaboration and engagement.

### **1.1. Rationale**

The Convention on Biological Diversity (CBD), arguably the major international environmental agreement dealing with sustainable development, includes multiple articles and decisions that focus on private sector engagement. Despite ratifying the CBD in January of 2004, Thailand has struggled to implement the programmes and strategies of the Convention on a national level. One of the reasons for the difficulty has been the lack of collaboration with the private sector on biodiversity-related efforts. Indeed, the CBD is clear that private sector engagement is vital for effective implementation of the Convention.

Is the private sector interested in collaborating with government and academic stakeholders on environmental management and biodiversity conservation? Are for-profit businesses in Thailand already engaged in individual projects which are indirectly aiding the national convention of the CBD? What strategies would be best suited towards enhancing cooperation between governmental and academic stakeholders with the private sector on biodiversity concerns?

The thesis will undertake research to answer these questions with the hope that the results will stimulate multi-stakeholder collaboration and aid the national implementation of the CBD.

## **1.2. Thesis Statement**

The thesis will answer the following questions:

1. Is the private sector in Thailand interested in supporting or implementing actions or programmes related to biological diversity?
2. How can the academic and government sectors better engage the private sector in order to attain a multi-stakeholder approach towards national biodiversity management?
3. For those businesses already taking action, what is the level of participation in CBD-relevant activities and which type of activities are being implemented?
4. Which CBD articles and COP decisions are currently being addressed by businesses?

By addressing these questions, the research will make a strong contribution towards the body of knowledge surrounding CSR in Thailand as well as the national implementation of the CBD. The Thai government has full-time staff dedicated to CBD-related matters under the Office of Natural Resources and Environmental Policy and Planning (ONEP). The Ministry of Environment and Natural Resources (MONRE) utilizes substantial financial and human resources towards sound environmental management practices. The Ministry also has the obligation of overseeing mechanisms and strategies for Thailand's national implementation of the CBD.

Since research has shown that private sector engagement related to implementation of the CBD is low (Limjirakan et al., 2009), there is understood to be a gap of knowledge surrounding the reasons for the lack of engagement. The proposed research will fill this knowledge gap and potentially aid the MONRE and the ONEP in better engaging the private sector in the national implementation of the CBD using approaches which the research ranks as most relevant. Implementation of the CBD is a matter of

compliance which Thailand has implemented in front of the global community. Hence, any research which can enhance the implementation of the Convention is beneficial for the nation.

### **1.3. Scope and Brief Methodology**

The research consists of two elements including case studies and a survey questionnaire. The environmental outreach projects undertaken by Charoen Pokphand Group and PTT Public Company Limited, two of the largest corporations in Thailand, were reviewed and then linked to corresponding CBD articles and COP decisions to demonstrate what types of linkages exist.

The other research element is an online survey questionnaire distributed via e-mail and accessible via the Internet. The survey was distributed to private sector businesses with operations in Thailand. Other stakeholders such as non-governmental organizations (NGOs) and academia were not eligible to participate in the survey since the questions were specifically formulated to gauge certain elements of private sector sentiment and decision-making processes.

The initial intention of the researcher was to meet a quota of 100 responses to the survey but without limiting the total number of responses.

### **1.4. Implications of Research**

The NCSA thematic assessment report on the CBD (Limjirakan et al., 2009) found that the government and academia in Thailand experienced relatively low levels of collaboration with the private sector excluding NGOs and civil groups (i.e., the for-profit businesses). Private sector engagement is directly addressed by COP decisions VIII/17, IX/26 and X/21 and encouraged in the CBD Articles 10 and 16. Although the NCSA report uncovered this shortcoming in the national implementation, the study did not go further in understanding why the stakeholders lacked effective collaboration. Nor did the report take stock of the general sentiment within the

private sector businesses regarding their engagement with government stakeholders on environmental issues or their implementation of the CSR programmes which address biological diversity concerns.

Based on the findings of the NCSA report, the author has already established that private sector collaboration for CBD implementation is lacking in Thailand. Based on the text of the CBD and the COP decisions as well as a review of the academic literature, the author can also establish that private sector engagement is a key aspect of effective implementation of the CBD. Therefore, the majority of the new research to be conducted as part of the thesis involves better understanding the relationship of private sector in Thailand to the CBD mechanisms and demonstrating the connections through the case studies, and surveying the private sector to understand their CSR priorities and to assess the areas where engagement can be enhanced between stakeholder groups.

The case studies in Chapter IV present information about projects from private sector companies which are relevant, both explicitly and implicitly, to the national implementation of the CBD. This information benefits the national stakeholders as well as international bodies and groups that are interested in private sector engagement in the CBD. The case studies will act as examples for other Thai businesses to follow should they decide to engage in biodiversity-related outreach programmes as part of public-private partnerships or as corporate social responsibility initiatives.

The original research which was generated from the distribution of a survey questionnaire (Chapter IV) adds new perspective to the current understanding of the private sector's relationship to the government stakeholders in general and the national implementation of the Convention on Biological Diversity in particular. As a result, this research will help the reader to gain a better understanding of:

- (a) how the Thai private sector views national biodiversity in terms of priorities;
- (b) what types of projects relevant to the CBD are being conducted by the private sector; and

- (c) how to better involve the private sector in order to further the progress of national implementation of the stated goals and actions of the CBD.



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## CHAPTER II

### LITERATURE REVIEW

#### 2.1. The Case for Private Sector Engagement in Environmental Governance

In centuries past, the state government was the clear arbiter of governance, providing social services such as law enforcement, adjudication, maintenance of public spaces and management of forests and wild territories. This was the case in nineteenth century Thailand where provincial monarchs controlled the people and the natural resources without consulting with other stakeholders (Usher, 2009). The 20<sup>th</sup> century saw the birth of industrialization in the West, and with it, the rise of the private sector.

Friedman (2008) famously pointed out that “the social responsibility of business is to increase its profits”. If this were the case, then business and the private sector would have no responsibility to participate in governance unless it were profitable to do so. However, the role of business and society has become intertwined and interdependent, especially as the ramifications of private sector activities become apparent to the public.

Research conducted in 2008 at the request of the United Nations has shown that the cost of cleaning up and remediating the environmental damage caused by the world’s 3,000 largest companies would amount to USD 2.2 trillion, a figure which amounts to nearly one third of their profits (Jowit, 2010). The cost figures in the research are hypothetical, however, as most countries do not hold corporations accountable for ‘external costs’ like damage to the environment.

The United Nations findings are but one example. There are a number of ways in which business and society are set at odds, where in fact business operations have a perverse impact on society (Das Gupta, 2008). This creates additional pressure on the business to reform its ways so that societal ills can be treated and not accelerated by the activities of the private sector.

The situation is, however, more nuanced than simply placing the blame squarely on the private sector. Ashman (2001) suggests that “declining legitimacy” of government performance in the provision of public services has put pressure on the private sector to address such shortcomings and that this is a major reason for promoting private sector engagement in governance. Scherer and Palazzo (2008) go further by stating that “in as much as the state apparatus does not work perfectly, there is a demand for business to be socially responsible, i.e. corporations are asked to comply with the law when the enforcement body is weak and even to go beyond what is required by law, when the legal system is imperfect or legal rules are incomplete” (p. 414). This “over-compliance” is expanded by Heal (2007), who gives numerous examples of multinational corporations that are engaged in voluntary activities which lessen their environmental impact.

Since both the declining performance of the government (Ashman, 2001) and the perverse impacts from the private sector (Das Gupta, 2008) are partly to blame for a decline in the quality of public services, including environmental services, the public and private sectors have gradually learned to work together and collaborate to address the shortcomings. Logan and Wekerle (2008: 2099) cite Low who defines these public-private partnerships as “different networks of public and private actors” that “come together or are brought together, to formulate and implement solutions to public problems” (Low, 2004: 137). Indeed, both parties are able to bring their respective strengths to the partnership to further the mission at hand. Logan and Wekerle (2008: 2099) argue that “environmental initiatives benefit from the incorporation of business models to mitigate the effects of cutbacks to environmental programs.”

For businesses, striking the right balance in working with the state is not always easy. Critics have been quick to criticize such collaborative efforts when the private sector is seen as overzealous or reaching too far into the public domain (Young, 1990; Bianco and Adler, 2001; Lane, 2003); yet they have been equally critical where the private sector is viewed as not taking enough responsibility or doing enough to address governmental

shortcomings (Sax, 1993; Frisvold and Condon, 1998; Scherer and Palazzo, 2008).

Even the notion of the public sector working in tandem with businesses and corporations has fueled controversy. The academic research into private sector engagement and partnership with state actors is widely debated. Research can be shown to support collaboration with the private sector (Larner and Craig, 2005; Logan and Wekerle, 2008) or to be wary of such collaboration (Lane, 2003; McCarthy and Prudham, 2004), but in general, the relationship is more nuanced and the body of research tends to avoid taking sides. Logan and Wekerle (2008: 2097) describe how "the line between public and private is becoming increasingly blurred." As private-public partnerships have increased in developed countries in particular, labels such as "neoliberal environmental governance" and the "privatization of conservation" have arisen (Young, 1990; Lane, 2003).

Neoliberal environmental governance can be understood to comprise voluntary regulations and self-regulation, public-private partnerships and citizen interest groups or coalitions (McCarthy and Prudham, 2004). Some find that neoliberal governance – complete with its voluntary collaborations with the private sector and its reliance on market-based mechanisms – will benefit the state by giving the appearance of greater consensus within the community and a greater outreach to non-government actors (Larner and Craig, 2005). However, McCarthy and Prudham (2004: 276) worry that increased presence of public-private partnerships and corporate collaboration in environmental management projects is not necessarily a sign of private sector interest and could be indicative of neo-corporatist frameworks arising as part of a neoliberal expansion into environmental governance. The concern here is that the increased involvement of the private sector in environmental governance is met in tandem by a "rolling back" of the state's management efforts.

Raymond and Fairfax (2002: 600 - 601) describe "a 'shift to privatization' in policy" and denote these policies as comprising four characteristics, namely (i) the promotion of conservation on privately owned



land, (ii) the use of market-based mechanisms, including voluntary actions by the private sector, (iii) providing compensation to non-state actors for their efforts in conservation to a pre-established degree, and (iv) the "contracting" of "private groups" in the achievement of the "conservation objectives". Examples demonstrative of this privatization in environmental policy include land trusts, the Kyoto Protocol and the 1990 Clean Air Act of the United States (Raymond and Fairfax, 2002). However, such examples are largely confined to the case of North America; whether this holds any truth for the case of Thailand cannot be concluded from the available research.

Research from developing countries shows that increased voluntary actions from the private sector such as public-private partnerships (PPPs) do not necessarily indicate a move towards a privatized or neoliberal policy approach. In the case of development in India, Kuriyan and Ray (2009: 1663) found that the "outsourcing of development services to private entities need not 'privatize' the state but does alter the way in which citizens 'see' the state." In other words, PPPs allow the state to improve their image with the general public by using the efficiencies of the private sector to appear more market-friendly and less bureaucratic.

### **2.1.1. The Negative Environmental Impacts of Business**

There is ample research to support the position that business actions have a negative impact on biodiversity (Shrivastava, 1995; Heal, 2007; Mills and Waite, 2009). Scherer and Palazzo (2008: 423) make several references to the negative environmental impacts of the private sector, especially multinational corporations which "are perceived as the driving forces behind global warming (Le Menestrel et al., 2002)" and "ecological problems in general (Shrivastava, 1995)".

Some research expands business actions to include economic growth in general as a culprit in the loss of biodiversity. Mills and Waite (2009) make use of quantile regression to disprove earlier findings (Dietz and Adger, 2003) that economic development initially leads to a loss in biodiversity but eventually brings about increased conservation efforts and investment (also

known as the environmental Kuznets curve or EKC). The findings of Mills and Waite (2009) show that economic development leads to sustained loss of species diversity, especially in Asia; moreover, they make a number of compelling arguments that developed countries' perceived gains in conservation are "illusory".

### **2.1.2. Lack of Participation from the Private Sector**

Despite the culpability of the private sector in negatively impacting biodiversity, few businesses have historically taken action to buck the trend. Some participants in the UNDP Regional Bureau Biodiversity Initiative lamented the lack of private sector participation in the Mexico consultation (IISD, 2009). Confirming the lack of presence at the Mexico consultation, COP 8 decision VIII/17 identifies the private sector as "arguably the least engaged of all stakeholders in the implementation of the Convention, yet daily activities of business and industry have major impacts on biodiversity."

There are examples put forward by academics and practitioners as to why businesses are not active in preserving biodiversity (Frisvold and Condon, 1998; Siebenhuner and Suplie, 2005). Frisvold and Condon (1998) point out that native species of flora or fauna are naturally occurring and cannot be patented because they are considered public goods in the global commons. This means that there is ample opportunity for businesses to exploit common goods but little incentive to invest in them since any person has access to them. Additionally, Frisvold and Condon make a strong case that private investors have neglected conservation of plant genetic resources in particular because of the ease of replication and transport of such resources and the common knowledge associated with them.

Siebenhuner and Suplie take a more cynical response to the lack of private sector engagement in the CBD meetings and working process, stating that "members of the business community regard the CBD as an ill-structured and uninformed UN-process, governed by politicians who vastly

over-estimate the value of genetic resources” (Siebenhuner and Suplie, 2005: 508).

## **2.2. Reasons for Private Companies to Engage in Public-Private Partnerships**

The reasons why a business would be interested in participating in conservation and sustainable utilization of resources are myriad. Frisvold and Condon (1998) point out that the loss of species diversity, also known as genetic erosion or biodiversity loss, negatively impacts commercial agricultural crops and can lead to complete collapse of some genetic species. Such a scenario would presumably have a negative economic impact and businesses would want to avoid this from happening. Ashman (2001) finds that the private sector engages in collaboration usually for one of two reasons. The first is that collaboration with other stakeholders (i.e., government or civil society) creates some perceived benefit to the core business of the company. The second reason is philanthropic and stems from the desire of the company to create a positive brand image with the public or, less frequently, a true sense of responsibility on the part of the business leaders. The results from Ashman’s comparative analysis show that “strategic” partnerships are “no more successful” than the “resource-based” partnerships (philanthropy) in real-time applications in Brazil, India and South Africa (2001: 1100). Not all researchers agree with Ashman’s findings. Hopkins (2007) believes that philanthropy should be abandoned in favour of strategic partnerships as well as CSR projects which are focused on developing the Global South. The former, he argues, is not as effective in achieving sustainable development because philanthropy creates dependency of the recipient on the donor.

There are myriad factors which could influence private companies to engage in public-private partnerships. Siebenhuner and Suplie (2005: 512) describe “external influences” which can be significant drivers of “learning processes” and can include “political pressures, changing demand structures, new competitors, new scientific findings, technological innovations,

criticisms from NGOs, other parts of industry or from the media.” Each of these can also be understood as a potential factor for a private company to work more closely with the public sector. In general, such factors can be categorized as financial incentives, corporate social responsibility (CSR), or risk reduction to the company’s business model.

### **2.2.1. Financial Incentives**

There is certainly ample evidence that shows that environmental protection and best practices can lead to cost savings and financial benefit (Frisvold and Condon, 1998; WBCSD, 2006; Heal, 2007). Frisvold and Condon (1998) describe examples where plant genetic resources led to substantial profits from hybrid agricultural crops while the World Business Council on Sustainable Development highlights the cost savings from eco-efficient lighting and clean technologies as an opportunity and motivating factor for businesses to get involved in environmental concerns (WBCSD, 2006). Heal (2007) opines that the private sector is willing to “over-comply” or do more than what is required by law because it allows them to “internalize external effects”, thereby reducing the amount of social conflict which may otherwise exist between business interests and social interests and leading to longer-term sustainability of the company. These outcomes can thus benefit the financial bottom line of the organization and provide further incentive for the private sector to have a business strategy with regard to the natural environment.

Such incentives stem from the concept of natural capital, or the notion that natural resources and ecosystem services have an economic value. With this understanding, efforts have been made to quantify this value into a monetary equivalent (ten Kate and Laird, 1999; Rausser and Small, 2000). While determining the value of ecosystem services such as the sequestration of greenhouse gases or the conversion of carbon dioxide into oxygen by trees has proven challenging, researchers have had greater success determining the value of plant genetic resources: whole plants such as agricultural crops as well as plant extracts or derivatives which are utilized

as key ingredients in the pharmaceutical, cosmetic and biotechnology industries. Research conducted by ten Kate and Laird (1999) shows that global sales of products which utilized some form of plant genetic resources totalled in between USD 500 and USD 800 billion a year as of 1999. Gurib-Fakim (2005: 1) found that “in the pharmaceutical industry, natural products contribute somewhere between 25-50% of the total sales of the products on the market.” Some have even referred to plant genetic resources as “critical inputs” for growing the biotechnology industry (Frisvold and Condon, 1998: 553). As the size of the biotechnology and pharmaceutical sectors has continued to grow over the last decade, the value derived from sales of products which utilize plant genetic resources may be much higher at the present.

The importance of appropriate valuation of natural capital is not to be underestimated, especially when considering the concept of neoliberal environmental governance and public-private partnerships described earlier in the chapter and researched by the likes of Young (1990), Lane (2003) or Larner and Craig (2005). In fact, some suggest that utilizing a neoliberal or market-based approach to conservation and environmental management requires placing a value on nature (Robertson, 2004). Richerzhagen and Holm-Mueller (2005: 447) elaborate upon the necessity of quantifying the value of natural capital if a market-based approach to conservation is used, stating that “conservation of biodiversity can only be obtained if the private benefit of conserving biodiversity exceeds the private benefits of cultivating land or of any other biodiversity damaging activity (e.g. commercial logging).” It is because of this private benefit of higher financial returns that many businesses choose to engage in public-private partnerships.

### **2.2.2. Corporate Social Responsibility**

While financial incentives can be considered one reason for the private sector to willingly engage in public-private partnerships dealing with the natural environment, there are other reasons as well. Corporate social responsibility (CSR) is one such reason and must be considered when

analyzing business engagement in environmental management and conservation projects. Definitions of CSR vary and are used differently by different researchers and businesses. There are some common elements within the definitions, particularly that CSR (i) has some social benefit, (ii) is voluntary in nature and not forced upon the firm, and (iii) comprises actions which go beyond the minimum corporate compliance as required by law (Husted and Allen, 2007; Crowther and Capaldi, 2008). One of the most complete definitions is offered by Hopkins (2003: 10):

CSR is concerned with treating the stakeholders of the firm ethically or in a responsible manner. 'Ethically or responsible' means treating stakeholders in a manner deemed acceptable in civilized societies. Social includes economic and environmental responsibility. Stakeholders exist both within a firm and outside. The wider aim of social responsibility is to create higher and higher standards of living, while preserving the profitability of the corporation, for peoples both within and outside the corporation.

Clearly, the definition is relevant to biodiversity projects in that such projects address environmental responsibility to stakeholders both within and outside the firm. Considering the environment aspect of CSR then implies that firms treat the natural environment in such a way as "deemed acceptable in civilized societies" while still preserving profitability.

