

Lessons Learnt of Thai Women Environmental Leaders

Sittipong Dilokwanich, Suvanee Kaewsawang, Suttirat Savatdipap, Jarinee Iochawna
and Srisuphang Limganjanawat

Faculty of Environment and Resource Studies, Mahidol University, NakhonPathom 73170, Thailand

Abstract

During the past few decades, Thai women have learned how to extent their roles from a care taker of children and a household to natural resources and environmental protection and management in local and inter-regional communities. Due to the application of National Economic and Social Development Plans, rapid resource exploitation has brought in natural resource and environmental degradation all over the country threatening communal security. For this reason, there have been a number of emerging environmental leaders who want to correct directions of national development, especially Thai woman environmental leaders who are taking a successful role of environmental guardian in their communities. This research attempts to explore why they took leadership role in environment, how they work so successful as an environmental guardian, and what their next move is. During early 2013 till mid-2014, there are 28 Thai woman leaders who received the award of Thai Environmental Conservation Mother from the Faculty of Environment and Resource Studies, Mahidol University between 2004 and 2012. They were in-depth interviewed and collected data were preceded by content analysis.

Their lessons learnt show that most leaders saved their communities' environment and natural resources from the intervention of new development activities. Most of them had their parents as a good role model in environmental management who provide knowledge of morals and environmental ethics as a good basic of leadership while some shared their husband's responsibility in the same matter. Significantly, teamwork is their working style with the assistance of public participation to hold teamwork and collaboration of the community. Almost all leaders had systematic working with talents of patience, gentleness and sensitivity. The working network also broadens their new information and knowledge between practitioners. In the same time, more than half of the leaders can prepare their successors from the younger generation who can continue environmental conservation of the community, while the rest cannot do it. This situation pushes some leaders find alternative succession process.

Keywords: Thai women; environmental leaders; lessons learnt

1. Introduction

Since the late 1950s, the Royal Thai Government with the suggestion of the International Monetary Fund (IMF) and the World Bank (WB) has employed the National Economic and Social Development Plans to boost Thai economy in order to raise quality of life of Thai people. However, these plans have let capitalism in forms of modernization, industrialization and tourism influence local people in all regions deteriorating local traditions and awareness about valued relationship between human and its environment. As a result, resource exploitation for profit making has dominated Thai people's perception which results in rapid environmental degradation and pollution which threaten quality of life, especially self-reliance (Office of National Economic and Social Development Board, 2001; 2011; Silliman, 1999).

However, resistance of new developments from local communities has been seen around the country. Some locals have confronted these influences by taking

leader's role which bring local followers to question, learn and solve problems of social and economic securities. Remarkably, more women have taken such role in Thai society, especially the ones who won the award of Thai Environmental Conservation Mother¹. This research attempts to explore why they took leadership role in environment, when and how they

¹Since 2004, Faculty of Environment and Resource Studies, Mahidol University has annually offered the award of Environmental Conservation Mother to Thai women leaders in four regions (north, northeast, central, and southern regions) who remarkably protect and manage their environment and natural resources as well as raise their children's environmental awareness. In summary, the range of leaders' main goals are: conservation of community forest, upstream forest, and mangrove forest, water resource conservation of lake and watershed, wetland management, community rights of land resource management, coastal resource conservation, community wastewater treatment, urban environmental management, and environmental education.

gained environmental awareness linking to environmental ethics and justice, and how they have had a good success as an environmental guardian. Therefore, the researchers do not want to make a comparative study of Thai women leaders with other leaders in different countries about performance or effectiveness.