Private firms opt to engage in CSR campaigns for a multitude of reasons, although not usually for profit motives; Vogel (2005: 17) points out that "there is no evidence that behaving more virtuously makes firms more profitable." Sometimes, such campaigns are driven by a company's leaders who may wish to truly manage the firm in a socially responsible manner; when driven by these motives, CSR can "represent a move away from the traditional view of companies simply providing services and products, to contributing to the welfare of society" (Tudor et al., 2008: 766). More often though, CSR motives are driven by pressures from democratic governments and social groups to comply with national legislation or be ethically responsible for any actions taken (Ashman, 2001; Vogel, 2005). The declining

legitimacy of some public service sectors has only added to that pressure upon corporations and businesses to be proactive. This development is one of the drivers behind CSR initiatives and public-private partnerships in general.

Research of the CSR motives of private companies in Thailand is lacking. There are a number of CSR initiatives in Bangkok including the *CSR Club* comprising publically-traded corporations (Thai Listed Companies Association, 2010); the *Social Venture Network Asia (SVN Asia)* which runs a CSR Centre in Thailand that publishes a monthly CSR journal called "Business & Society" (SVN Asia (Thailand), 2011); and the *Net Impact Bangkok Professional Chapter* which aims to support socially responsibly practices in the private sector and operates from a base location at the Sasin Business School at Chulalongkorn University (Net Impact, 2006).

Each of these groups attracts a different type of member. The CSR Club only includes those companies which opt in and are publically traded on the Stock Exchange of Thailand (SET). SVN Asia attracts a membership that is largely local small and medium sized enterprises (SMEs). The Net Impact Bangkok Professional Chapter regularly attracts a large number of expatriates, foreign business owners, CSR enthusiasts and graduate students. Hence, each group appeals to a unique segment of the business community and demonstrates just how diverse the interest in CSR has become. Still, the motives behind joining such CSR groups and for Thai businesses undertaking CSR initiatives are not clear and would benefit from additional research.

### **2.2.3. Risk Reduction in Operating Environs**

A third factor which influences businesses to engage in public-private partnerships is risk reduction. This is closely related to the operating environment of the business and the social or political risks of doing business in a particular locale. Das Gupta (2008: 100) points out that "socio-political instability can, in turn, be detrimental to business". Hence, a company can opt to work closely with the public sector to limit the amount of socio-political risk

in the places where it does business. This is sometimes a motivation for CSR campaigns as well.

Risk reduction can also be viewed as a kind of long-term investment strategy. For instance, Crowther and Capaldi (2008: 7) explain that “good environmental performance by an organisation in the present is in reality an investment in the future of the organisation itself” because by limiting its environmentally driven inputs, the firm is preserving more environmental supplies for the future “which will enable the organisation to operate in the future in a similar way to its operations in the present”. The Coca-Cola Company, one of the world’s largest producers of beverages, has engaged in such an initiative by striving to return enough freshwater back to the natural environment to fully offset the amount of water used in their beverages and beverage production (The Coca-Cola Company, 2010).

### **2.3. Private Sector Engagement in Implementing the CBD**

The basis for private sector engagement in the national implementation of the CBD is well established in the documentation of the Convention. Article 10 requests Parties to encourage cooperation between their national government and private sector to develop methods of sustainable use for biological resources. Article 16 calls for policy measures to be enacted by Parties wherein the private sector would facilitate “access to, joint development and transfer of technology” which would benefit both governments and the private sector in developing countries in particular.

Whereas the CBD articles give brief mention to the private sector, the decisions taken by the Conference of the Parties (COP) refers to the private sector in much greater detail and frequency. The issue first received notice in COP decision III/6 regarding financial resources, wherein the Conference of the Parties “requests the Executive Secretary to explore further possibilities for encouraging the involvement of the private sector in supporting the Convention’s objectives” (SCBD, 1996). Thereafter, references to the private sector became more frequent in the CBD meetings. The final decisions coming out of the Fourth Meeting of the Conference of the Parties



(COP 4) made extensive reference to the private sector and the need to encourage its involvement in the Convention.

Perhaps most explicit among the Parties to the Convention in calling for private sector involvement was the government of the United Kingdom in its *Review of the Operations of the Convention on Biological Diversity*, submitted on the sidelines of COP 4 which took place in Bratislava, Slovakia, in 1998. In their submission, the UK government stated that effective implementation of the CBD could only occur if civil society – including the private sector – was actively involved and thus, the COP should explore the linkages of the CBD and civil society to promote better information exchange (SCBD, 1998).

It was not until the Eighth Meeting of the Conference of the Parties (COP 8) that the issue of engagement with the private sector would be highlighted at length. Decision VIII/17 is entirely dedicated to private-sector engagement and importantly covers the possible mechanisms to be used “in facilitating contributions” and the “reasons for promoting the engagement of business and industry in the implementation of the Convention.” Among the reasons identified in COP decision VIII/17 are:

- (a) the contribution that adoption of best practices by business could render towards the goals of the Convention, noting that the private sector is “arguably the least engaged of all stakeholders in the implementation” and that business actions “have major impacts on biodiversity”;
- (b) the power and influence held by the private sector on “Governments and public opinion”;
- (c) the knowledge, technological resources and organizational skills which the private sector brings to the collaborative mix.

In the last three meetings of the COP (COP 8 in Curitiba, Brazil; COP 9 in Bonn, Germany; COP 10 in Nagoya, Japan), the significance of the private sector and business community has reached a high point. Each has issued a decision which focused entirely on business and private sector engagement. Further, the frequency of references to business and private

sector has also increased. The COP decisions reached at the COP 8 meeting contain 46 instances of the word “private” (as in ‘private sector’) or the word “business”; the number of same word appearances increases to 51 instances in the COP 9 decisions and even higher to 81 instances of “private” or “business” within COP 10 decisions (SCBD, 2011). This can be understood to represent the growing importance which the Member Parties to the CBD place on engagement with the private sector and on businesses in particular; indeed, the term “business sector” appears with higher frequency in the COP 10 decisions as opposed to “private sector”, something not previously seen in the COP decisions. This indicates a greater focus on the business community rather than NGOs (who are also traditionally understood to be representative of the private sector).

All CBD Articles and COP decisions which contain any reference to “business” or the “private” sector have been tabulated and categorized in Table 2.1.

Table 2.1 Thematic categorization of CBD Articles and COP decisions which refer to “private” sector or “business”

Thematic Category / Subject Matter	Number of Decisions / Articles referring to "private" sector or "business"	Reference Locations
Financial Resources	10	COP Decisions I/2; III/6; IV/12; V/11; V/22; VI/16; VII/20; VII/21; IX/11; X/3
Private Sector Engagement / Business Engagement	8	COP Decisions VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44
Technology Transfer / Knowledge Transfer	7	Article 16. COP Decisions II/4; IV/1; VII/29; VIII/12; IX/14; X/16
Access and Benefit Sharing (ABS)	7	COP Decisions IV/8; V/26; VI/24; VII/19; VIII/4; X/1; Nagoya Protocol, Article 22
Article 8(j) and related provisions	7	COP Decisions V/16; VI/10; VII/16; IX/13; X/40; X/42; X/43
Incentive Measures	6	COP Decisions III/18; V/15; VI/15; VIII/25; IX/6; X/44

Clearing-House Mechanism	5	COP Decisions II/3; III/4; IV/2; V/14; VIII/11
Sustainable Use	5	Article 10. COP Decisions V/24; VII/12; X/32; X/44
Agricultural Biodiversity	4	COP Decisions IV/6; VIII/23; IX/1; IX/2
Protected Areas (Art. 8(a) - (e))	4	COP Decisions VII/28; VIII/24; IX/18; X/31
Biodiversity and tourism	3	COP Decisions IV/15; VI/14; VII/14
Forest Biodiversity	3	COP Decisions V/4; VI/22; IX/5
National Reports	3	COP Decisions II/17; VI/25; X/10
Communication, Education, Public Awareness (CEPA)	3	COP Decisions VI/19; IX/32; X/22
Marine & Coastal Biodiversity	2	COP Decisions V/3 and VII/5
Inland Water Biodiversity	2	COP Decisions VII/4 and VIII/20
Ecosystem Approach / Millennium Ecosystem Assessment	2	COP Decisions VII/11 and VIII/9
Dry, Sub-Humid Lands Biodiversity	2	COP Decisions VII/2 and IX/17
Invasive Alien Species	2	COP Decisions VI/23 and X/38
Miscellaneous* (*aggregated to include all themes which lacked at least two references)	15	COP Decisions II/12; V/1; V/18; VI/9; VI/21; VI/27; VI/29; VIII/1; VIII/3; X/2; X/6; X/37. Strategic Plan for Biodiversity 2011-2020

The rankings in Table 2.1 indicate that the private sector and business community are most commonly referred to in CBD documentation in relation to financial resources. As early as 1996, the COP was discussing how to engage the private sector for additional financial resources to implement the Convention. The second most frequent subject in reference to the business community is engagement. This topic shows up more often in later COP decisions as Parties discuss how to best engage the private sector to collaborate in public-private partnerships which could further the national

implementation of the CBD. In this regard, the present research on private sector engagement in Thailand will be valuable as a case study for other Parties interested in this topic.

In addition to financial resources and engagement, calls for the private sector to get involved with the implementation of the CBD are particularly strong with regard to technology and knowledge transfer. The so-called "knowledge gap" between rich and poor countries is high, but especially so between the private companies doing research in the developed world and the state-sponsored institutes engaged in research in the developing world (Rausser, Simon, and Ameden, 2000: 499). Rausser, Simon, and Ameden (2000) surmise that public-private partnerships (PPPs) are a logical way to increase the equity by having the private companies transfer knowledge to the state actors via such collaboration.

This is not to say that the private sector must do all the thinking. Indeed, the public institutions in developing countries must plan carefully and strategically so that the appropriate thematic areas where synergies may arise are the focus of such knowledge transfer (Rausser, Simon, and Ameden, 2000). The CBD and the associated decisions by the Conference of the Parties (COP) to the CBD may prove useful in such strategic planning as numerous thematic areas are discussed at length therein (e.g., access to plant genetic resources, benefit-sharing, *in situ* conservation, traditional and indigenous knowledge).

In Thailand, and more broadly in developing countries as a whole, more research is needed to examine whether state actors are crafting knowledge transfer strategies around such thematic areas when they do engage in PPPs.

As extensive as the calls for private sector engagement are within CBD decisions and academic research, there is less information on whether private companies have any interest in engaging with government to implement projects related to CBD implementation. Some companies may be proactive and seek to be "first-movers" in pursuing CBD-related environmental outreach; indeed, COP decision VIII/17 points out that there

are members of the private sector who are engaged in collaborative activities to implement the Convention. However, there has equally been a resistance to engage in the CBD process. While many developed countries which imported genetic resources from biodiversity-rich countries sought to engage multiple stakeholders such as the private sector in debating the access and benefit-sharing (ABS) provisions of the Convention, the overall response from the business community was apprehensive, according to Siebenhuner and Suplie (2005); specifically, “the mentioning of guidelines to define a set of standards for bioprospecting activities in line with the CBD caused concern rather than active cooperation” (Siebenhuner and Suplie, 2005: 513).

The apprehension may possibly be attributed to a lack of encouragement from the global economic marketplace to prioritize environmental stewardship among the business community. As the world's largest economy, the United States of America (USA) has a significant reach in the global business community. The fact that the USA has not ratified the CBD may have set a precedent for business to ignore engagement in the CBD or to participate in national implementation.

The lack of engagement from the private sector in implementing the Convention, however, is also attributed to a lack of awareness of the CBD itself. Gurib-Fakim (2005: 3) cites Iwu and Laird (1998) when she states that businesses which are dependent on floral and faunal biodiversity for their products – such as in the cosmetics, medicinal and personal care industries – display “significantly low” level of “awareness of the CBD”. Other research has uncovered that 64 percent of European Union citizens either have never heard of the term “biodiversity” or have heard of the term but do not know what it means (Zeller Jr., 2010). With such poor public awareness, it is interesting to note that only three COP decisions make reference to improving communication, education and public awareness in relation to the private sector and business community (Table 2.1).

### 2.3.1. Access to Genetic Resources and Benefit-Sharing (ABS)

Another thematic area within the CBD which garners attention in relation to the private sector is that of access to genetic resources and benefit-sharing, also known as ABS. As seen in Table 2.1, ABS-related provisions within the CBD documentation are some of the most frequent to reference “business” or the “private” sector. The reason is because businesses are some of the largest financial beneficiaries of biodiversity, particularly in the form of plant genetic resources. When, in 1999, ten Kate and Laird studied the global sales of products which contain derivatives or are derived from genetic sources, they found that the value of such products lie somewhere in the range of USD 500 billion and USD 800 billion a year (ten Kate and Laird, 1999). These products extend across a variety of industries, from cosmetics and pharmaceuticals to agriculture and botanicals.

ABS provisions within the CBD are an attempt by Parties to the Convention to share the benefits derived from biodiversity in an equitable manner so that the full benefit is not squandered by the private industries described above. Since many of these companies benefitting financially are based in developed countries, the ABS dialogue often frames the stakeholders in terms of “provider countries”, or countries which are the source of origin and export of genetic resources, and “recipient countries” which import genetic resources (Siebenhuner and Suplie, 2005: 513). The line between provider and recipient countries is not always clear. For instance, Thailand is a major donor country for rice, particularly the native variety known as *Hom Mali*, or jasmine rice. Yet Thailand is also a recipient country in the form of apples imported from China and wheat imported from the United States.

By the very nature of genetic resources resulting in some private value to be gained, ABS provisions add to the concept of a “market” for biological resources (Richerzhagen and Holm-Mueller, 2005). In the global marketplace of international trade, it is the private value of tradeable biological resources which can have a major effect on how sustainably such resources are utilized. Hence, ABS provisions go to the very heart of the

CBD's objectives of conservation, sustainable use, and fair and equitable sharing of benefits. At a minimum, there is an implied expectation that developed countries, with their bringing technological advancements in genetic resources to market, will share the gains from such activity, either in terms of financial resources, technological know-how, or research (Siebenhuner and Suplie, 2005).

Brenner (1997) explains that PPPs should be understood as a necessity rather than as an option because of how the private sector's role in the biotechnology industry has grown over the past 50 years. Whereas the "Green Revolution" of the 1970s was brought to market by public-funded research institutes and philanthropic entities in developed countries, the growth and expansion of the biotech industry, especially in agricultural developments including seed hybridization and genetically modified food crops, has been driven by the private sector (Brenner, 1997: 8). Indeed, Kate (2002) proposes that it is not the governments themselves that do the majority of the implementation but the other stakeholders such as universities, NGOs, research institutes and the private sector which do so. When considered alongside research showing that investment in agricultural research is flat or shrinking in developing countries (Brenner, 1997; Rausser, Simon, and Ameden, 2000; Pray and Naseem, 2003), there is a strong case for encouraging private sector engagement alongside state actors in CBD implementation.

There are private companies in Thailand that are implementing genetic research and development (R&D) programmes that further the national implementation of the CBD. The CP Group is one such company and its genetic research and development work with Thai species of chicken and buffalo is one of the case studies relevant to this thesis, further explored in Chapter 4.

## **2.4. Geographical Distribution of CBD-related Research**

The literature relating to private sector engagement, CSR and the CBD in practice largely focus on public policy theory in areas outside of

Southeast Asia (Dyker, 2001; Ingenbleek et al., 2007). While studies from developing countries are considered (Ashman, 2001; Fryxell and Lo, 2001; Artuso, 2002), Thailand is rarely highlighted in this regard. An exception is Gerpacio (2003) who considers research and development of maize in private sector versus public sector capacities in Asian countries including Thailand. Here, Gerpacio concludes that “the reluctance of the private sector ... to address the needs of marginal maize farmers should encourage the public sector to continue playing an active role in maize research and development” as well as technology dissemination (Gerpacio, 2003: 319).

The ABS dialogue has also been assessed from a Japanese perspective by Sumida (2008). Soon after the CBD was developed in Rio de Janeiro in 1992, the Japan Bioindustry Association (JBA) began collaboration with Japanese businesses which benefit from biological resources to assist the Japanese government in the implementation of the CBD, with particular focus on the ABS provisions which stood to affect the Japanese bioindustry (e.g., cosmetics, pharmaceuticals, etc.). As a recipient country, Japan is reliant on provider countries like Thailand for obtaining the derivatives of genetic resources which form the basis for numerous products. The aforementioned apprehension of the business community to engage in ABS related dialogue (Siebenhuner and Suplie, 2005) out of concern about new ABS policies over-regulating the industry did not escape the pharmaceutical industry in Japan, where there was perception that the “CBD has negatively affected corporate management’s incentives for investment in natural product-based drug discovery, because of uncertainty over the regulatory procedures of a number of developing countries” (Sumida, 2008: 39).

Rather than pull away from the CBD, the JBA in partnership with the Ministry of Economy, Trade and Industry (METI) decided to engage with developing (provider) countries to promote technology transfer and knowledge sharing on “win-win” terms. Japan, through the efforts of the JBA and the METI, planned for several bilateral research cooperation projects throughout Southeast Asia to facilitate this technology transfer and knowledge sharing; in doing so, they were furthering Japan’s implementation of CBD



Article 16 (“Access to and transfer of technology”), Article 17 (“Exchange of information”), Article 18 (“Technical and scientific cooperation”), and COP 7 Decision VII/29, among others.

Thailand, as an important provider country for the Japanese bioindustry, was one of three countries (the others being Malaysia and Indonesia) with which the JBA and the METI established Bilateral Research Cooperation Projects; these projects “exchanged a total of 591 Japanese and Southeast Asian scientists, installed the most-needed equipment and instruments in the local research facilities, and sponsored domestic research programs” (Sumida, 2008: 39). While Sumida’s research gives a clear example of an Asian recipient country engaging in ABS related developments with Thailand, there does not appear to be research from the Thailand perspective in this area.

Similarly, CSR is an area which is heavily researched in developed markets but less so from the developing country perspective. In general, CSR literature falls into four main thematic areas including social, environmental, ethics and stakeholders (Lockett et al., 2006; Visser, 2008). The understanding of CSR is largely coming from the developed countries of the West (Gugler and Shi, 2007) and Thailand’s fledging CSR movement is still nascent. Of the developed market CSR research, the major themes comprise ethical and environmental issues (Lockett et al., 2006); however, developing countries have a tendency to focus on social development within CSR initiatives (Visser, 2008).

If Visser’s findings also holds true for Thailand, the expected outcome of the present research would show a preference among responding businesses to focus on social thematic areas instead of the kinds of environmental themes (e.g., conservation, ABS, forest restoration) which make up the CBD literature. Such outcomes are heretofore unfounded in the Thai context; hence, the present thesis proposes novel research that simultaneously sheds new light on the private sector’s sentiment towards CSR in Thailand as well as private sector engagement and collaboration with

other stakeholders towards environmental best practices in line with the CBD documentation.