2. Research Methods and Tools

For data collection of this research, the researchers conducted in-depth interviews with all respondents who received the award of Thai Environmental Conservation Mother from the Faculty of Environment and Resource Studies, Mahidol University between 2004 and 2012. Total numbers of the award holder are 32, but only 4 winners cannot be interviewed due to health problems and political insecurity in the local areas. Therefore, there are 10 winners in the northern, 10 in the central, 4 in the northeastern, and 4 in the southern regions. During early 2013 till mid-2014, the researchers asked permission to interview all 28 respondents by taking notes and recording audio-visual. Moreover, we visited the respondents' working sites such as community forest, coastal area, and learning center. After completing data collection, the researchers made content analysis by grouping main and minor issues. Cross-tabulation of all issues is made for better interpretation (Kumar, 2011; Wellington and Szczerbinski, 2007).

3. Results and Discussion

3.1. National economic and social development and environmental changes

For more than 50 years after the Royal Thai Government has applied the National Economic and Social Development Plans, most Thai people in rural areas have to trade-off between their abundant natural resources and new options of development in modern agriculture, manufacturing industry, mass tourism, and urban expansion affected by new housing developments and further infrastructure preparation in order to gain more national income and to raise quality of life (Office of National Economic and Social Development Board, 2001; Neher, 1994; Tanabe, 1994). Since the Fifth National Development Plan (1984-1987), there was a decentralization policy of modernization to other regions of the country. Clearly, the more decentralization of new investment outside Greater Bangkok supported by the central government, private sectors, and multi-national enterprises, the higher rate of environmental deterioration distributes to communities and remote areas all over the country, especially in forms of deforestation, soil erosion, soil salinity, flood,

drought, water and air pollution, loss of biodiversity, etc. When any area of investment has less resource and more pollution, the investors or entrepreneurs will relocate their activities to new rich natural resources, cheap labor cost, lax environmental regulations, and less environmental and social conflicts (Office of National Economic and Social Development Board, 1991; 2011; Dent, 2004; Panayotou and Sussengkarn, 1992; Suehiro, 1989; Hewison, 1989).

Although the Seventh National Economic and Social Development Plan (1992-1996) initially encourages sustainable development following the Declaration of Sustainable Development in Rio de Janeiro in 1992, environmental problems and income gaps between the rich and the poor in Thailand has never decreased. This situation reflects different understanding of individuals and organizations affecting mixed environmental managements (Office of National Economic and Social Development Board, 2001; Harvey, 1996). For this reason, most investors will relocate their activities to somewhere else, whenever their old area becomes useless for further production. Even the new infrastructure development projects belonged to the public sector such as road or highway construction and reservoir building cause social and environmental impacts. These actions are doubtlessly distributing pollutions or environmental problems in all regions causing social unrest in many communities.

Obviously, whenever social unrest happens in any country, it usually generates some change agents or new environmental leaders who attempt to investigate new development projects of the outsiders about how to raise economic and social status of local people. For Thailand case, these leaders can be either male or female in any age group at the early stage of environmental movement. Nevertheless, when such movement has happened for longer time than anyone can expect, female change agents will apparently take a leadership role due to their endurance, care of other people, and well-behaved manner.

3.2. Emergence of environmental awareness

Many reports of the United Nations or paper works of several international organizations about women leaders in environment generally show the effectiveness of their performance, their working problems, and gender equality to men (Dankelman and Davidson, 1988; UNEP and WorldWIDE Network, 1992). Apparently, no one explores how these people get involved in environmental movement and what the main cause of their interest or the inspiration is. When we further notice all women environmental leaders are working hard for their communities or transferring

usable knowledge for other people, it is curious that when and how environmental awareness did happen in each leader? Possibly, it may be from the family's up-bringing, local tradition and culture, or other related causes. In addition, does this awareness reflect value in term of ecological or environmental and financial securities (Harvey, 1996).

From the in-depth interview with 28 women environmental leaders, it was found that local tradition and culture was not the inspiration of environmental awareness because most development flows generated by public and private investors dominate local culture and devalue local wisdom in daily living. Moreover, these flows affect the former relationship between human and its environment or their environmental ethics, for example less respect of guardian spirits of the rice field, the river, and the forest. Most local people have paid more attention to new technology of high-yield production (green revolution) or of natural resource exploitation for poverty alleviation (Tanabe, 1994; Curry, 2011).