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## **CHAPTER III**

### **METHODOLOGY**

Two instruments were used in the data collection: case studies and a survey questionnaire. The instruments address different aspects of private sector engagement. While the survey questionnaire sought to gauge the current sentiments of the private sector with regard to CSR, biological diversity and collaboration with the government and academic sectors, the case studies demonstrate the ability of the Thai private sector to contribute towards national implementation of the CBD. The latter point was deemed necessary for the thesis because having real examples helps convey to the reader the type of private sector engagement which is possible in relation to the CBD (and the articles and COP decisions of which it is comprised).

#### **3.1. The Case Studies of the Charoen Pokphand Group and PTT Public Company Limited**

##### **3.1.1. Desk Study**

Various sources of information were compiled and reviewed to understand the types of CSR initiatives employed by the Charoen Pokphand Group (CP Group) and PTT Public Company Limited (PTT). This included company websites, information pamphlets, CSR annual reports, compact disks containing electronic presentations, newspaper articles, and other reports.

##### **3.1.2. Field Visits**

To observe firsthand the type of projects which PTT and CP Group engage in with regard to biological resources and environment, two field sites were visited: PTT's Sirinath Rajini Mangrove Forest Ecology Learning Center in Pranburi, Thailand, and CP Group's Native Chicken Academic and Demonstration Center in Chonburi, Thailand.

The Sirinath Rajini Mangrove Forest Ecology Learning Center was visited once on July 22, 2009. Two separate visits were made to CP Group's Native Chicken Academic and Demonstration Center – once on July 21, 2009, and again on April 22, 2010.

### **3.1.3. Interviews**

A consultant to CP Group was interviewed on June 29, 2009, regarding CP Group's CSR initiatives in relation to CBD implementation in Thailand. As a representative of CP Group, the consultant participated in the Ninth Meeting of the Conference of the Parties (COP 9) to the CBD in Bonn, Germany.

Another interview was later arranged with the Vice President of the Native Chicken Business at CP Group, on April 22, 2010. The Vice President of the Native Chicken Business leads CP Group's research and development (R&D) efforts in relation to native species of chicken and water buffalo in Thailand, including *ex situ* conservation efforts through sperm banks and breeding programs.

While no arranged interviews took place with staff from PTT, in-person discussions took place during the field visit on July 22, 2009, and personal communications followed via e-mail.

### **3.1.4. Constraints**

The case studies of the CP Group and PTT are limited by the sheer size and breadth of activities which both companies engage in. To fully research and report on every type of CSR initiative which these multi-national corporations (MNCs) undertake is beyond the scope of this thesis. Hence, only those CSR initiatives which relate to environmental issues are covered herein. Socially themed projects were not reviewed.

## **3.2. Survey Questionnaire**

### **3.2.1. Purpose**

A survey questionnaire was deemed the most efficient instrument to utilize in order to collect data from the largest number of businesses in the private sector. Given the thousands of businesses spread across Thailand, engaging in individual interviews with businesses was deemed inefficient and unrealistic. Focus group discussions and other group settings were also deemed to be inappropriate for this study. Such group methods are costly and can bias the results when group sentiment sways honest individual feedback. Further, the research proposed herein is fairly high-level and does not require subjective feedback. The form data is standardized for all participants. Further, the questionnaire allows for statements of mode such as frequency or percentage figures (Gomm, 2008: 26). Knowing the mode, for example, allows the researcher to identify the most common type of social outreach programs amongst the participants or the percentage of respondents that consider environmental initiatives as outside the scope of their business interests.

The questionnaire was devised with the intent of assessing the willingness of the private sector in Thailand to engage in public-private partnerships and other environmental management initiatives that are called for in the COP decisions of the CBD. The purpose of the questionnaire also included gauging the extent of CSR applications being utilized by the respondents' companies. Understanding the penetration of CSR programs in the participating private sector and knowing what types of CSR initiatives are most frequently used is very useful information. Knowing this information allows one to understand the relative importance that companies place on environmental outreach compared to other common CSR goals such as poverty reduction, community infrastructure improvement and enhancement of skill sets in the local community. This information could also assist the

public sector agencies responsible for Thailand's national CBD implementation to better hone their engagement methods when reaching out to the private sector. For example, knowing that a particular business is more concerned about community initiatives than nationwide issues may help Thailand's Ministry of Natural Resources and Environment (MONRE) to propose a local-level partnership with that particular company instead of a large-scale, national-level project.

### **3.2.2. Language**

The survey questionnaire was made available to participants in both English and Thai language. This is logical given that the study includes businesses and companies based in Thailand.

The survey was created in English and subsequently translated into Thai. Given that words and meaning can sometimes get lost in translation, every effort was made to make the translations as close to identical as possible. In addition to the initial translation from English to Thai, several Thai researchers with strong background in CBD and environmental terminology made a comparative review of the two versions to further strengthen the quality of the translation. However, given the specific terminology that is unique to the CBD, some words are not easily translated into Thai language and may present a comparative difference between the English and Thai versions. Any such effect should be minimal given the breadth of the survey and the relatively high-level approach taken.

### **3.2.3. Content**

Most of the questions within the survey questionnaire fall within the nominal or categorical level (Gomm, 2008). There are also questions with rating scales (i.e., rating the importance of a topic ranging from 'very important' to 'not important'). In general, these types of questions are deemed high-level and broad. The reason for keeping the content at a broad level is because of the wide variation in eligible survey participants and the lack of data on initial conditions.

For instance, the small, medium and large businesses from the private sector were all eligible to participate in the survey. This means that family-owned small businesses were surveyed alongside large multinational corporations and all were posed with the same set of questions. This was done purposely because the COP decisions seek to engage businesses of all sizes in partnering with governments to further the implementation of the CBD.

Naturally, the capabilities, risks and opportunities that a multinational corporation is faced with vary significantly from those faced by a tiny “mom and pop” type of business. Even so, some questions were posed (i.e., membership to standards organizations) that are clearly better fielded by corporations than by small businesses.

#### **3.2.4. Scope**

Survey participation was open to all businesses with operations in Thailand, regardless of whether they are small, medium and large in terms of capitalization or number of employees. Businesses were not excluded based on their size.

The reason for the wide parameters is due to the importance of small and medium enterprises (SMEs) in developing countries like Thailand. A report on the relationship of business and biodiversity, led by several non-profit organizations, found that “all companies, even those located in urban areas, can make a positive contribution to biodiversity” and that “in the developing world especially, it may be the local companies and SMEs that hold the key to conserving biodiversity” (Earthwatch Institute, IUCN, and WBCSD, 2002: 8). In addition, COP 10 Decision X/21 emphasizes “the interest and capacities of private enterprises, including small and medium-sized enterprises, in the conservation and sustainable use of biodiversity and ecosystem services.” As such, there is a need to understand how businesses of all sizes relate to public-private partnerships and environmental thematic issues of the kind described in the CBD.

The only prerequisites in participant selection were (i) that the business has operations in Thailand (exclusively, as in domestic businesses, or in part, as is the case of multinationals) and (ii) that survey participants respond on behalf of a for-profit business only. Thus, non-governmental organizations and civil groups, though often considered part of the larger private sector, are not included in the scope of the thesis due to the nature of the survey questions and the limited amount of space for fielding such questions in the survey. The motivations for engaging in environmental governance mechanisms like the CBD are numerous and widespread and are likely to differ between for-profit businesses and non-profits like NGOs and civil society organizations. Each of these groups has unique circumstances which require consideration, especially when creating questions within the context of a survey.

### **3.2.5. Application**

The survey application was applied by cluster sampling (Gomm, 2008: 139). In this case, the clusters were the business networking groups and associations in Thailand that focus on responsible business practices, public-private partnerships and CSR. The specific groups and associations utilized in this study include the Net Impact Bangkok Professional Chapter, the CSR-Thailand Yahoo! Group list, the Management System Certification Institute of Thailand (MASCI), CSR-Asia, and the Danish-Thai Chamber of Commerce. While additional groups were contacted for assistance with distribution of the survey questionnaire, no confirmation was received whether the distribution occurred.

These groups were contacted because they regularly interact with businesses and organizations in Thailand that have an interest in CSR and corporate responsibility extending beyond the generation of profits for shareholders. As such, they have contact lists of private sector companies in Thailand that may engage in environmental outreach; these companies certainly fit the description of the private sector which the CBD membership is hoping to recruit for partnerships.



These clusters agreed to disperse an e-mail to their contacts and members which included an Internet link to an online version of the survey questionnaire. By clicking the link, the recipients were taken to the survey questionnaire and were able to participate in the study. Participants were given the choice of filling out the questionnaire in English or in Thai language.

This application method of cluster sampling is very efficient in that a single e-mail sent by the group associations and business networks immediately reaches hundreds of representatives from eligible companies. This means that the sample size can grow quite quickly within a short amount of time. However, there are also drawbacks to this approach. First, the sample is biased in that only businesses that are connected to the CSR networks and group associations are contacted. Businesses outside of these networks do not form part of the sample. Second, the online application of the survey means that businesses must have Internet access and a certain level of tech savvy to participate. Thailand being a developing country with a major part of gross domestic product (GDP) being generated by farmers and the agriculture industry, Internet access is not a standard feature for all of the private sector. Thus, the cluster sample is only representative of those businesses with Internet access.

However, cluster sampling was not the only method of application. Personal e-mails directed at potential participants also contributed to the overall application of the survey questionnaire. In this case, potential business contacts – both known and unknown to the researcher – were contacted in a similar fashion with a similar request as posed to the cluster groups. This was done in an effort to further generate responses to the survey questionnaire and increase the total respondent size.

### **3.2.6. Administration**

The online questionnaire was developed using SurveyMonkey, a well known online service provider of survey solutions. Technically, the survey was available worldwide as the Thai and English webpages that

hosted the survey were fully accessible to any Internet user who received the uniform resource locator (URL) addresses; in practice, only those persons who were informed of the URL address were considered potential visitors to the online survey. The author is not aware of any instance where a random Internet user happened to find either webpage and proceed to fill in the online survey. Since the administrative controls of the website provide full tracking of all submissions and quality controls to ensure participants are completing the survey from computers based in Thailand, the risk of the data being corrupted by businesses lacking operations in Thailand is negligent.

The online questionnaire was applied primarily through professional networks mentioned above in section 3.2.5 by circulating the access information and request to members via e-mail notification. The e-mail explained the nature of the research and included links to access the Internet webpage where the survey lived. Two links were provided – one for accessing the Thai language version of the survey and one for accessing the English language version.

### **3.2.7. Validity**

Several types of validity were considered while formulating the survey questionnaire. **Content validity** refers to whether or not the content of the survey is relevant to the questions being asked in the research. In describing content validity, Gomm (p. 34) poses the question, “Does [the survey] deal with all relevant aspects of what it is supposed to measure?” In order to achieve the closest possible level of content validity in relation to the CBD, the COP decisions of the CBD were reviewed in detail. All references to “business” or “private sector” were flagged and categorized according to the subject heading under which the reference appeared.

For example, the subject heading of COP decision III/6 is “Additional financial resources” meaning that the Parties to the Convention looked at this specific subject at the third meeting of the COP and memorialized the discussion as Decision III/6. Paragraph 3 of COP decision

III/6 refers to “encouraging the involvement of the private sector in supporting the Convention’s objectives.”

Table 2.1 categorizes all such references according to the subjects of the COP decisions and CBD articles under which the references appear.

The questions of the survey were developed with consideration to the trends in Table 2.1. Since the major recurring themes dealing with the private sector in the COP decisions include financial resources, engagement, technology transfer, incentive measures and benefit sharing, these topics constitute the major thematic areas dealt with in the survey questions. Given that the references deal with 26 different subject areas, addressing all such subjects in the survey content was not realistic; such a survey would have been far too detailed and time-consuming for the average respondent to answer.

**Construct validity** was also considered in the formulation of the survey but ultimately played a limited role. In order to address construct validity, one must establish that the survey results are consistent with existing facts and theories in the studied phenomenon. Among other topics, the literature review looked at CSR in developing countries; private sector engagement; CBD implementation; and public-private partnerships. However, the literature rarely if ever dealt with the Thai case in particular so drawing relevant comparisons to validate the construct was limited.

To a certain extent, both the construct validity and the content validity are ineffective tools in the case of the present research. No prior research could be identified which looks at the relationship between the private sector and CBD implementation in Thailand. Even corporate social and environmental outreach initiatives are poorly understood because the field of CSR is quite nascent in Southeast Asia in general and Thailand in particular.

**External validity**, or transferability of results from the participating group to the wider population, does not hold up in the present research. The participants in the survey are not statistically representative of

the true private sector community in Thailand; hence, the results of the survey cannot be scaled up from the 36 private sector respondents to correlate to all businesses in Thailand. The author is not aware of any available census data of Thai businesses to indicate current numbers of capitalization size, type of industry, market focus, CSR penetration and so on. Therefore, a representative sample could not be identified to participate in the research study. Additionally, the survey was applied through existing channels which may bias the outcome of the results. This was explained in detail in section 3.2.5 above regarding survey application.

### **3.2.8. Constraints**

The formulation and choice of content for the survey questionnaire creates a number of constraints on the data pool and on the analysis of the results. The use of questions with rating scales creates the possibility of what Gomm (2008: 26) calls “positional bias” where respondents are reluctant “to use the extreme options on a scale if they have a choice” – thereby rendering the majority of responses in the middle of the scale. The survey questionnaire had five questions which incorporated rating scales.

Additionally, the stability of the data collected might be affected based on the respondents themselves. The majority of participants were chosen based on their membership to certain business networking groups such as the Net Impact Professional Chapter. The participants were contacted through established contact lists maintained by a number of organizations. This means that whichever company representative belonged to the group contact list was also the same person to receive the survey questionnaire. It is possible that the results of the survey would change if different employees within the participating organization had completed the survey. Hence, the validity of the data is only as good as the quality of the respondents in accurately representing their companies or organizations.

Comprehensibility, or the ability of the respondents to understand the language and concepts of the survey instrument (Gomm, 2008: 37), is also a concern. Biodiversity is a very particular term and the

CBD a very specific concept, neither of which are common to the typical workings of industry and business. The survey questionnaire attempted to identify the level to which comprehensibility affected the participants by specifically asking the respondents to identify their level of familiarity with the United Nations Convention on Biological Diversity as well as familiarity with the term 'biodiversity.' Other than these two terms, the survey was designed with particular care to avoid academic language and specific expert terms from CBD literature such as access and benefit sharing (ABS), Article 8(j), indigenous peoples, the 'ecosystem approach' and so forth. This was done so that the survey would be applicable to the layman with no existing knowledge of the CBD and no environmental background knowledge. The trade-off in this approach is that the survey does not address specific areas of interest within the CBD, such as the request for the private sector to engage in and maintain the use of remote sensor technology to monitor marine biodiversity trends as called for in COP decisions V/3 and VII/5.

Electing to use the internet for dispersion of the survey may have limited the response rate of participants. Gomm (2008: 213) identifies internet questionnaires as having a low rate of response similar to postal questionnaires. However, the ability to reach numerous businesses through e-mail and contact lists is believed to offset that limitation; the low response rate is acceptable when the potential sampling pool is so large. The key is to reach as many private sector businesses as possible through e-mail distribution channels. The distribution itself is a constraint in the sense that the researcher cannot always be aware of which contacts opt to further distribute the survey to others unless notification is provided.

# **CHAPTER IV**

## **RESEARCH FINDINGS**

### **4.1. The Charoen Pokphand Group**

The Charoen Pokphand Group (CP Group) was founded by two brothers, Ek Chor and Siew Whooy Chia, in 1921 (CP Group, 2004). What started as a small seed shop in Bangkok has grown into one of Asia's largest conglomerates and the largest in Thailand. Today, the CP Group employs more than 250,000 people and comprises at least eleven different business groups which are involved in everything from telecommunications to plastics, from agriculture to industrial parts. Some of the CP Group's numerous subsidiaries are publicly traded on both the Stock Exchange of Thailand (SET) and the New York Stock Exchange.

The largest subsidiary of the CP Group is the CP Foods Group (CPF) which focuses on the full food production supply chain: seed development, agriculture, animal feed, livestock farming, aquaculture and shrimp farming / production, food processing, and wholesale and retail sales. The company has adopted the slogan: "Kitchen of the world" (Charoen Pokphand Foods PCL, 2008b). The CPF has grown into a multinational entity with operations in Asia, Europe and North America.

By raising livestock such as cattle, chickens and swine on an industrial scale, the CPF has a substantial impact upon the natural environment. The CPF's aquaculture and shrimp farming activities can affect mangrove forests, and its agricultural products including corn, soybeans and rice also utilize large tracts of land. All of these operations have strong correlations to the CBD in areas ranging from sustainable use of biological diversity to access and benefit sharing. The CPF has recognized these connections and has engaged in various environmental management initiatives through its CSR program.

#### 4.1.1. CSR Framework

With their agricultural underpinnings, the CPF has a strong connection to the natural environment where crops are grown and livestock are raised. As such they have adopted a broad CSR framework and concept of corporate responsibility. According to a company CSR presentation (Jiarakongman, 2010: 5):

[CPF] always realize that the country and society have given it an opportunity to operate its business. Therefore, it is the CPF responsibility to support activities that are beneficial to society through joint efforts with employees, families, communities, and society in order to improve the overall quality of society.

The social emphasis is clear. The CPF also realizes that the communities are its customers so the relations with society are crucial for its business development.

The CSR framework utilized by the CPF covers a wide spectrum including technology transfer, environment, energy, community and public welfare, job creation, healthcare and sporting activities (Charoen Pokphand Foods PCL, 2008a). Predominantly, the CPF has focused on farmers and farming communities as part of its outreach campaigns. Given the nature of this thesis and the focus on the CBD and public-private partnerships in environmental management, the only aspect of the CPF's CSR framework reviewed herein are those projects which relate to environmental managements and benefits to farmers.

#### 4.1.2. Environmental Management and Farmer's Benefits

The CPF's CSR projects in the area of technology transfer, agriculture, environmental restoration, indigenous knowledge, and *ex situ* conservation all contribute to the national implementation of the CBD. These linkages are shown in Table 4.1 under section 4.1.4. Most of these projects involve partnership with local communities, government agencies or other businesses.

- Integrated and Contract Farming: The CPF operates a nationwide contract farming operation in Thailand, which provides management training and best practices to over 10,000 local farmers. While the farmers must utilize their own land for the farming, the CPF provides breeders, vaccinations, animal feed, as well as price guarantees for buying back the swine and chickens (broilers and layers) from the farmers (Charoen Pokphand Foods PCL, 2008i). The CPF has also emulated this program with 5,000 aquaculture farmers who raise “tabtim” fish. The programs have resulted in higher wages and sustainable incomes for local farmers. This model also embodies a form of technology transfer in that local farmers are getting access to medicines and vaccinations free-of-charge.
- Agricultural Villages: The CPF has engaged in several projects of similar design, wherein local farmers are taught new techniques and skills and the CPF provides them with all capital equipment (farms, tools, land), supplies (feed, medicines, vaccinations) and farming inputs (swine, chickens, goats, rice, etc). The farmers cover the costs by taking out a preferred loan with a partnering bank, which the CPF supports as a loan guarantor. These projects have resulted in technology and knowledge transfer to the farmers, increased incomes for the local families, and predictable agricultural inputs for the CPF to buy back into its food production supply chain. Examples of these kinds of projects include the Nong-Wah Agricultural Village (Charoen Pokphand Foods PCL, 2008g), the Kam-Phaeng-Phet Agricultural Village (Charoen Pokphand Foods PCL, 2008f), the Pak-Lor Area Development Project (Charoen Pokphand Foods PCL, 2008h), and the Huay-Ong-Kot Project (Charoen Pokphand Foods PCL, 2008e).
- Biogas and biodiesel: The CPF has introduced biogas and biodiesel production facilities utilizing the waste and by-products of the agriculture and livestock production cycle. The biogas production commonly utilizes waste and sewage from swine farms, where methane gas is released and can be captured for energy production. The biodiesel is created from vegetable oil derived at a food processing plant and is used to power 47 of



the CPF's carriages and trucks (Charoen Pokphand Foods PCL, 2008j)). By using by-products from the production cycle to create energy, the CPF not only reduces the amount of waste it generates but also reduces the amount of fossil fuels used. Further, the CPF transfers biogas technology to some of the local farmers that it partners with and teaches them the production skills which provide additional revenue streams for the farmers.

- Saving Aquatic Animals Project: The CPF partnered with the national Department of Fisheries to introduce farmed fishing practices to 25 different sites near water sources (Charoen Pokphand Foods PCL, 2008d). In doing so, the CPF hopes that the communities at the project sites will produce and consume more farmed fish, thereby reducing the amount of wild fish that are consumed in an effort to rebalance fish populations in the affected areas.
- Planting Mangrove Forests: Although the CPF does not directly engage in planting mangrove forests, the company has been donating funds to non-profit groups and universities such as Kasetsart University to finance mangrove restoration projects since 1993 (Charoen Pokphand Foods PCL, 2008c). The CPF continues this engagement because the company knows that shrimp farming – one of the CPF's core activities – is often detrimental to the health and vitality of coastal mangroves. Within the CPF's own shrimp production, 80% of the water from the breeding ponds is treated before re-use and discharge (Thummabood, 29 June 2009).

#### **4.1.3. Native Chicken and Buffalo Breeding Programmes**

Perhaps the CP-affiliated projects most tied to species conservation are those related to native chickens and water buffalo. The focus on native species of chicken and water buffalo is due in large part to the Chairman and Chief Executive Officer (CEO) of CP Group, who is personally interested in native chickens because he has been raising fighting cocks from the time he was a boy. His passion for water buffalo came later in life when, on his 62<sup>nd</sup> birthday, he saved a water buffalo from the slaughterhouse which

sparked the idea to preserve strong breeds of native buffalo (Keeratipatpong, 2010).

While Thailand's agribusinesses produce one billion broilers for the food economy every year (Keeratipatpong, 2010), only 61 million natural-bred chickens of native breed remained in Thailand as of 2009 according to statistics from the Department of Livestock Development as cited by CP Group (Jiarakongman, 2010: 17). That is a 15.56% decrease over the last decade. This concern along with the support of the Chairman and CEO led to CP Group's creation of the Native Chicken Research and Development Center in the Chonburi province of Thailand. The objectives of the Native Chicken R&D Center include the conservation of tradition and culture of raising native chickens; research and development of varieties for breeding; technology and knowledge transfer to local farmers; and promotion of income streams related to native chickens to maximize the incentive of farmers to maintain the breeds (Jiarakongman, 2010).

While cock fighting may seem like an odd form of CSR, the CP Group explains that fighting matches between different breeds of chicken have been occurring for centuries and are a form of indigenous culture (Thummabood, 29 June 2009). According to the head of the Native Chicken R&D Center, Thailand's climate is roughly divided into six months of rainy season and six months of dry season. While farms cultivate and harvest crops during the rainy season, fields sit idle for much of the dry season. During this time, there are a number of holidays and cock fighting tournaments. Instead of trying to change the culture of the farmers, the CP Group has sought to introduce a higher awareness of civility and safety to the matches by encouraging event organizers and chicken owners to have small "boxing gloves" placed over the spurs so as to avoid bloodshed (Keeratipatpong, 2010).

The CP Group also uses the Native Chicken R&D Center as a demonstration site, often hosting groups of school children or visiting academics to further educate people on the native breeds of chicken and pass on awareness of the role of chickens in Thai culture. This ties in well to

the CP Group's business model since the company is the largest producer of chicken meat and eggs in the country.

The other conservation interest of the CP Group's CEO is water buffalo. Some estimates place the number of wild (non-domesticated) water buffalo, known as *Bubalus bubalis*, at less than 60 individuals (Kekule, 2010). Such a critically endangered population means that *ex situ* or off-site conservation is critical to the survival of the species. Domesticated water buffalo have played a pivotal role in farming culture in Thailand. Prior to the introduction of industrial machinery in the nation, the water buffalo was the main workhorse on the farm, responsible for pulling the plough through wet rice paddy fields. However, with the introduction of agricultural machinery such as tractors during the 1980s, the number of domesticated water buffalo fell from 8 million to 1.45 million heads by 2007 (Thummabood, 20 July 2009). From 1997 to 2009, numbers of water buffalo fell by nearly 40% (Jiarakongman, 2010: 7).

These figures on species loss along with the CEO's interest in conserving water buffalo led the CP Group to establish the Thai Buffalo Conservation and Development Center. The objective of the Conservation and Development Center is to conserve native Thai buffalo and to encourage farmers to raise the animals on their farms; to conduct research on the genetic traits of water buffalo; and to extract and donate semen samples from champion water buffalo to the Department of Livestock Development (DLD) so that the government can engage in an artificial insemination breeding program.

Each year, the CP Group donates around 26,000 doses of semen to the DLD (Jiarakongman, 2010: 12). Progeny from the parent buffalo is nearly 2,000 head per year; of these, 200 female buffalo are given to villagers to maintain on their farms on an annual basis, with nearly 2,000 families having received a buffalo as a result of the project (Thummabood, 29 June 2009). The farmers are taught husbandry skills in order to raise the buffalo and use the animals for farm work such as ploughing. Through genetic research, breeding and promotion of species conservation, the CP Group has

turned the project into strong example of how the private sector can contribute to national implementation of the CBD.

In 2008, the CP Group was able to demonstrate these connections at the Ninth Meeting of the Conference of Parties (COP 9) to the CBD in Bonn, Germany. A consultant to the CP Group led a team of delegates to present at a COP 9 side event on the relationship between the CP Group, the Thai private sector and biological diversity conservation (Thummabood and Thawinprawat, 2008). The consultant's knowledge of livestock as well as his experience in the government sector and familiarity with the CBD made him an excellent resource to tie the CP Group's environmental outreach projects to relevant aspects of the CBD dialogue.

#### 4.1.4. Relationship of the CP Group's Environmental Projects to the Implementation of the CBD

A number of environmental management projects from the CP Group and its subsidiary, the CP Foods Group, have been summarized in sections 4.1.2 and 4.1.3. All of these projects contribute in some way towards Thailand's national implementation of the CBD. The linkages of the CP Group's environmental projects and the CBD are shown in Table 4.1.

Table 4.1 Linkage of CBD Articles and COP decisions to the CP Group's environmental projects

CP Group's Projects CBD Articles and COP decisions	Biogas and biodiesel	Integrated and Contract Farming	Agricultural Villages	Saving Aquatic Animals Project	Planting Mangrove Forests	Native Chicken R&D Center	Thai Buffalo Conservation and Development Center
Financial Resources	I/2; VI/16; VII/20	I/2; VI/16; VII/20	I/2; VI/16; VII/20; VII/21; IX/11	I/2; VI/16; VII/20; VII/21; IX/11	I/2; VI/16; VII/20	I/2; VI/16; VII/20	I/2; VI/16; VII/20; VII/21; IX/11

Private Sector Engagement	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44	VI/26; VIII/8; VIII/15; VIII/17; IX/8; IX/26; X/21; X/44
CEPA	VI/19; IX/32; X/22	VI/19; IX/32; X/22	VI/19; IX/32; X/22	VI/19; IX/32; X/22	VI/19; IX/32; X/22	VI/19; IX/32; X/22	VI/19; IX/32; X/22
Indigenous Knowledge: Article 8(j) and related provisions	-	X/40; X/43	X/40; X/43	X/40; X/43	-	VI/10; X/40	VI/10; X/40; X/43
Technology & Knowledge Transfer	Art. 16; X/16	Art. 16; X/16	Art. 16; VIII/12; IX/14; X/16	Art. 16; VIII/12; IX/14	-	-	Art. 16; VIII/12; IX/14; X/16
Access and Benefit-Sharing (ABS)	VI/24; VII/19	IV/8; VI/24; VII/19; Nagoya Protocol Art. 22	IV/8; VI/24; VII/19; Nagoya Protocol Art. 22	IV/8; VI/24; VII/19; Nagoya Protocol Art. 22	-	IV/8; VI/24; VII/19; Nagoya Protocol Art. 22	IV/8; V/26; VI/24; VII/19; Nagoya Protocol Art. 22
Sustainable Use	Art. 10; V/24	V/24	Art. 10; V/24	Art. 10; V/24; VII/12	Art. 10	Art. 10; V/24	Art. 10; V/24; VII/12
Agricultural Biodiversity	IX/2	IV/6; IX/1	IV/6; IX/1	-	-	-	IX/1
Protected Areas	-	-	-	-	VIII/24; IX/18; X/31	-	-
Biodiversity & Tourism	-	-	-	-	-	VI/14; VII/14	-
Forest Biodiversity	-	-	-	-	IX/5	-	-
Biofuels	IX/2; X/37	-	-	-	-	-	-

Source: <http://www.cbd.int/decisions/>

#### 4.2. PTT Public Company Limited

PTT Public Company Limited (PTT) is a “regional integrated energy and petrochemical company” that is predominantly focused in

Thailand but includes other international operations as well (PTT Public Company Limited, 2008: 9). Long before growing into Thailand's premier multinational private oil and gas company, PTT started as a state-owned entity established under the Petroleum Authority of Thailand Act B.E. 2521 in 1978. After more than 20 years of operations, the Petroleum Authority of Thailand was privatized in 2001 in order to make the business more competitive. PTT Public Company Limited (PTT) was born. With equity shares listed on the Stock Exchange of Thailand, PTT is publicly traded; however, the Government of Thailand maintains at least a 51 percent share in the company and it is generally acknowledged that PTT is "the national oil company" (PTT Public Company Limited, 2009: 1).

PTT's organizational structure comprises two business groups including the Upstream Petroleum and Gas Business Group and the Downstream Petroleum Business Group (PTT Public Company Limited, 2009). The former group is focused on petroleum exploration and production as well as natural gas procurement and transmission, while the latter group engages in retail and commercial marketing of fuel and oil products. PTT also comprises entities for oil refining and petrochemical production as well as international trading of crude oil, petrochemicals and refined products.

With such an extensive product chain which touches upon offshore drilling for oil exploration, oil and gas pipelines, and refineries and retail sales locations, there are myriad ways in which PTT's business model can affect biodiversity in Thailand. Hence, there are myriad ways in which the company could choose to engage in environmental management alongside the government or civil society actors in approaches which could benefit the national implementation of the CBD.

#### **4.2.1. CSR Framework**

PTT has spared no expense to develop a fully integrated and comprehensive approach to CSR. According to PTT's President and CEO, the intent behind PTT's CSR framework is to "lower risks, add sound long-term business opportunities, and enable the organization to appreciate and

improve its work to satisfy all stakeholders” (PTT Group, 2009: 4).

‘Stakeholders’ refers to both internal stakeholders and external as well, in keeping with Hopkins’ definition of CSR which was explored in Chapter 3 above.

Hence, the CSR framework at PTT translates into two categories. The ‘internal stakeholder’ category includes “the responsibility for each individual’s own work process, strict compliance with laws and regulations” as well as “constant development to meet international standards to control, prevent, and minimize potential impacts on the company’s processes to deliver products and services” (PTT Public Company Limited, 2008: 10). The ‘external stakeholder’ category includes “the responsibility for society, the community, and the environment to ensure that all sectors can co-exist with sustainability” (PTT Public Company Limited, 2008: 10).

In order to address both internal and external aspects within their business operations, PTT utilizes an extensive CSR framework which extends across all stakeholder groups. This framework is centered on stakeholder engagement and includes branches for human rights, CSR reporting, labour rights, environmental management, product stewardship, supply chain management, fair operating practices, social investment and community development (PTT Public Company Limited, 2008: 10). Metrics across these categories, as well as other measures, are reported in PTT’s annual sustainability report which utilizes the industry standard G3 guidelines as dictated by the Global Reporting Initiative (GRI, 2011). Given the nature of this thesis and the focus on the CBD and public-private partnerships in environmental management, the only aspect of PTT’s CSR framework reviewed herein is the Environmental Management branch.

#### **4.2.2. Environmental Management**

The CSR framework which PTT employs includes a section dedicated to environmental management. Further, PTT often initiates environmental projects with the help and support of stakeholders including NGOs and government agencies. Hence, several of PTT’s environmental

projects are using public-private partnerships which serve to further the national implementation of the CBD. The linkages between these projects and the COP decisions under the CBD are shown in Table 4.2 under section 4.2.4.

- Vetiver Grass Cultivation Project: Since 2003, PTT has continuously engaged with public stakeholders to implement vetiver grass cultivation projects at a variety of scales. The deep roots of vetiver grass help to strengthen soil stability and prevent desertification; the grass also promotes soil fertility by infusing nutrients in the soil and captures water runoff (PTT, 2008e). PTT partnered with the Royal Project Foundation as well as 1,000 farmers to plant more than 22 million vetiver saplings across 5,573 rai (891 hectares) of land from 2003 to 2006 (PTT, 2008c). In 2007, PTT partnered with the Land Development Department, the Chaipatthana Foundation, and the Office of the Royal Development Projects Board to initiate a vetiver cultivation contest and awareness building campaign (PTT, 2008d).
- Biodiversity Resources Management Project: PTT collaborated with the Biodiversity Research and Training Program (BRT) to devise the Biodiversity Resources Management Project. The project seeks to improve sustainable community development through multidisciplinary approaches to science, management and business. One initiative under the joint partnership of PTT and BRT involved environmental restoration of 30,000 rai (4,800 hectares) along the Thailand-Myanmar border in Kanchanaburi province in order to improve the livelihoods of local communities (PTT, 2008a).
- Green Globe Awards: PTT established the Green Globe Awards as a way to incentivize the community to engage in natural resource conservation and sustainable environmental management. The annual event has continued to grow since its inception in 1999. For instance, the 11<sup>th</sup> Green Globe Award Contest in 2009 attracted 1,017 entries from individuals, youth groups, media organizations and the community at large (PTT Group, 2009: 70). Of the 1,017 entries, 54 received awards from PTT,



including financial support to start up the proposed projects. The Green Globe Awards have been so successful that PTT is turning the concept into a center for knowledge exchange by creating the Green Globe Institute, which will serve as a kind of clearinghouse for communication, education, and public awareness on sustainable management of natural resources and environment.

- The One-Million Rai Reforestation Project In Honor of the King: The initiative to plant one million rai (160,000 hectares) of forest across Thailand grew from the Queen of Thailand's concern about drought and water shortages. In order to honor His Majesty the King of Thailand, PTT decided to engage in this reforestation effort, concentrating on watershed areas which would benefit most from the absorptive qualities of the natural root systems of the trees to retain water. PTT estimates that the eight year long project resulted in the absorption of 18 million tons of carbon dioxide equivalent in addition to adding 14 million tons of oxygen into the air (PTT Group, 2009: 5). The company also estimates that the value of the timber that was replaced by the reforestation activities is THB 6 billion. Ending in 2005, the project was deemed so successful that PTT has continued with additional reforestation initiatives each year to the present.
- Herb Garden: PTT planted an herb garden using 60 species of local plants which are commonly used in traditional medicine and local remedies. The herb garden is planted on 60 rai (9.6 hectares) of land next to the Rayong Industrial Estate where PTT has several facilities (PTT, 2008b). The garden is used as a demonstration plot to promote education and public awareness of local herbs and traditional knowledge indigenous to Thai culture.
- Sirinath Rajini Mangrove Ecosystem Learning Center: The One-Million Rai Reforestation Project sought to improve national forest cover of all types including mangrove forests. Located in the central-southern province of Prachuap Kirikhan, the Pak Nam Pran community in the district of Pranburi was the site of some of the worst mangrove degradation at the hands of shrimp farmers. PTT partnered with the Royal Project

Foundation, the World Conservation Union (IUCN), and the Pak Nam Pran community to replenish the native mangrove ecosystems on two plots of abandoned shrimp farms (PTT Group, 2009: 70). In addition to the mangrove ecosystem restoration, PTT developed a Mangrove Ecosystem Learning Center to promote public awareness and knowledge sharing of the value and utility of mangroves to the community and the nation. More details of the Sirinath Rajini Mangrove Ecosystem Learning Center are found in section 4.2.3.

#### **4.2.3. Sirinath Rajini Mangrove Ecosystem Learning Center**

As part of the “One Million Rai Reforestation Project in Honor of the King” described above, PTT placed additional emphasis on the inclusion of mangrove forests as part of the reforestation campaign. The company highlighted a speech by Her Majesty Queen Sirikit as the motivation for addressing mangrove degradation within the scope of the “One Million Rai” project; Her Majesty Queen Sirikit is quoted as stating that “without mangrove forest, all species will be extinct. The forest is thus considered aquaculture nursery” (PTT, 2009: 1).

Her Majesty Queen Sirikit made mangrove restoration one of her main charitable causes and this led to PTT’s interest in mangrove forest restoration. They focused their attention on the coastal province of Prachuab Khiri Khan because of the high density of shrimp farms found along the coastline there. Mangrove forests are commonly reappropriated for shrimp farming because the limited land use of mangrove swamps often means shrimp producers can purchase the land at a low price; furthermore, the nutrient-rich silt is beneficial for shrimp, as is the tidal currents which bring fresh nutrients to the area and remove toxins (de Graaf and Xuan, 1998; Paez-Osuna, 2001).

One particular plot of land in the district of Pranburi was particularly challenged by land degradation due to the intensive aquacultural practices of a shrimp farm operation. The 786 rai (125.76 hectares) of land at the site – the largest abandoned shrimp farm in Thailand – was severely



Indigenous Knowledge: Article 8(j) and related provisions	VI/10; VII/16; X/40; X/42	VI/10; X/40; X/42	X/40	X/40	VI/10; X/40	X/40
Knowledge Transfer	IX/14; X/16	IX/14; X/16	-	-	-	IX/14; X/16
Access and Benefit-Sharing (ABS)	VII/19	IV/8; VII/19	VII/19		IV/8; VII/19	IV/8; VI/24; VII/19
Sustainable Use	Art. 10; V/24	Art. 10; V/24	Art. 10	-	V/24	Art. 10; V/24
Agricultural Biodiversity	IV/6; IX/1	-	-	-	-	-
Protected Areas	-	VIII/24	-	-	-	VII/28; VIII/24
Biodiversity & Tourism	-	-	-	VI/14; VII/14	-	VI/14; VII/14
Forest Biodiversity	-	-	V/4; VI/22; IX/5	-	-	IX/5
Biodiversity of Dry and Sub-humid Lands	VII/2; IX/17	-	-	-	-	-
Ecosystem Approach		VII/11	VII/11			VII/11
Incentive Measures	-	-	-	VI/15	-	-

Source: <http://www.cbd.int/decisions/>

### 4.3. Survey Questionnaire

As discussed in the survey methodology (Chapter 3), participants were given the option to fill in an English language survey or a Thai language survey. Both were exclusively available to be filled in via the Internet at a dedicated website. The English version of the survey questionnaire is available in Appendix A, while the Thai version is available in Appendix B. Both feature the same questions and logic.