Remarkably, there are two main periods of environmental awareness raising of these leaders: during their childhood and the establishment of their own family. When they were young, about 66.7 per cent of them noticed their parents were taking care of natural resources and environment while they were helping them in household and farming activities. With deeper observation, their parents with other neighbors always kept maintaining natural resources of the community in healthy condition for the long-term uses. In some cases, grandparents also taught them how to conserve the environment. Therefore, the emerging awareness during the childhood has encouraged their leadership in environmental protection and conservation of the community.

About 33.3 per cent of total leaders gained the environmental awareness when they had their own family because they had to lessen husbands' workloads in environmental management. This assistance gradually inspires the wife's affection and worship of natural resource and environment. Some gained an inspiration from site visit in other places so that they wanted to follow the same success for their own community. Some others had to raise their children with high dependence of natural resources in community forest, rice field, river, or coastal area nearby the village. And some just focused on environmental justice as to help other people who hardly access to their own natural resources.

All the above responses reflect daily tasks for their family survival, household care, and income earning (Dankelman and Davidson, 1988). However, different emerging time of environmental awareness in all

woman environmental leaders could not show clearly their strong or weak commitment of environmental responsibility due to the dependence degree of three different tasks and the diverse understanding about environmental ethics and justice of each person, especially interrelationship between human and natural resources with the concern of resource access and sharing or distribution. Clear understanding of environmental ethics and justice not only brings in good working targets and procedures but also indicates how we should best live, act and the kind of persons we should be as a leader and a follower in the community (DesJardins, 2013; Curry, 2011).

3.3. *Environmental ethics and justice*

As mentioned, each environmental leader has different experience of collective awareness since their childhood or marriage reflecting dissimilar environmental ethics and justice as well as environmental management in their communities. Although the meanings of environmental ethics and environmental justice are almost the same to their senses, more than half of them or 57.1 per cent thought for 'environmental ethics' that "human is a small component in environmental system but it can cause high impacts so that we have to be cautious to live with all living and non-living things with high respect and care in order to maintain the whole system. Therefore, if we have good environment, it can generate good human." This view shows a combination of eco-centric and anthropocentric senses as well as value-judgments of human and the environment (Curry, 2011). In addition, 35.7 per cent of total numbers give importance of professional ethics or self-responsibility of their activities by being honest to their duties and a good role model to other people.

For environmental justice, most leaders thought that it is a part or a sub-set of environmental ethics and it is the fair distribution of rights in natural resource access and utility for good environmental management. This understanding is similar to social justice in term of equal benefit taking of all individuals (DesJardins, 2013; Harvey, 1996). Around 42.9 per cent of total leaders emphasized that nature supports human basic needs so that we should not compete with each other for more usage; but we have to take care of its abundant resources so as to be benefit to the next generation. Clearly, this idea agrees upon wise uses in the sense of conservation and sustainable development. Furthermore, about 14.3 per cent thought that we have to minimum use of resources. If there is some left over, we can share it to all community members proportionally or to less fortunate people. Whereas 17.9 per cent of the total expressed that the community

must fairly manage their natural resource and environment and employ laws and regulations equitably, about 14.3 per cent emphasized that everyone completes his responsibility correctly by being a good example for others. It is undeniable that most leaders are not guilty to claim justice as a tool of resource exploitation for themselves as human being, not for other creatures (living and non-living things) to sustain (Gardner, 1978).

Both terms of environmental ethics and environmental justice definitely influence the leadership of woman environmental spearheads. If their understanding of these terms is correct, it will be helpful for them to establish rational goals of communal environmental protection and management. In addition, they do not only complete daily tasks for survival, household care, and income earning of their families, but also raise quality of life of the whole community to where they belong.