The full set of survey responses to all questions is included in Appendix C as the full responses to all questions are too lengthy to reproduce herein. Important findings from the survey are discussed under nine categories as follows:

- response rate (section 4.3.1);
- demographic of participants (section 4.3.2);
- management standards (section 4.3.3);
- recycling (section 4.3.4);
- the CBD and biodiversity (section 4.3.5);
- environmental outreach (section 4.3.6);
- corporate social responsibility (section 4.3.7);
- public-private partnerships (section 4.3.8);
- and partner engagement (section 4.3.9).

#### **4.3.1. Response Rate**

Between February 8 and April 19, 2010, the author contacted thirty-six persons with business contacts and distribution networks within Thailand. These persons agreed to distribute and/or participate in the online survey. Based on corroboration with the thirty-six contacts, the survey is known to have reached at least 668 unique e-mails, each of which could possibly constitute a participant in the survey. However, the actual distribution is higher than 668 because several persons agreed to distribute the online survey to business groups but did not confirm the number of contacts in such groups. For statistical purposes, then, the total distribution is taken to be greater than or equal to 668.

A total of forty-four unique persons completed the online survey. This means the response rate (of the total 668 known possible respondents) is equal to or less than 6.58% of potential participants, though likely lower due to the unknown population reached by certain email lists as mentioned above.

The survey distribution approach mixed (i) contacting persons through direct personal e-mail invitation with (ii) contact second removed by having contacts distribute to their contacts via email. Participants were also given an incentive to participate in the form of a lucky draw wherein one random participant would receive breakfast delivered to their office for their colleagues.

Marcussen (2001) found that “response rates in Internet surveys can be anything” but “the average response rate is just a function of the mix of methods used”. For instance, Marcussen’s research found that the general response rate for Internet surveys was 1.3% but that participation increased depending on the factors added. By sending a personal e-mail to the potential respondent, the response rate increased by an additional 29%, whereas notifying a group of persons through a distribution e-mail list resulted in an increased participation level of 3.4%. Further, having met the potential respondent in person would add another 15 percentage points to the potential rate of response.

Applying Marcussen’s findings to the current research results in an expected response rate which ranges from 5.74% - 8.74%, depending on the effectiveness of the participation incentive (e.g., breakfast at work) offered which is unknown.<sup>1</sup> This range includes the actual response rate of 6.58% so Marcussen’s approach holds true in this case.

#### **4.3.2. Demographic of Participants**

Survey questions #1 through #5 relate to the demographic of participants. Of the forty-four participants that accessed the online survey, thirty-six (82%) came from business and private sector while eight (18%) belonged to other sectors and were ineligible to participate in the full online survey. As explained in Chapter III above, the desired methodology sought to only survey private sector respondents, not those from NGOs, academic or the public sector. Of the eight who were ineligible to participate, four belonged to academic institutions, three were from non-profit organizations and one from a government agency.

The remaining thirty-six respondents came from a variety of business types, as seen in Table 4.3.

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<sup>1</sup> The expected response rate (5.74% - 8.74%) was generated with Marcussen’s expected factors of response, averaging the pool of 668 known possible respondents across three weighting factors: (i) 650 potential participants contacted via e-mail distribution lists (3.4%); (ii) the 20 potential participants contacted via personal e-mail (29%), of which (iii) 12 had been met in person (15%). This average (4.44%) was then added to a base score of 1.3% for general response rate to Internet surveys, with a variable range of 3% added for the effectiveness of the incentive offered.

Table 4.3 Types of industry where participants are employed

Answer Options	Response Percent	Response Count
Banking / Finance	11.1%	4
Mining / Cement / Paper	2.8%	1
Electricity / Oil / Power	13.9%	5
Legal / Consulting / Advisory services	16.7%	6
Food / Beverage	5.6%	2
Healthcare	2.8%	1
Retail sales	8.3%	3
Agricultural / farming / grocery	2.8%	1
Hotel / Hospitality	8.3%	3
Manufacturing	8.3%	3
Other (please specify)	19.4%	7
<b>answered question</b>		<b>36</b>
<b>skipped question</b>		<b>0</b>

Banking, consulting and energy were major industries for respondents. The diversity of participants is significant and is indicative of the diversity in the Thai private sector.

Most participants were quite senior in terms of their standing in their company. Nearly one third of participants (11) reported being a vice president, director or other senior management role. Almost 20% were the owner, CEO, or president of the company.

The scope of company operations was diverse, but most of the respondents (47.2%) indicated that their company was international or global in scope. Only six of 36 participants (16.7%) worked for companies within a national scope, equivalent to the number of participants working for regional companies. The rest of the participants (19.4%) worked for companies focused at the community and local levels.

The company's headquarter of operations seems to mirror the scope. Of the 35 participants opting to indicate their company's base of operations, just over 50% (18) indicated their company was based in Thailand while the rest were based in other countries but with operations in Thailand.

The employee size of participating companies was as diverse as the number of industries. The majority of respondents (52.8%) worked in companies which employed between 11 – 500 people, while 25% worked for

companies employing between 501 – 5,000 people. Only three participants (8.3%) worked for large-scale corporations with more than 5,000 employees and only five (13.9%) worked for small-scale businesses with ten or less employees.

#### **4.3.3. Management Standards**

There are numerous management standards groups and certifications available to the private sector for improving environmental management practices and efficiencies. Survey question #6 asked participants about which standards and certifications were used by their employers.

Of the 35 participants who opted to identify the standards and certification schemes utilized by their company, 25.7% indicated ISO14001 (environmental management standards) as present within their business. Three respondents' firms were engaged with the United Nations Global Compact, three with ISO9000 (quality management systems), and three with SA8000 (global social accountability standard). No participating companies were using the Global Reporting Initiative (GRI), AA1000 (AccountAbility ethical standards) or ISAE3000 (assurance standard on ethical requirements and quality control) standards.

More than one-third of respondents said they did not know which standards or certifications were utilized by their company.

#### **4.3.4. Recycling**

Survey questions #7 and #8 were designed to understand recycling practices in the Thai private sector. In total, 21 of 35 respondents (60%) indicated that their company has a recycling program while only eight (22.9%) did not have such a program. The rest were unsure whether their employer recycles.

Of the businesses which do recycle, the vast majority (95.2%) recycled paper. Surprisingly, the same number of businesses recycles



electronic equipment (33%) as recycles plastic (33%). Even more recycle used printer cartridges (38.1%).

#### **4.3.5. The CBD and Biodiversity**

Participants' understanding of the CBD and biodiversity was tested in survey questions #9 - #11. When asked to rank their familiarity with the term "biodiversity" on a scale of 1 (no familiarity) to 10 (expert), seven of 32 respondents (22%) were not familiar with the term. Counterbalancing this group was nine respondents (29%) who ranked either a 7 or 8, indicating a generally high understanding of "biodiversity". The overall average ranking was 4.72 which shows a moderate understanding of the term.

Only 12 of 34 respondents (35.3%) had heard of the Convention on Biological Diversity (CBD); the vast majority (64.7%) had never heard the term before. The 12 participants with prior knowledge of the CBD were then asked to identify the three main objectives of the CBD, which are (i) the conservation of biological diversity; (ii) using biological diversity in a sustainable way; and (iii) the fair and equitable sharing of the benefits derived from biological diversity. While one participant declined to answer the question, 11 did respond with their best assumptions.

Most respondents did seem to be familiar with the objectives, with 8 of 11 correctly identifying the first objective, 7 of 11 identifying the second objective, and 5 of 11 identifying the third objective. Three respondents incorrectly believed that combating climate change was a main objective of the CBD and two persons thought that educating people about biological diversity was a main objective. Hence, while most have not heard of the CBD, those who have generally display a basic knowledge of the main themes.

#### **4.3.6. Environmental Outreach**

Questions #12 - #14b dealt with the theme of environmental outreach. A majority (65.6%) of the 32 respondents stated that their company was involved in environmental outreach projects. Nine respondents'

companies (28.1%) were not engaged in environmental outreach projects and two respondents were unclear.

Of the “Yes” and “Not sure” responses (23 persons), eleven (or 47.8%) stated that their company was involved in environmental restoration activities such as tree planting or reforestation. In addition to restoration activities, popular answers included financial support or donations to support environmental programs (43.5%); environmental impact assessment such as lowering the company’s energy footprint (69.6%); and conservation-related projects (34.8%). Only five of 23 respondents (21.7%) stated that their company was involved in climate change and biodiversity related activities.

The respondents who indicated their company was not involved in environmental outreach projects gave two main reasons for the lack of engagement. Five of nine respondents (55.6%) stated that their company’s environmental impact was minimal and therefore that environmental outreach was not a priority for the business. Three of nine people (33%) felt that social issues like poverty and job creation were more pressing needs than the environment.

#### **4.3.7. Corporate Social Responsibility**

The concept of corporate social responsibility (CSR) was captured in questions #15 - #17. Companies with operations in Thailand seem to be embracing CSR, 23 of 32 respondents (71.9%) indicating a CSR program at their place of business. Several respondents (9.4%) were unsure if such a program existed within their organization.

Of those private sector companies with CSR programs, the top two priority areas of the programs were sustainable development (56%) and education and job skills training for local people (50%). Conservation, environmental restoration and agriculture projects (44%) were third highest among CSR priorities. Falling close behind was poverty reduction at 22%.

Based on the answers provided by respondents, Thailand’s adoption of CSR programs appears to be robust and the priorities which the private sector focuses its attention seem weighted towards social issues

rather than environmental issues. This was confirmed in survey question # 17 where respondents were asked to rate how much of outreach programming at their business was social programming and how much was environmental programming. Although many (47%) indicated an even split between social and environmental, more respondents' organizations leaned towards social outreach (34%) than towards the environment (12%). These findings are not surprising as prior research by CSR experts has confirmed a preference for social issues over environmental ones in the developing world (Visser, 2008).

#### **4.3.8. Public-Private Partnerships**

Survey questions #18a - #21 addressed public-private partnerships (PPPs). Participants were asked where their company would be interested in partnering with the Thai government to implement environmental management projects as a form of PPP. A significant number of respondents were indecisive (50%) on the matter, whereas 31.3% would be interested and 18.8% not interested.

Those who indicated that they "might be" interested in a PPP with the Thai government were asked to identify the necessary conditions that would define such a partnership. Most respondents felt strongly that the company should have the right to publicize the partnership and that the PPP should have a strong benefit for the company. Notably, only one of ten respondents felt that the PPP must generate a profit for the company while 50% felt that generating a profit was not a deciding factor.

All participants were also asked to identify the types of support which their company would most likely provide in a PPP. The highest ranking response was "training of staff and personnel", with seven of 27 respondents indicating such training provision as very likely or certain and 11 indicating it as a possibility. This aligns well with COP 8 Decision VIII/17 which identifies the private sector as a source of technological resources and management skills which could aid in the implementation of the CBD.

Conversely, participants did not respond favourably overall to the idea of benefit sharing and the extension of patent rights or knowledge.

Only three persons were certain that their organization would provide such support to a PPP. Nine of 27 respondents (33%) said that benefit sharing and extension of patent rights or knowledge was not likely or not possible.

Still around 50% of respondents generally considered all options to be a possibility within the setting of a PPP, including but not limited to financial assistance, management consulting, technology transfer and research collaboration.

Participants were also asked to give reasons why their employer may hypothetically decide not to partner with the government or public sector entity. An overwhelming number (46.4%) believed that the cost to the company would be too high. More than a third felt that any PPP with government partners would not be related to the business strategy or core objectives of the company, and 25% indicated that the government is not a trustworthy partner. Such responses indicate a lack of trust in the government as a business partner which could undermine attempts at establishing PPPs.

Rounding out the questions on PPPs, participants identified the types of environmental projects that their company would be interested in. The top rated thematic area for PPPs was in communication, education and public awareness (CEPA) with 17 of 28 respondents (60.7%) interested. Close behind (53.6%) were projects in conservation and sustainable use. Also scoring high were climate change and biodiversity, biofuels, forests and carbon emissions reduction. Conversely, respondents were not particularly interested in partnering on projects related to biodiversity and tourism issues, genetic research and biotechnology, or administrative issues related to the CBD.

#### **4.3.9. Private Sector Engagement**

The final questions (#22 - #24) of the survey looked at engagement issues. Participants were asked if Thailand's Ministry of Natural Resources and Environment (MONRE) or the Office of Natural Resources and Environmental Policy and Planning (ONEP) had ever contacted their business firm. No private sector participants had ever been contacted by the

MONRE or the ONEP (although 38.9% were not sure if there had been any contact).

Adding academic institutions to the partnership seemed to change the sentiment of the private sector participants to engage in PPPs. Half of the 28 respondents felt their company would more likely support a PPP if an academic institution (i.e., university) were involved while 35.7% felt that including an academic partner was irrelevant in their firm's decision making process. Four participants indicated their company would be less likely to support a PPP which included an academic partner.

Lastly, participants were asked if their organization would be interested in attending a workshop about business and biodiversity if such an event were held in Bangkok. Almost a third showed slight interest while nearly 40% were clearly interested in attending. Only eight of 28 respondents felt their company would not be interested in attending the workshop.



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# CHAPTER V

## CONCLUSION

This study was initiated based upon earlier research which suggested that the private sector in Thailand was the least engaged stakeholder in the national implementation of the CBD. While lack of private sector engagement is not unique to Thailand and is common among many Parties to the CBD as described in COP 8 Decision VIII/17, there is little information available in Thailand or in the broader academic literature why this is the case.

As first described in Chapter I, section 1.2, four questions were posed which sought to expose the nature of private sector engagement with the CBD and business firms' general willingness to engage in public-private partnerships and environmental management projects. Conclusions to some of those questions can now be drawn based on the research findings in Chapter IV and documented in Appendix C.

### **5.1. Conclusion of Research Findings**

#### **5.1.1. The Interest of the Private Sector in Thailand in Supporting or Implementing Actions or Programmes Related to Biological Diversity**

The private sector in Thailand is interested in supporting or implementing actions or programmes related to biological diversity and many are already doing so. The CP Group and PTT have demonstrated numerous projects which are related to biological diversity in areas ranging from forests to fisheries to farms.

Survey responses also indicated that businesses in Thailand are implementing actions and programmes related to biodiversity. More than half of respondents stated that their businesses are already implementing environmental outreach projects. In addition, 31.3% of respondents felt that their organization would be interested to partner with the Thai government on project related to biodiversity or environmental management. An additional

37.5% indicated their company “may” be interested in partnering on such initiatives. With 68.8% open to the idea, the private sector participants in the survey questionnaire are clearly open to the concept of implementing programmes related to biodiversity.

### **5.1.2. Engagement in Multi-stakeholder Approaches to National Biodiversity Management**

One way in which other stakeholders can better engage the private sector in public-private partnerships (PPPs) is to reach out and connect with interested businesses. According to the responses, no businesses participating in the survey had been contacted by the Ministry of Natural Resources and Environment (MONRE) or the Office of Natural Resources and Environmental Policy and Planning (ONEP). This may indicate that government agencies such as the ONEP or its parent entity, the MONRE, need to be the first to initiate the partnership. However, this result is only indicative of the specific participating businesses and is not necessarily true for all businesses in Thailand. Neither the ONEP nor the MONRE was contacted for this research so it is unclear which specific businesses they have engaged with already. More research is needed, however, to understand how businesses prefer to be engaged by outside stakeholders.

Partnerships with the private sector could also be enhanced by focusing on the areas of work where businesses want to contribute. For instance, the survey responses (question #19) indicate that businesses are most willing to contribute capacity building and advisory services to a PPP. Academic and government partners should think about how such services could be utilized and then propose relevant ideas to potential firms.

Attaining a multi-stakeholder approach towards national biodiversity management could also benefit by incorporating social issues into the environmental agenda. This may increase the interest of private sector companies to participate. Survey responses indicate that there is a slight preference among responding companies' CSR initiatives to focus on social issues. If partners propose environmental projects with a balance of social

and environmental activities, more participants' companies would be interested in partnering.

Lastly, the academic and government partners could better engage private sector firms if they could assure the firms that project costs will be effectively monitored and managed. Although survey respondents did not feel that PPPs need to result in a profit for their business, they were concerned that the costs of partnering with government on such projects would be too high (question #20). A properly formulated budget shared in advance might be a useful way to gain the confidence of potential partners in the private sector.

### **5.1.3. Participation Levels and Types of CBD-relevant Activities Among Businesses Already Taking Action**

Nearly two-thirds of survey respondents stated that their businesses are already implementing environmental outreach projects, mainly in thematic areas like reforestation (47.8%), environmental project finance (43.5%), and environmental impact assessment and footprint (69.6%). Conservation (34.8%) and climate change (21.7%) were also part of respondents' implementation efforts.

However, businesses appear to be interested in partnering with other stakeholders on a wide range of projects relevant to the CBD, including CEPA, conservation and sustainable use, climate change and biodiversity, biofuels, forests, protected areas and many others.

Surprisingly few businesses were interested in working on projects related to island biodiversity, biotechnology, and eco-tourism. This may be due to the demographic of survey participants, noting that only three participants worked in the hotel and hospitality industry and only one in agriculture or farming. Additional research with a larger number of participants from such industries is needed in order to better understand such trends.



#### **5.1.4. CBD Articles and COP Decisions Currently Being Implemented by Businesses**

The environmental projects of the CP Group and PTT were reviewed and correlated to the relevant articles and COP decisions in Chapter IV, sections 4.1 and 4.2 respectively. Table 4.1 and Table 4.2 indicate numerous linkages between such projects and the decisions reached at the COP meetings. All that is needed to make such linkages is a clear understanding of the content of the CBD articles and COP decisions and transparent information on a company's environmental outreach projects.

Most businesses in the private sector lack knowledge of the CBD, however. This was made clear by the low awareness of the CBD (35.3%) among survey respondents. Because of this lack of knowledge, most businesses will not be in a position to identify how their environmental outreach projects are contributing towards CBD implementation.

Thailand's national focal point agency for the CBD is the ONEP. With its knowledge of CBD matters and requirements, the ONEP is well positioned to make these linkages between private sector projects and decisions known. However, doing so will require the ONEP and affiliated government agencies to reach out to businesses more earnestly. That no participating businesses can recall ever being contacted by the ONEP or the MONRE and yet over 31% would be interested in partnering with the Thai government on environmental outreach is reason to believe that there is significant opportunity to engage the private sector and establish these linkages.