3.4. Trait and style of leadership and working slogan

Before focusing on leadership trait and style of Thai women who are working in environment, there are some reasons which push and pull them to take a role of leader. From the field survey, there were 8 cases or about 28.5 per cent who were so distressed when the capitalists from outside community or some greedy local people attempted to take benefit from the communal resources through various development projects so that the leaders have to fight back for the fairness of their people. Other reasons are: 1) their inheritance of their parents' conservation practices (14.3 per cent); 2) their collective experiences from site visits and workshops in overseas or other provinces (10.7 per cent); and 3) local people acceptance of their high working capability (7.1 per cent); and others (39.4 per cent).

These inputs have formed properties or traits of leadership as Prawet Vasi (2014) pointed out that a good local leader has at least 5 characteristics: 1) altruism, 2) honesty, 3) intelligence, 4) communication skill, and 5) being acceptable. From the in-depth interview, there is no doubt that altruism and honesty are the most important issues in all leaders' mind of sincere working and helping for other people before themselves. They are all aware of well-practice under moral such as no threat or harm of other people, no corruption, no lie, no sexual seduction, and no addiction of alcohol and gamble. Remarkably, most of them or 39.3 per cent of the total leaders will try their best at this moment with careful working steps to achieve goals set for the public, while another 39.3 per cent walk the talk or keep their promises to protect and better manage

environment and resources with fearlessness to challenge the offenders. In addition, about 10.7 per cent just enjoy whatever task which benefit to the public without priority setting of goal or achievement. After accomplishing their goals, these three groups of public interest will work for further area of mutual interest with the community such as knowledge transfer and social security. However, another 10.7 per cent want to maintain their initial responsibility without expansion to new interests. Therefore, most leaders work in foreground as a negotiator or mediator who can make a bargaining power with stronger challengers, while some leaders who has less communication skill will work as a tough supporter for colleagues.

Working style of these leaders definitely is teamwork. No one is working alone for herself and others so that every leader differently get involved in stakeholders who are living in the community and its surrounding areas as well as concerned departments from local or central government. Public participation, however, is a key tool of the working group in order to hold teamwork and collaboration of the community. Interestingly, the setup working groups are diverse depending on the leader's capacity. Around 57.1 per cent of the total establishes their working group by themselves as an informal group, a club, or a foundation. Within this figure, 32.1 per cent work or do activities based on reliable data and information from their own researches and consultation with advisors, specialists, or working networks, while the rest are working based on their past experience. Clearly, 21.4 per cent of the total leaders set up their working group with the assistance of their husband or colleagues. Within this figure, 14.3 per cent utilize data and information from their own researches or suggestion from advisors, specialists, or networks. The rest of the leaders, about 28.5 per cent, work with the existing clubs or former working groups in the community. Obviously, they work in low profile as a strong supporter or a back-up person of the team.

More interestingly, when the researchers asked the women leaders about the different working style between men and women, they thought that they have more advantages than men in systematic working together with incorporated details and talents of patience, gentleness and sensitivity to gain effective dialogue between individuals and groups within community and between several communities, for examples as expressed:

"... I think women have higher responsibility than men. We work on time. We do not addict to tobacco, alcohol or flirtation as to damage our efficiency. Further, we have a better information filing system ..." (a leader from Amphoe Yan Ta Khao,

Trang province, pers.comm., April 2014)

"... Women work better than men in the forefront because we can calm down possible conflicts. The opposition especially who are men dare not harm women ..." (a leader from Amphoe Ratsada, Trang province, pers.comm., April 2014)

The above expressions show strength of the bargaining power with the challengers. However, this property has to go together with moral practice for well-behaved manners such as responsible, honest, sincere, friendly, and respectable. Thus, the environmental leader will gain back of good feedbacks of collaboration and understanding from the publics and the working networks.