#### **5.2. Recommendations for Future Research**

Additional research would be useful to understand how private sector businesses prefer to be engaged by other stakeholders like government. It is currently unclear whether businesses are willing to take the lead in initiating public-private partnerships (PPPs) or whether they prefer government agencies or universities to lead first. Knowing this could assist in getting more PPPs started.

Future research into CSR in Thailand and PPPs should also strive to increase the scale of participation by focusing on wider distribution of the research mechanism (i.e., online survey). While the response rate to the survey in this study was in line with established response rates internationally for this method of polling, the distribution base was too low to be able to draw significant correlations and the statistical error too large to use for predicted outcomes. By expanding the distribution to reach thousands of businesses in Thailand, the response pool will grow and the possibility of statistical significance will increase.

Another useful area of research is the demographic of the private sector in Thailand. Knowing what percentage of Thai businesses are small, medium, large or multinational would be useful in targeting businesses. Knowing the total number of businesses in the private sector would also be useful statistically in order to understand the number of survey responses needed for reaching predictive outcomes with low statistical error.

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**APPENDICES**

ศูนย์วิทยทรัพยากร  
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## **APPENDIX A**

### **ENGLISH SURVEY QUESTIONNAIRE**

The following is a copy of the entire original content of the English survey questionnaire, taken from screen captured images of the actual Internet-based survey as presented to the participants. However, the Internet-based survey presented questions one at a time; here, the questions are presented in a running list format:

#### Opening Message:

Hello! My name is Walker Young and my Master's thesis at Chulalongkorn University is titled, "An assessment of the relationship of the private sector to the national implementation of the Convention on Biological Diversity: a case study of Thailand".

My research seeks to understand the current sentiments of the private sector companies doing business in Thailand, specifically looking at private sector engagement in public-private partnerships, corporate social responsibility (CSR) and environmental management. All of these are critical elements in the implementation of the Convention on Biological Diversity. I have created an online survey to study this relationship, and I am asking for your participation.

By completing this survey, you will be helping to expand the level of knowledge about CSR in Thailand and the level of engagement that the private sector has with environmental issues. Currently, CSR trends in Thailand are poorly understood. It is my hope that my research will share new details about CSR as it is being demonstrated in Thailand, and shed new light on the relationship of the private sector and the Convention on Biological Diversity.

As a token of appreciation for completing the survey, you will have the option of entering your company in a lucky draw. Three random entries will be selected and those companies will win a coffee and snack break for 20 persons, with donuts and coffee delivered directly to your office.

Thank you for participating! If you have any questions or concerns about participating in this survey, please contact me at [cbd.thai@gmail.com](mailto:cbd.thai@gmail.com) and I will assist you.

Let's get started!

Please click "Next" to begin the survey.

**Question 1:****Please indicate your position / title within your organization:**

- |   |  |
|---|--|
| <input type="checkbox"/> Owner/CEO/President                    | <input type="checkbox"/> Consultant      |
| <input type="checkbox"/> VP/Director/Other executive management | <input type="checkbox"/> Permanent staff |
| <input type="checkbox"/> Middle management                      | <input type="checkbox"/> Temporary staff |
| <input type="checkbox"/> Other (please specify)                 |  |

**Question 2:****What is the scope of your company / organization? (Select one):**

- |  |  |
|--|--|
| <input type="radio"/> Local or community | <input type="radio"/> Regional               |
| <input type="radio"/> National           | <input type="radio"/> International / Global |

**Question 3a:****Is your company / organization part of the government, private sector (business), academic institution or non-profit group? (Select the one which best describes your company):**

- |   |  |
|---|--|
| <input type="radio"/> Government / state-owned  | <input type="radio"/> Academic institution or research institute |
| <input type="radio"/> Private Sector / business | <input type="radio"/> Non-profit organization                    |

**\*Auto-response if selected answer to Q3a is NOT "private sector / business":**

I'm sorry. This survey is meant to be filled out only by companies in the private sector / business category. Thank you for your desire to participate but we are not seeking information from the other sectors at this time.

**Question 3b:****How many employees does your company / organization have?**

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| <input type="radio"/> 1 - 10      | <input type="radio"/> 1,001 - 5,000   |
| <input type="radio"/> 11 - 100    | <input type="radio"/> More than 5,000 |
| <input type="radio"/> 101 - 500   | <input type="radio"/> Not sure        |
| <input type="radio"/> 501 - 1,000 |                                       |

**Question 4:**

**What type of industry best describes your company / organization (Select one):**

- |   |  |  |
|---|--|--|
| <input type="radio"/> Banking / Finance         | <input type="radio"/> Legal / Consulting / Advisory services | <input type="radio"/> Real estate                      |
| <input type="radio"/> Mining / Cement / Paper   | <input type="radio"/> IT / Telecoms / Computers              | <input type="radio"/> Retail sales                     |
| <input type="radio"/> Electricity / Oil / Power | <input type="radio"/> Healthcare                             | <input type="radio"/> Agricultural / farming / grocery |
| <input type="radio"/> Other (please specify)    |  |  |

**Question 5:**

**Where is your company's headquarters or parent company located?**

- In Thailand  Outside of Thailand

**Question 6:**

**Please identify which of the following standards and reporting mechanisms your company / organization has adopted (Select all that apply):**

- |  |  |
|--|--|
| <input type="checkbox"/> ISO 14001                         | <input type="checkbox"/> AA1000  |
| <input type="checkbox"/> GRI (Global Reporting Initiative) | <input type="checkbox"/> ISAE 3000   |
| <input type="checkbox"/> UN Global Compact                 | <input type="checkbox"/> I do not know which standards or certifications my company has adopted. |
| <input type="checkbox"/> SA8000                            |  |
| <input type="checkbox"/> Other (please specify)            |  |

**Question 7:**

**Does your company / organization have a recycling program? (Select one):**

- Yes  No  Not sure

**\*Question 8 (only if answered "Yes" to Q7):**

**Please indicate which materials your company recycles [Check all that apply]:**

- |   |  |
|---|--|
| <input type="checkbox"/> Paper                | <input type="checkbox"/> Used printer cartridges |
| <input type="checkbox"/> Plastic              | <input type="checkbox"/> Not sure                |
| <input type="checkbox"/> Electronic equipment |  |





**Question 12:**

**How often do environmental issues get discussed in the context of your company's daily operations and business model?**

Select one number from 1 to 10:

1 (Never)	2	3 (Not Often)	4	5 (Sometimes)	6	7 (Often)	8	9	10 (Everyday)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Question 13:**

“Environmental outreach” activities are those projects of a company that go beyond the normal operations of the business in order to benefit the natural environment, and also those activities within a company's normal operations which seek to enhance the natural environment. Such outreach programs are often financial, technological, genetic, conservation-based or agricultural in scope.

**Is your company / organization involved in any environmental outreach projects?**

Yes       No       Not Sure

**\*Question 14a (only if answered “Yes” or “Not Sure” to Q13):**

**What types of environmental outreach projects is your company / organization involved in? [Select all that apply]:**

<input type="checkbox"/> Ecosystem restoration (i.e., Reforestation / tree planting)	<input type="checkbox"/> Conservation-related	<input type="checkbox"/> Environmental impact (i.e., shrinking the energy usage / company footprint)
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Plant genetic research / technology	<input type="checkbox"/> Climate change and biodiversity
<input type="checkbox"/> Marine / Coastal / Water-related	<input type="checkbox"/> Financial support or donations in support of environmental programs or agencies	
<input type="checkbox"/> Other (please specify)		

**\*Question 14b (only if answered “No” to Q13):**

**Please choose the reason(s) which best explain why environment-related activities are not a main priority of your company (choose all that apply):**

<input type="checkbox"/> Environmental issues are not related to our company's strategic objectives	<input type="checkbox"/> Taking care of the environment is the job of the government, not for business or the private sector
<input type="checkbox"/> Our company's environmental impact is minimal	<input type="checkbox"/> I am not sure
<input type="checkbox"/> Social issues like poverty and the creation of jobs are more urgent issues than the environment	<input type="checkbox"/> I want to skip this question
<input type="checkbox"/> Other (please specify)	

**Question 15:**

“Corporate social responsibility” is the ethical and responsible treatment of external stakeholders (i.e., the local community, society) and the environment while preserving the profitability of the corporation. Corporate social responsibility is

deliberate on the part of the company; it involves planning and implementation of actions concerning the external stakeholders and/or environment.

**Does your company / organization have a corporate social responsibility (CSR) program?**

- Yes
- No
- Not sure

\*Question 16 (only if answered “Yes” to Q15):

**What are the priorities of your company’s CSR program [Please select a maximum of two responses]:**

	Choice	
	#1	#2
Poverty reduction	<input type="checkbox"/>	<input type="checkbox"/>
Community infrastructure improvement	<input type="checkbox"/>	<input type="checkbox"/>
Education and job skills training for local people	<input type="checkbox"/>	<input type="checkbox"/>
Environmental enhancement, improvement or restoration / Agriculture / Conservation	<input type="checkbox"/>	<input type="checkbox"/>
Sustainable development	<input type="checkbox"/>	<input type="checkbox"/>
Preservation of local culture / historical sites	<input type="checkbox"/>	<input type="checkbox"/>
Not sure	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)		

Question 17:

**In your company / organization, approximately what percentage of outreach programming is social and what percentage is environmental?**

	100% social	75% social / 25% environmental	50% social / 50% environmental	25% social / 75% environmental	100% environmental	Not sure
Check one box:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 18a:

**Would your company / organization be interested in partnering with the Thai government on projects related to biodiversity or environmental management?**

- Yes
- No
- Maybe
- Not sure

**Question 18b (only if answered 'Maybe' for Q18a):**

**You identified that your company / organization 'may be' interested in partnerships related to environmental projects. For each of the following conditions, identify the importance of each condition in order for your company / organization to participate in the partnership [Check the relevant box]:**

	Absolutely necessary	Highly Important	Preferable but not necessary	Not a factor / Irrelevant
The project should generate a profit for our company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The project should have an acceptable budget (cost minimization)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company should do the planning and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The partnership should have a strategic benefit for our company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There should be other businesses involved in the partnership besides our company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company should receive adequate recognition for our contributions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The outcomes of the partnership should be tangible and apparent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our company should have the right to publicize the partnership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)				

**Question 19:**

**Suppose that your company / organization were involved in a partnership or cooperative program for environmental management, conservation or related project. Given the capabilities of your company / organization, please identify the types of support your company / organization would most likely provide:**

**[Check one category for each type of support]**

	Very Likely or Certain	Possible	Not Likely / Not possible
Financial Assistance / Funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology Transfer / Material Support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management Consulting / Advisory Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training of Staff / Personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benefit Sharing / Extension of Patent Rights or Knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research collaboration / cooperation with other stakeholders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)			

**Question 20:**

**If your company/business decided NOT to partner with the government or public sector, which of the following reasons best explain your company's reasoning? [Check all that apply]:**

- This kind of project is not related to our business strategy or core objectives
- Our company has nothing to offer to this kind of partnership
- The cost to the company would be too high
- There is no benefit to the company in doing this kind of partnership
- The government is corrupt and not a trustworthy partner
- Our company does not have the capacity to partner with the government
- Other (please specify)

**Question 21:**

**If joining a partnership with the government or with another business partner, which types of environmental projects would your company be interested in?**

	Interested	Not Interested	Not Sure / Not Clear
Agricultural biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dry and Sub-humid lands biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inland Waters (i.e., lakes, rivers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Islands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine and coastal ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conservation and Sustainable Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protected Areas (i.e., National Parks)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversity and Tourism Issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication, Education and Public Awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administrative issues related to the CBD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impact Assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial Mechanisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carbon Trading / Emissions Reduction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Genetic Research / Biotechnology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofuels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intellectual Property Rights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environment and local people's rights to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change and biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 22:

**Has the Ministry of Natural Resources and Environment (MONRE) or the Office of Natural Resources and Environmental Policy and Planning ever contacted your company / organization?**

- Yes
- No
- Not sure

Question 23:

**If academic institutions such as universities were also involved in the partnership, would that have an effect on your company's desire to support cooperative environmental programs?**

- Yes, more likely to support
- Irrelevant. Does not change the likelihood of our company supporting the partnership
- Less likely to support if academic institutions are involved

Question 24:

**If a seminar or workshop about business and biodiversity were held in Bangkok, would your company / organization be interested in attending?**

- Very Interested
- Interested
- Slightly interested
- Not interested

## APPENDIX B

### THAI SURVEY QUESTIONNAIRE

The following is a copy of the entire original content of the Thai survey questionnaire, taken from screen captured images of the actual Internet-based survey as presented to the participants. However, the Internet-based survey presented questions one at a time; here, the questions are presented in a running list format:

#### Opening Message:

สวัสดีครับ ผมชื่อ วอค์คเกอร์ ยัง กำลังเรียนปริญญาโท อยู่ที่จุฬาลงกรณ์มหาวิทยาลัย และกำลังทำวิทยานิพนธ์ เรื่อง ความสัมพันธ์ของภาคเอกชนต่อประเทศในการดำเนินการตามอนุสัญญาความหลากหลายทางชีวภาพซึ่งเป็นกรณีศึกษาของประเทศไทย.

งานวิจัยของกระผมมีจุดมุ่งหมายเพื่อทำความเข้าใจถึงบริษัทภาคเอกชนที่ทำธุรกิจในประเทศไทย โดยเฉพาะดูที่การร่วมมือของภาคเอกชนต่อความร่วมมือกับห้างหุ้นส่วนเอกชน, องค์กรการรับผิดชอบต่อสังคม (CSR) และการจัดการสิ่งแวดล้อม องค์กรทั้งหมดเหล่านี้เป็นองค์ประกอบสำคัญในการดำเนินการตามอนุสัญญาความหลากหลายทางชีวภาพ.

กระผมได้ทำแบบสำรวจออนไลน์เพื่อศึกษากรณีนี้ กระผมจึงขอความร่วมมือจากท่านด้วย โดยการกรอกแบบสำรวจนี้จะช่วยขยายระดับความรู้เกี่ยวกับการรับผิดชอบต่อสังคม(CSR)ในประเทศไทย และระดับการมีส่วนร่วมของภาคเอกชนต่อปัญหาสิ่งแวดล้อม. ขณะนี้แนวโน้มความรับผิดชอบต่อสังคม(CSR) ใน ประเทศไทยยังมีน้อยมาก มันเป็นความหวังที่งานวิจัยของผมจะมีส่วนร่วมที่จะกระจายข้อมูลและความรู้ใหม่ๆเกี่ยวกับความรับผิดชอบต่อสังคม(CSR) ตามที่มีได้มีตัวอย่างให้เห็นในบ้างประเทศไทย และแสดงความถึงตั้งใจของพลังคลื่นลูกใหม่ต่อความสัมพันธ์ของภาคเอกชนต่ออนุสัญญาความหลากหลายทางชีวภาพ.

และเพื่อเป็นการขอบคุณสำหรับการมีส่วนร่วมกรอกแบบสำรวจนี้ คุณจะมีสิทธิ์ออกชื่อบริษัทของคุณเข้าร่วมในการจับรางวัล โดยผมจะสุ่มเลือก3 บริษัทเหล่านั้น ผู้ถูกเลือกจะได้รับกาแฟ โดนต์และอาหารว่าง สำหรับ 20 คนโดยจะมีการส่งโดยตรงไปยังสำนักงานของท่าน.

กระผม ขอขอบคุณสำหรับการมีส่วนร่วมของท่าน ถ้าท่านมีข้อซักถามหรือข้อสงสัยใดๆที่เป็นประโยชน์เกี่ยวกับแบบสำรวจนี้ กรุณาติดต่ออีเมลล์ผมได้ที่cbd.thai@gmail.com แล้วผมจะติดต่อคุณโดยเร็วที่สุด

มาเริ่มกันเถอะครับ

โปรดเลือก "Next" เพื่อที่จะทำแบบสำรวจ

Question 1:**โปรดระบุตำแหน่งในองค์กร/บริษัทของท่าน**

- |  |                                       |
|--|---------------------------------------|
| <input type="radio"/> เจ้าของ/CEO/ประธานบริษัท                 | <input type="radio"/> ที่ปรึกษา       |
| <input type="radio"/> รองประธาน/ผู้อำนวยการ/ตำแหน่งบริหารอื่นๆ | <input type="radio"/> พนักงานประจำ    |
| <input type="radio"/> ตำแหน่งการจัดการระดับกลาง                | <input type="radio"/> พนักงานชั่วคราว |
| <input type="radio"/> อื่น ๆ โปรดระบุ                          |                                       |

Question 2:**โปรดระบุระดับหรือขอบเขตของการทำงานของหน่วยงานของท่าน เลือกเพียงหนึ่งตัวเลือก**

- |  |                                     |
|--|-------------------------------------|
| <input type="radio"/> ระดับท้องถิ่นหรือชุมชน | <input type="radio"/> ภูมิภาค       |
| <input type="radio"/> ระดับชาติ              | <input type="radio"/> ระดับนานาชาติ |

Question 3a:**โปรดระบุประเภทของหน่วยงานที่ท่านกำลังทำงานอยู่**

- |  |   |
|--|---|
| <input type="radio"/> หน่วยงานรัฐบาล             | <input type="radio"/> หน่วยงานการศึกษา    |
| <input type="radio"/> หน่วยงานเอกชนหรือภาคธุรกิจ | <input type="radio"/> องค์กรไม่หวังผลกำไร |

\*Auto-response if selected answer to Q3a is NOT “หน่วยงานเอกชนหรือภาคธุรกิจ”:

ขอภัย ณ ที่นี้

เนื่องจากแบบสอบถามนี้มีจุดประสงค์ที่จะสอบถามเฉพาะหน่วยงานเอกชนหรือภาค

ธุรกิจเท่านั้น ขอขอบคุณสำหรับความร่วมมือ

แต่ขณะนี้เรายังไม่ต้องการข้อมูลจากหน่วยงานอื่นดังกล่าว

Question 3b:**ท่านมีจำนวนเจ้าหน้าที่ในหน่วยงานหรือองค์กรของท่านจำนวนเท่าใด ?**

- |                                      |  |
|--------------------------------------|--|
| <input type="radio"/> 1 - 10 คน      | <input type="radio"/> 1,001 - 5,000 คน |
| <input type="radio"/> 11 - 100 คน    | <input type="radio"/> มากกว่า 5,000 คน |
| <input type="radio"/> 101 - 500 คน   | <input type="radio"/> ไม่แน่ใจ         |
| <input type="radio"/> 501 - 1,000 คน |  |

**Question 4:**

โปรดระบุประเภทของอุตสาหกรรมของบริษัทหรือองค์กรของท่าน เลือกเพียงหนึ่งตัวเลือก

- |  |   |   |
|--|---|---|
| <input type="radio"/> การธนาคาร/การเงิน        | <input type="radio"/> กฎหมาย/ที่ปรึกษา/บริการให้คำแนะนำ | <input type="radio"/> อสังหาริมทรัพย์                   |
| <input type="radio"/> เหมืองแร่/ซีเมนต์/กระดาษ | <input type="radio"/> ไอที / การสื่อสาร / คอมพิวเตอร์   | <input type="radio"/> การขายส่ง                         |
| <input type="radio"/> ไฟฟ้า/น้ำมัน/พลังงาน     | <input type="radio"/> ดุลยสุขภาพ                        | <input type="radio"/> เกษตรกรรม/การทำฟาร์ม / การปลูกผัก |
| <input type="radio"/> อื่น ๆ โปรดระบุ          |   |   |

**Question 5:**

สำนักงานใหญ่หรือบริษัทแม่ของท่านตั้งอยู่ที่ใด?

- ในประเทศไทย       ต่างประเทศ

**Question 6:**

โปรดเลือก มาตรฐาน หรือกลไกการรายงาน ต่อไปนี้ที่บริษัทของท่านมีการนำมาใช้

- |  |   |
|--|---|
| <input type="checkbox"/> ISO 14001                         | <input type="checkbox"/> AA1000   |
| <input type="checkbox"/> GRI (Global Reporting Initiative) | <input type="checkbox"/> ISAE 3000  |
| <input type="checkbox"/> UN Global Compact                 | <input type="checkbox"/> ข้าพเจ้าไม่ทราบว่าบริษัทหรือองค์กรของข้าพเจ้ามีการนำมาตรฐานใดมาใช้บ้าง |
| <input type="checkbox"/> SA8000                            |   |
| <input type="checkbox"/> อื่น ๆ โปรดระบุ                   |   |

**Question 7:**

บริษัทหรือองค์กรของท่านมีการดำเนินโครงการ ริไซเคิลหรือไม่

- ใช่       ไม่ใช่       ไม่แน่ใจ



\*Question 8 (only if answered “ใช่” to Q7):

**โปรดระบุว่าหน่วยงานของท่าน รีไซเคิล วัสดุประเภทใด**

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> กระดาษ       | <input type="checkbox"/> หมึกพิมพ์ที่ใช้แล้ว |
| <input type="checkbox"/> พลาสติก      | <input type="checkbox"/> ไม่น่าใจ            |
| <input type="checkbox"/> อุปกรณ์ไฟฟ้า |  |

Question 9:

**ท่านเคยได้ยินคำว่า “อนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ” หรือไม่ ?**

- ใช่  ไม่ใช่

\*Question 10 (only if answered “ใช่” to Q9):

**โปรดระบุเป้าหมายหลักสามข้อของ อนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ โดยการเลือกจากตัวเลือกด้านล่าง**

	1	2	3
ให้ความรู้ด้านความหลากหลายทางชีวภาพแก่ประชาชน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
เพื่ออนุรักษ์ความหลากหลายทางชีวภาพ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ใช้ความหลากหลายทางชีวภาพอย่างยั่งยืน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การต่อต้านการเปลี่ยนแปลงสภาพภูมิอากาศ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การแบ่งปันผลประโยชน์ด้านความหลากหลายทางชีวภาพอย่างเป็นธรรมและเท่าเทียม	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
จัดตั้ง ครอบคลุมการทำงานด้านกฎหมายด้านความหลากหลายทางชีวภาพ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
เพิ่มความหลากหลายทางชีวภาพในธรรมชาติ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ข้าพเจ้าไม่ทราบเป้าหมายหลักต่าง ๆ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Question 11:**

จากมาตราส่วน 1-10 กรุณาจัดลำดับความคุ้นเคยของท่านกับคำว่า "ความหลากหลายทางชีวภาพ" โดย 10 หมายถึง คุ้นเคยมากที่สุด และ 1 หมายถึงไม่คุ้นเคยเลย

	1 (ไม่คุ้นเคยเลย)	2	3	4	5	6	7	8	9	10 (คุ้นเคยมาก/เชี่ยวชาญ)
เลือก จากระดับ 1-10:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Question 12:**

ท่านคิดว่า ในเนื้อหาของแผนธุรกิจและแผนปฏิบัติการประจำวันของบริษัทของท่านมีการอภิปรายประเด็นทางด้านสิ่งแวดล้อมหรือไม่

	1 ( ไม่เคย )	2	3 ( ไม่ค่อยบ่อย )	4	5 ( บางครั้ง )	6	7 ( บ่อย )	8	9	10 ( ทุกวัน )
เลือก จากระดับ 1-10:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Question 13:**

กิจกรรม "Environmental Outreach" หมายถึงโครงการต่าง ๆ ของบริษัทที่ดำเนินการมากกว่าการดำเนินงานทางธุรกิจปกติเพื่อที่จะสร้างผลที่ดีต่อสิ่งแวดล้อมทางธรรมชาติรวมถึงการดำเนินการปกติของบริษัทที่ส่งผลดีต่อสิ่งแวดล้อมทางธรรมชาติ โครงการเหล่านี้อาจอยู่ในรูป การเงิน เทคโนโลยี พันธุกรรม การอนุรักษ์ หรือ การเกษตรกรรม

**ท่านคิดว่า บริษัทหรือองค์กรของท่านมีโครงการหรือกิจกรรมที่เกี่ยวข้องทางด้านสิ่งแวดล้อม หรือไม่?**

ใช่
  ไม่ใช่
  ไม่แน่ใจ

**\*Question 14a (only if answered "ใช่" or "ไม่แน่ใจ" to Q13):**

**โครงการหรือกิจกรรมทางด้านสิ่งแวดล้อมประเภทใดที่บริษัทหรือองค์กรของท่านมีส่วนเกี่ยวข้อง? โปรดเลือกทุกข้อที่เกี่ยวข้อง**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> การฟื้นฟูระบบนิเวศ เช่นการปลูกป่า   | <input type="checkbox"/> โครงการที่เกี่ยวกับการอนุรักษ์                                     | <input type="checkbox"/> ผลกระทบสิ่งแวดล้อม เช่น การลดการใช้พลังงาน          |
| <input type="checkbox"/> การเกษตรกรรม                        | <input type="checkbox"/> การวิจัยและเทคโนโลยี พันธุศาสตร์ของพืช                             | <input type="checkbox"/> การเปลี่ยนแปลงสภาพภูมิอากาศและความหลากหลายทางชีวภาพ |
| <input type="checkbox"/> โครงการทางทะเล/ชายฝั่ง/เกี่ยวกับน้ำ | <input type="checkbox"/> การสนับสนุนทางการเงิน หรือการบริจาคเพื่อสนับสนุนโครงการสิ่งแวดล้อม |  |
| <input type="checkbox"/> อื่น ๆ โปรดระบุ                     |   |  |

**\*Question 14b (only if answered “ไม่ใช่” to Q13):**

**โปรดเลือกเหตุผลที่ดีที่สุด ที่อธิบายถึงเหตุผลที่ทำให้กิจกรรมที่เกี่ยวข้องกับสิ่งแวดล้อม ไม่มี  
ความสำคัญหลัก ในบริษัทหรือองค์กรของท่าน (สามารถเลือกได้มากกว่าหนึ่งข้อ):**

- |  |   |
|--|---|
| <input type="checkbox"/> ประเด็นทางด้านสิ่งแวดล้อมไม่ใช่ยุทธศาสตร์หลักขององค์กรหรือบริษัท                                  | <input type="checkbox"/> การดูแลสิ่งแวดล้อมเป็นความรับผิดชอบของภาครัฐไม่ใช่ของภาคเอกชนหรือภาคธุรกิจ |
| <input type="checkbox"/> ผลกระทบต่อสิ่งแวดล้อมจากบริษัทของเราน้อย  | <input type="checkbox"/> ข้าพเจ้าไม่แน่ใจ   |
| <input type="checkbox"/> ประเด็นทางสังคมเช่น ความยากจนหรือการสร้างงานเป็นประเด็นที่มีความจำเป็นเร่งด่วนกว่าด้านสิ่งแวดล้อม | <input type="checkbox"/> ข้าพเจ้าขอผ่านคำถามนี้   |
| <input type="checkbox"/> อื่น ๆ โปรดระบุ   |   |

**Question 15:**

“Corporate social responsibility” “โครงการรับผิดชอบต่อสังคม” (CSR) คือโครงการที่ใช้หลักจรรยาและศีลธรรมรับผิดชอบต่อสังคมในการอนุรักษ์สิ่งแวดล้อมซึ่งไม่มีผู้ที่มีส่วนได้เสียใดๆ (เช่น ผู้คนในชุมชนท้องถิ่น, ชุมชน กลุ่มสังคม) โดยที่องค์กรนั้นก็ยังคงรักษาผลกำไรอยู่  
ความรับผิดชอบต่อ สังคมของนั้น เป็นความตั้งใจส่วนหนึ่งขององค์กร ซึ่งรวมถึงการวางแผนและเตรียมอุปกรณ์เพื่อการอนุรักษ์สิ่งแวดล้อมโดยคำนึงถึงผู้คนในท้องถิ่นและสิ่งแวดล้อมโดยไม่มีผลประโยชน์ทางธุรกิจใดๆมาเกี่ยว ข้อ

**บริษัทหรือองค์กรของท่าน มี “โครงการ เพื่อรับผิดชอบต่อสังคม” “corporate social responsibility” (CSR) หรือไม่ ?**

- ใช่
- ไม่ใช่
- ไม่แน่ใจ

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

\*Question 16 (only if answered “ใช่” to Q15):

**ประเด็นอะไรคือความสำคัญหลัก ในโครงการ  
รับผิดชอบต่อสังคม ของบริษัทหรือองค์กรของ  
ท่าน ?  
(สามารถเลือกได้ มากที่สุดสองข้อ)**

	# 1	# 2
การลดความยากจน	<input type="checkbox"/>	<input type="checkbox"/>
การพัฒนาาระบบสาธารณสุขประเภค	<input type="checkbox"/>	<input type="checkbox"/>
การฝึกทักษะและให้การศึกษากับคนท้องถิ่น	<input type="checkbox"/>	<input type="checkbox"/>
การพัฒนาหรือการฟื้นฟูหรือการอนุรักษ์สิ่งแวดล้อม	<input type="checkbox"/>	<input type="checkbox"/>
การพัฒนาอย่างยั่งยืน	<input type="checkbox"/>	<input type="checkbox"/>
การอนุรักษ์วัฒนธรรมท้องถิ่น และพื้นที่ประวัติศาสตร์	<input type="checkbox"/>	<input type="checkbox"/>
ไม่แน่ใจ	<input type="checkbox"/>	<input type="checkbox"/>

อื่น ๆ โปรดระบุ

**Question 17:**

**ในบริษัทหรือองค์กรของท่านมีโครงการทำเพื่อสังคม และทำเพื่อสิ่งแวดล้อมโดยประมาณท่าน  
คิดว่าเป็นเปอร์เซ็นต์ ?**

	100% ทำเพื่อสังคม	75% ทำเพื่อสังคม / 25% ทำเพื่อสิ่งแวดล้อม	50% ทำเพื่อสังคม / 50% ทำเพื่อสิ่งแวดล้อม	25% ทำเพื่อสังคม / 75% ทำเพื่อสิ่งแวดล้อม	100% ทำเพื่อสิ่งแวดล้อม	ไม่แน่ใจ
Select one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Question 18a:**

**ท่านคิดว่าบริษัทหรือองค์กรของท่านจะสนใจร่วมมือกับภาครัฐในโครงการที่เกี่ยวข้องกับความ  
หลากหลายทางชีวภาพหรือโครงการด้านการจัดการสิ่งแวดล้อมหรือไม่ ?**

- ใช่
- ไม่ใช่
- อาจจะ
- ไม่แน่ใจ

**Question 18b (only if answered “อาจจะ” to Q18a):**

ท่านระบุว่า บริษัทของท่าน อาจจะสนใจในความร่วมมือที่เกี่ยวข้องกับโครงการด้านสิ่งแวดล้อม สำหรับเงื่อนไขต่าง ๆ ต่อไปนี้ โปรดระบุความสำคัญของเงื่อนไขต่าง ๆ ด้านล่างต่อไปนี้ที่จะทำให้บริษัทหรือองค์กรของท่าน มีส่วนในความร่วมมือเหล่านั้น (โปรดเลือกเงื่อนไขที่เกี่ยวข้อง):

	จำเป็นอย่างยิ่ง	สำคัญมาก	อยากให้มีแต่ไม่จำเป็น	ไม่เกี่ยวข้อง
โครงการควรสร้างผลกำไรให้แก่ บริษัท	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
โครงการควรจะมีงบประมาณที่สามารถยอมรับได้ (ต้นทุนต่ำที่สุด)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
บริษัทหรือองค์กรของเราควรเป็นผู้วางแผนและออกแบบโครงการ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ความร่วมมือนั้นควรจะเป็นประโยชน์ต่อองค์กรของเรา	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ควรจะมีธุรกิจอื่น ๆ ไปเกี่ยวข้องในการสร้างความร่วมมือนอกจากธุรกิจของเรา	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
บริษัทของพวกเขาควรจะได้รับ การจดจำที่เพียงพอ สำหรับการดำเนินงานของพวกเขา	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ผลของความร่วมมือควรจะมีผลได้ระยะสั้น	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
บริษัทของพวกเขาควรได้รับสิทธิ์ที่จะเผยแพร่ให้สาธารณะชนรับรู้ความร่วมมือของบริษัท	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
อื่น ๆ โปรดระบุ				

**Question 19:**

สมมติว่าบริษัทหรือองค์กรของท่านมีส่วนเกี่ยวข้องกับโครงการความร่วมมือด้านการจัดการสิ่งแวดล้อม การอนุรักษ์หรือโครงการอื่น ๆ ที่เกี่ยวข้อง กรุณาประเมินถึงความสามารถขององค์กรของท่านหรือชนิดความช่วยเหลือที่บริษัทของท่านมีแนวโน้มที่จะสามารถจัดหาให้ได้มากที่สุด (เลือกเพียงหนึ่งคำตอบสำหรับแต่ละชนิดของการสนับสนุน)

	จัดหาได้แน่นอน	เป็นไปได้	เป็นไปได้
ประเภทของการสนับสนุน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การสนับสนุนทางการเงินและการให้ทุน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การถ่ายทอดเทคโนโลยี/ และการสนับสนุนเชิงวิศวะ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
บริการปรึกษาด้านการจัดการ/บริการให้คำปรึกษา	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การแบ่งปันผลประโยชน์/การขยายโอกาสและสิทธิ์ในด้านความรู้ต่าง ๆ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ความร่วมมือด้านการวิจัยและความร่วมมือกับผู้มีส่วนได้ส่วนเสียอื่น ๆ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
อื่น ๆ โปรดระบุ			

**Question 20:**

**ถ้าหากบริษัทหรือธุรกิจตัดสินใจที่จะไม่ร่วมมือกับภาครัฐหรือภาคเอกชน อะไรคือเหตุผลที่สามารถอธิบายการตัดสินใจของบริษัทท่านได้ดีที่สุด (สามารถเลือกได้มากกว่าหนึ่งข้อ)**

- |   |   |
|---|---|
| <input type="checkbox"/> โครงการเหล่านี้ไม่เกี่ยวข้องกับยุทธศาสตร์หลักขององค์กรหรือบริษัท | <input type="checkbox"/> บริษัทหรือองค์กรของเราไม่มีการช่วยเหลือด้านนี้             |
| <input type="checkbox"/> ค่าใช้จ่ายอาจสูงเกินไปกับบริษัท                                  | <input type="checkbox"/> ความร่วมมือประเภทนี้ไม่ก่อให้เกิดผลประโยชน์ต่อบริษัท       |
| <input type="checkbox"/> รัฐบาลมีการทุจริตและเป็นคู่ร่วมงานที่ไม่น่าเชื่อถือ              | <input type="checkbox"/> บริษัทหรือองค์กรของเราไม่มีความสามารถที่จะร่วมมือกับภาครัฐ |
| <input type="checkbox"/> อื่น ๆ โปรดระบุ  |   |

**Question 21:**

**ถ้าหากมีความร่วมมือกับภาครัฐหรือภาคเอกชนอื่น ๆ ท่านคิดว่าโครงการสิ่งแวดล้อมประเภทใดที่บริษัทหรือองค์กรของท่านมีความสนใจ ?**

	สนใจ	ไม่สนใจ	ไม่แน่ใจ/ไม่ชัดเจน
ระบบนิเวศการเกษตร	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ระบบนิเวศแห้งแล้งกึ่งชื้น	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ระบบนิเวศป่าไม้	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ระบบนิเวศน้ำผิวดิน (เช่น ทะเลสาบ แม่น้ำ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ระบบนิเวศหมู่เกาะ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ระบบนิเวศทางทะเลและพื้นที่ชายฝั่ง	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การอนุรักษ์และการใช้ทรัพยากรอย่างยั่งยืน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
พื้นที่คุ้มครอง (เช่น อุทยานแห่งชาติ )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ความหลากหลายทางชีวภาพและการท่องเที่ยว	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การสื่อสาร การศึกษา และ สำนักสาธารณะ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การบริหารที่เกี่ยวข้องกับ อนุสัญญาว่าด้วยความหลากหลายทางชีวภาพ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การประเมินผลกระทบ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
กลไกทางการเงิน	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การซื้อขายคาร์บอน และ การลดการปล่อยก๊าซ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การวิจัยพันธุ์ศาสตร์และ ไบโอเทคโนโลยี	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
เชื้อเพลิงชีวภาพ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ทรัพย์สินทางปัญญา	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
สิ่งแวดล้อมและสิทธิของคนในพื้นที่ที่จะใช้ทรัพยากร	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
การเปลี่ยนแปลงสภาพภูมิอากาศและความหลากหลายทางชีวภาพ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 22:

**กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อมหรือสำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อมได้เคยติดต่อมายังบริษัทหรือองค์กรของท่านหรือไม่ ?**

- ใช่
- ไม่ใช่
- ไม่แน่ใจ

Question 23:

**ถ้าสถาบันการศึกษา เช่น มหาวิทยาลัย มีส่วนเกี่ยวข้องกับความร่วมมือในโครงการต่าง ๆ ด้วยความร่วมมือเหล่านี้จะมีผลต่อความต้องการของบริษัทของท่านที่จะสนับสนุน โครงการความร่วมมือด้านสิ่งแวดล้อมหรือไม่ ?**

- ใช่ มีแนวโน้มที่จะสนับสนุนมากขึ้น
- ไม่เกี่ยวข้อง ความร่วมมือเหล่านี้ไม่เปลี่ยนแปลงความเป็นไปได้ของบริษัทที่จะสนับสนุนความร่วมมือเหล่านี้
- มีแนวโน้มที่จะสนับสนุนลดลงหากสถาบันการศึกษามีส่วนเกี่ยวข้อง

Question 24:

**ถ้าหากมีการจัด สัมมนาหรือ ทำ workshop เกี่ยวกับ "ธุรกิจกับความหลากหลายทางชีวภาพ" ขึ้นในกรุงเทพมหานครบริษัทหรือองค์กรของท่านจะสนใจเข้าร่วมสัมมนาครั้งนี้หรือไม่ ?**

- สนใจมาก
- สนใจ
- ค่อนข้างสนใจ
- ไม่สนใจเลย

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

## APPENDIX C

### SURVEY RESPONSES

The following is a compilation of all received survey responses. The responses are listed in the order of the survey questions and are aggregated to show all responses (i.e., responses from both the Thai language survey and English language survey are included herein).

Question 1:

Please indicate your position / title within your organization:			
Answer Options	Response Percent	Eligible Response Count	Responses from Ineligible Groups (NGOs, Academia, Public Sector)
Owner/CEO/President	19.4%	7	1
VP/Director/Other executive management	30.6%	11	2
Middle management	16.7%	6	
Consultant	8.3%	3	1
Permanent staff	22.2%	8	1
Temporary staff	0.0%	0	
Other (please specify)	5.6%	2	3
<b>answered question</b>		<b>36</b>	<b>8</b>
<b>skipped question</b>		<b>0</b>	<b>0</b>

[Written responses for Question 1]:

ID	Other (please specify)	
E1	student	Ineligible
E2	student	Ineligible
E3	i work at winners	
E4	student	Ineligible
E5	Sustainable Development Coordinator	



## Question 2:

<b>What is the scope of your company / organization? (Select one):</b>			
<b>Answer Options</b>	<b>Response Percent</b>	<b>Eligible Response Count</b>	<b>Responses from Ineligible Groups (NGOs, Academia, Public Sector)</b>
Local or community	19.4%	7	1
National	16.7%	6	3
Regional	16.7%	6	4
International / Global	47.2%	17	0
<b>answered question</b>		<b>36</b>	<b>8</b>
<b>skipped question</b>		<b>0</b>	

## Question 3a:

<b>Is your company / organization part of the government, private sector (business), academic institution or non-profit group? (Select the one which best describes your company):</b>			
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>	
Government / state-owned	2.3%	1	Ineligible
Private Sector / business	81.8%	36	
Academic institution or research institute	9.1%	4	Ineligible
Non-profit organization	6.8%	3	Ineligible
<b>answered question</b>		<b>44</b>	
<b>skipped question</b>		<b>0</b>	

\* 36 eligible private sector participants; 8 ineligible from other groups

## Question 3b:

<b>How many employees does your company / organization have?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
1 - 10	13.9%	5
11 - 100	25.0%	9
101 - 500	27.8%	10
501 - 1,000	13.9%	5
1,001 - 5,000	11.1%	4
More than 5,000	8.3%	3
Not sure	0.0%	0
<b>answered question</b>		<b>36</b>
<b>skipped question</b>		<b>0</b>

Question 4:

<b>What type of industry best describes your company / organization (Select one):</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Banking / Finance	11.1%	4
Mining / Cement / Paper	2.8%	1
Electricity / Oil / Power	13.9%	5
Legal / Consulting / Advisory services	16.7%	6
Food / Beverage	5.6%	2
Healthcare	2.8%	1
Retail sales	8.3%	3
Agricultural / farming / grocery	2.8%	1
Hotel / Hospitality	8.3%	3
Manufacturing	8.3%	3
Other (please specify)	19.4%	7
<b>answered question</b>		<b>36</b>
<b>skipped question</b>		<b>0</b>

[Written responses for Question 4]:

<b>ID</b>	<b>Other (please specify)</b>
<b>T1</b>	การเย็บผ้า (Garment)
<b>T2</b>	เครื่องมือแพทย์ (Medical Device)
<b>T4</b>	วิจัย ฝึกอบรม (Research training)
<b>T5</b>	Architectural Design & Real Estate Development Consultant
<b>E7</b>	Diverse Businesses
<b>E8</b>	Production
<b>E9</b>	Publishing

Question 5:

<b>Where is your company's headquarters or parent company located?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
In Thailand	51.4%	18
Outside of Thailand	48.6%	17
<b>answered question</b>		<b>35</b>
<b>skipped question</b>		<b>1</b>

Question 6:

<b>Please identify which of the following standards and reporting mechanisms your company / organization has adopted (Select all that apply):</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>

ISO 14001	25.7%	9
GRI (Global Reporting Initiative)	0.0%	0
UN Global Compact	8.6%	3
SA8000	8.6%	3
AA1000	0.0%	0
ISAE 3000	0.0%	0
ISO9000	8.6%	3
ISO9001	14.3%	5
ISO14061 (Carbon footprint & offsetting)	2.9%	1
I do not know which standards or certifications my company has adopted.	34.3%	12
None	5.7%	2

Other (please specify)	45.7%	16
<b>answered question</b>		<b>35</b>
<b>skipped question</b>		<b>1</b>

[Written responses for Question 6]:

ID	Other (please specify)
E1	none
E2	Just Good Business Practises, but not specific to an ISO, although I am a qualified Auditor for ISO 9002
E3	ISO 14061 (carbon footprinting and offsetting), no general CSR reporting
E4	ISO9000, ISO TS16949
E5	BSCI
E6	Green Globe Certification
E7	ISO 9001, Accor environment standards and Green Globe (earthcheck)
E8	ISO 9001, Various internal company developed measurement systems reported globally
T1	TLS8001
T2	ISO9001
T3	ISO 9001
T4	ระบบ ISO9000 VERSION 2000
T5	GMP/HACCP
T6	ISO TS 16949, ISO9000
T7	Do not need
	9001
T8	18001

Question 7:

<b>Does your company / organization have a recycling program? (Select one):</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>

Yes	60.0%	21
No	22.9%	8
Not sure	17.1%	6
<b>answered question</b>		<b>35</b>
<b>skipped question</b>		<b>1</b>

Question 8 (only for the 21 who answered “Yes” to Question 7):

<b>Please indicate which materials your company recycles [Check all that apply]:</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Paper	95.2%	20
Plastic	33.3%	7
Electronic equipment	33.3%	7
Used printer cartridges	38.1%	8
Not sure	4.8%	1
<b>answered question</b>		<b>21</b>
<b>skipped question</b>		<b>15</b>

Question 9:

<b>Have you heard of the United Nations Convention on Biological Diversity (CBD)?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes	35.3%	12
No	64.7%	22
<b>answered question</b>		<b>34</b>
<b>skipped question</b>		<b>2</b>

Question 10 (only for the 12 who answered “Yes” to Question 9):

<b>To the best of your ability, please identify the three main objectives of the Convention on Biological Diversity (CBD) by selecting three of the items below:</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Educating people about biological diversity	18.2%	2
The conservation of biological diversity	72.7%	8
Using biological diversity in a sustainable way	63.6%	7
Combating climate change	27.3%	3
Sharing the benefits of biological diversity fairly and equally	45.5%	5
Providing a legal framework for biological diversity	9.1%	1
Increasing the diversity in Nature	9.1%	1
I don't know what the main objectives are.	0.0%	0
<b>answered question</b>		<b>11</b>
<b>skipped question</b>		<b>25</b>

## Question 11:

<b>On a scale from 1 to 10, please rank your level of familiarity with the term "biodiversity" (10 being "Most Familiar" and 1 being "Not Familiar"):</b>		
<b>Answer Options</b>	<b>Response</b>	<b>Response Percent</b>
<b>1 (Not Familiar)</b>	7	22%
<b>2</b>	2	6%
<b>3</b>	3	9%
<b>4</b>	2	6%
<b>5</b>	4	13%
<b>6</b>	3	9%
<b>7</b>	5	16%
<b>8</b>	4	13%
<b>9</b>	2	6%
<b>10 (Most Familiar / Expert)</b>	0	0%
<b>Response Count</b>	32	
<b>Skipped Question</b>	4	
<b>Rating Average</b>		4.72

## Question 12:

<b>How often do environmental issues get discussed in the context of your company's daily operations and business model? Select one number from 1 to 10:</b>		
<b>Answer Options</b>	<b>Response</b>	<b>Response Percent</b>
<b>1 (Never)</b>	3	9%
<b>2</b>	1	3%
<b>3 (Not Often)</b>	4	13%
<b>4</b>	1	3%
<b>5 (Sometimes)</b>	9	28%
<b>6</b>	1	3%
<b>7 (Often)</b>	7	22%

<b>8</b>	2	6%
<b>9</b>	1	3%
<b>10 (Everyday)</b>	3	9%
<b>Response Count</b>	32	
<b>Skipped Question</b>	4	
<b>Rating Average</b>	5.5	

Question 13:

<b>Is your company / organization involved in any environmental outreach projects?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes	65.6%	21
No	28.1%	9
Not Sure	6.3%	2
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>4</b>

Question 14a (only for the 23 who answered “Yes” or “Not Sure” to Question 13):

<b>What types of environmental outreach projects is your company / organization involved in? [Select all that apply]:</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Ecosystem restoration (i.e., Reforestation / tree planting)	47.8%	11
Agricultural	13.0%	3
Marine / Coastal / Water-related	21.7%	5
Conservation-related	34.8%	8
Plant genetic research / technology	4.3%	1
Financial support or donations in support of environmental programs or agencies	43.5%	10
Environmental impact (i.e., shrinking the energy usage / company footprint)	69.6%	16
Climate change and biodiversity	21.7%	5
Other (please specify)	26.1%	6
<b>answered question</b>		<b>23</b>
<b>skipped question</b>		<b>13</b>

[Written, “Other” responses for Question 14a]:

Number	Other (please specify)
E1	permaculture demonstration property in Pak Chong
E2	Create and support environmental education programs in local schools
E3	Social improvement - development of facilities for local schools, temples, orphanages etc.
T1	ผลกระทบต่อสิ่งแวดล้อม เช่น การ re-used and recycle เศษไม้ที่เหลือจากการผลิต [Environmental impacts such as reused / recycled wood after production]
T2	Green Architecture-Environmental and Clean Energy from the waste recycling: Water & Garbages etc.
T3	การศึกษา [Education]

Question 14b (only for the 9 who answered “No” to Question 13):

Please choose the reason(s) which best explain why environment-related activities are not a main priority of your company (choose all that apply):		
Answer Options	Response Percent	Response Count
Environmental issues are not related to our company's strategic objectives	11.1%	1
Our company's environmental impact is minimal	55.6%	5
Social issues like poverty and the creation of jobs are more urgent issues than the environment	33.3%	3
Taking care of the environment is the job of the government, not for business or the private sector	0.0%	0
I am not sure	11.1%	1
I want to skip this question	0.0%	0
Other (please specify)	11.1%	1
	<b>answered question</b>	<b>9</b>
	<b>skipped question</b>	<b>27</b>

[Written, “other” response for Question 14b]:

ID	Other (please specify)
T2	ให้ความสำคัญ แต่ไม่ใช่ภารกิจหลัก เนื่องจากองค์กรให้ความสำคัญกับประเด็นทางสังคมเป็นหลัก [It is a focus but not the main reason, because the company focuses on social issues]

Question 15:

Does your company / organization have a corporate social responsibility (CSR) program?		
Answer Options	Response Percent	Response Count
Yes	71.9%	23
No	18.8%	6
Not sure	9.4%	3
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>4</b>

Question 16 (only for the 23 who answered "Yes" to Question 15):

What are the priorities of your company's CSR program [Please select a maximum of two responses]:		
Answer Options	%	Response Count
Sustainable development	56%	10
Education and job skills training for local people	50%	9
Environmental enhancement, improvement or restoration / Agriculture / Conservation	44%	8
Poverty reduction	22%	4
Preservation of local culture / historical sites	6%	1
Not sure	6%	1
Community infrastructure improvement	0%	0
Other (please specify)	11%	2
<b>answered question</b>		<b>18</b>
<b>skipped question</b>		<b>13</b>
<b>Disqualified for not following instructions</b>		<b>5</b>

[Written, "other" response for Question 16]:

ID	Other (please specify)
E1	Emphasis on reducing ecological footprint and community well-being
E2	Educating everyone on the need for sustainability

Question 17:

In your company / organization, approximately what percentage of outreach programming is social and what percentage is environmental?		
Answer Options	Response	Response Percent
100% social	2	6%
75% social / 25% environmental	9	28%
50% social / 50% environmental	15	47%
25% social / 75% environmental	2	6%



<b>100% environmental</b>	2	6%
<b>Not sure</b>	2	6%
<b>Response Count</b>	32	
<b>Skipped Question</b>	4	

Question 18a:

<b>Would your company /organization be interested in partnering with the Thai government on projects related to biodiversity or environmental management?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Combined Responses</b>
Yes	31.3%	10
No	18.8%	6
Maybe	37.5%	12
Not sure	12.5%	4
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>4</b>

Question 18b (only for 12 who answered “Maybe” to Question 18a):

<b>You identified that your company / organization ‘may be’ interested in partnerships related to environmental projects. For each of the following conditions, identify the importance of each condition in order for your company / organization to participate in the partnership [Check the relevant box]:</b>					
<b>Answer Options</b>	<b>Absolutely necessary</b>	<b>Highly Important</b>	<b>Preferable but not necessary</b>	<b>Not a factor / Irrelevant</b>	<b>Response Count</b>
Our company should have the right to publicize the partnership	5	3	2	0	8
The partnership should have a strategic benefit for our company	4	2	3	1	8
The outcomes of the partnership should be tangible and apparent	3	5	2	0	8
Our company should receive adequate recognition for our contributions	3	3	3	1	8
The project should have an acceptable budget (cost minimization)	2	7	1	0	8

Our company should do the planning and design	2	1	4	3	8
There should be other businesses involved in the partnership besides our company	2	1	2	5	8
The project should generate a profit for our company	1	1	3	5	8
Other (please specify)					1
<b>answered question</b>					<b>10</b>
<b>skipped question</b>					<b>2</b>

[Written, "other" response for Question 18b]:

ID	Other (please specify)
E1	We have our own program and the government could come to support this program

Question 19:

<b>Suppose that your company / organization were involved in a partnership or cooperative program for environmental management, conservation or related project. Given the capabilities of your company / organization, please identify the types of support your company / organization would most likely provide: [Check one category for each type of support]</b>				
<b>Answer Options</b>	<b>Very Likely or Certain</b>	<b>Possible</b>	<b>Not Likely / Not possible</b>	<b>Response Count</b>
Financial Assistance / Funding	3	14	7	24
Technology Transfer / Material Support	4	13	7	24
Management Consulting / Advisory Services	5	14	6	25
Training of Staff / Personnel	7	11	7	25
Benefit Sharing / Extension of Patent Rights or Knowledge	3	12	9	24
Research collaboration / cooperation with other stakeholders	5	12	8	25
Other (please specify)				0
<b>answered question</b>				<b>27</b>
<b>skipped question</b>				<b>9</b>

## Question 20:

If your company/business decided NOT to partner with the government or public sector, which of the following reasons best explain your company's reasoning? [Check all that apply]:		
Answer Options	Response Percent	Response Count
This kind of project is not related to our business strategy or core objectives	35.7%	10
The cost to the company would be too high	46.4%	13
The government is corrupt and not a trustworthy partner	25.0%	7
Our company has nothing to offer to this kind of partnership	14.3%	4
There is no benefit to the company in doing this kind of partnership	10.7%	3
Our company does not have the capacity to partner with the government	10.7%	3
Other (please specify)	14.3%	4
<b>answered question</b>		<b>28</b>
<b>skipped question</b>		<b>8</b>

[Written, "other" response for Question 20]:

ID	Other (please specify)
T1	ต้องดูความตั้งใจของผู้ที่จะเข้ามาให้ความช่วยเหลือว่าจะสามารถต่อยอดให้กับชุมชนได้ ไม่ใช่ทำให้กับบริษัทเพียงอย่างเดียวและไม่ถ่ายทอดให้กับองค์กรปกครองท้องถิ่น หรือเป็นเพียงงานวิจัยเพื่อเสนอผลงาน แต่ไม่มีการต่อยอดอย่างเป็นระบบ [To really see the intention of those who will join a partnership that will extend help to the community. Not make only the company succeed or transfer to a local government organization or a research proposal presentation. However, no extension in a systematic way.]

## Question 21:

If joining a partnership with the government or with another business partner, which types of environmental projects would your company be interested in?				
Answer Options	Interested	Not Interested	Not Sure / Not Clear	Response Count
Communication, Education and Public Awareness	17	5	3	25
Conservation and Sustainable Use	15	5	5	25
Climate change and biodiversity	14	9	2	25
Biofuels	12	7	5	24

Forest biodiversity	12	9	4	25
Carbon Trading / Emissions Reduction	11	8	6	25
Marine and coastal ecosystems	10	9	5	24
Protected Areas (i.e., National Parks)	9	7	8	24
Inland Waters (i.e., lakes, rivers)	9	8	7	24
Agricultural biodiversity	9	8	8	25
Financial Mechanisms	9	9	6	24
Impact Assessments	8	6	10	24
Intellectual Property Rights	8	12	4	24
Environment and local people's rights to use	7	9	9	25
Dry and Sub-humid lands biodiversity	3	11	10	24
Biodiversity and Tourism Issues	6	11	8	25
Islands	5	11	8	24
Genetic Research / Biotechnology	5	12	7	24
Administrative issues related to the CBD	2	7	15	24
<b>answered question</b>				<b>28</b>
<b>skipped question</b>				<b>8</b>

## Question 22:

<b>Has the Ministry of Natural Resources and Environment (MONRE) or the Office of Natural Resources and Environmental Policy and Planning ever contacted your company / organization?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes	0.0%	0
No	61.1%	14
Not sure	38.9%	14
<b>answered question</b>		<b>28</b>
<b>skipped question</b>		<b>8</b>

## Question 23:

<b>If academic institutions such as universities were also involved in the partnership, would that have an effect on your company's desire to support cooperative environmental programs?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes, more likely to support	50.0%	14
Irrelevant. Does not change the likelihood of our company supporting the partnership	35.7%	10
Less likely to support if academic institutions are involved	14.3%	4
<b><i>answered question</i></b>		<b>28</b>
<b><i>skipped question</i></b>		<b>8</b>

## Question 24:

<b>If a seminar or workshop about business and biodiversity were held in Bangkok, would your company / organization be interested in attending?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Very Interested	10.7%	3
Interested	28.6%	8
Slightly interested	32.1%	9
Not interested	28.6%	8
<b><i>answered question</i></b>		<b>28</b>
<b><i>skipped question</i></b>		<b>8</b>

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

## BIOGRAPHY

**Name** First: Walker  
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**Education** School: Columbia University  
Location: New York City, New York, USA  
Degree: Bachelor of Science (B.Sc.)  
Major: Engineering and Management Systems  
Year: 2005

School: Columbia University  
Location: New York City, New York, USA  
Degree: Bachelor of Arts (B.A.)  
Major: Pre-engineering  
Year: 2004

**Work Experience** Position: Regional Monitoring & Evaluation Coordinator  
Employer: WWF Greater Mekong Programme  
Date: May 2010 – May 2011  
Location: Hanoi, Vietnam

Position: Freelance Editor  
Employer: Self  
Date: November 2009 – April 2010  
Location: Bangkok, Thailand

Position: Teaching Assistant  
Employer: Chulalongkorn University  
Date: June 2009 – February 2010  
Location: Bangkok, Thailand

Position: Senior Strategic Marketing Analyst  
Employer: Qualcomm International (Hong Kong)  
Date: September 2007 – July 2008  
Location: Hong Kong

Position: Senior Project Analyst  
Employer: Qualcomm Incorporated  
Date: August 2005 – September 2007  
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