When asking about the working slogan for their success, more than half of the leaders (56.0 per cent) expressed 'Be determined and responsible' or 'Do good things for the public today'. About 20.0 per cent have similar slogans as 'To be honest to yourself and others without taking advantage for yourself', 'Share your surplus to anyone who has less', 'Maintain your morals and ethics as long as you can', and 'Have bravery and fight for the right things with patient, comprehension, and fairness to others'. Certainly, these slogans reflect their unique traits and styles that most men hardly fill a gap in leadership such as collaboration, interaction, cooperation, non-bureaucratic, personal contacts, encouragement, participation, sensitivity, and communality (Carli and Eagly, 2007; Pittinsky *et al.*, 2007). However, these characteristics clearly interfere the balance between soft and hard sides of the women especially tenderness, compassion, determination, and fearlessness as well as time management for their own family and the public so that any leader who can maintain such balance and well combine internal values and external expressions would become as Roberts (2007) identified them as an authentic leader.

3.5. *Goal accomplishment and continuing success*

Certainly, women who won the award of Thai environmental leader have their clear original goal such as rational utility of community forest and river basin or coastal resource conservation. After having the award, there is only one case or 3.6 per cent who has still worked on the same old goal. Around 21.4 per cent has worked on the former one with the expansion of cooperation network reaching other communities in order to exchange experience and information, while more than 70.0 per cent has not only expanded their working network in the former goal but they also have additional goals especially for better quality of communal life or refreshing local wisdom of natural

resource and environmental conservation as to strengthen self-reliance.

Remarkably, the enthusiasm of working network and new goal extension encourages the leaders to consistently search more new knowledge by exploring various documents, having conversation with different fields of experts, or gaining more computer and internet linkage skills from real practice. These new attempts of knowledge and talent upgrading have widen the leaders' thinking to establish further mutual interests with the whole community. As previously mentioned about knowledge transfer and social security, these two issues seem to be very important under the present threat of globalization. Almost all women leaders has set up a learning center in their community where they can gather and exchange useful data and information about tools and techniques in environmental and natural resource conservation and management, causes and effects of concerned environmental movement, environmental laws and regulations, networks of similar environmental activities, etc. Frequently, they visit other learning centers in different places so as to strengthen collaborations. For social security of the community, most leaders focus on income generation through local products sale or OTOP (One Tambon - One Product), health care promotion, and food security and safety by organic farming.

The continuation of their works show that the leaders have a strong working discipline following their belief in environmental ethics and justice through specific trait and style of leadership of each person. Altruism brings in new goal of achievement for the leaders because they have to fulfill the variation of communal needs which change from time to time, while honesty to their responsibility result in trust and respect from the public. Therefore, team working does not limit to the working group as usual but it expands to whole community and nearby. It is questionable that leaders have had any problem and how long it last for the team working.

3.6. *Working obstacles and mitigations*

Although all environmental leaders have a clear working target and plan, there are only half of them having no complaint of working problems. All of them have been working efficiently with the cheerful supports of family members, colleagues, and the community so that they are optimistic or have positive thinking towards all responsibilities. However, any unexpected problem could happen in the future so that if they are careless about it, they may suffer for not preparing any mitigation. Meanwhile, the other half of them has faced different problems. About 21.4 per cent of this

group was threatened for physical attack or for life by anyone who expected for benefit exploitation, or they were put in jail by government officials due to their role as a fighter for winning the game not a negotiator for mutual interest. For the problem of physical attack or for life threat, the leaders had to ask for protection from local and state authorities who are willing to save them; but for the imprisonment, colleagues and local people usually form a bargaining power to negotiate with the authorities as to gain a freedom for their leader. Around 10.7 per cent of the total leaders were distress due to miscommunication leading to misunderstanding among family members, colleagues, and communal people about their working intention. In order to cure this discouragement and gain some suggested mitigations, the Thai women environmental leaders were mostly consulting with their family members and colleagues. Sometimes it took time to clarify all hidden or collective misunderstandings, but it later helped strengthen family relationship and working partnership with their colleagues and communal people. Trust is finally valuable for their refreshment of hard working.

Other reasons are the minor ones as indicated as no cooperation from some social groups in the community, no successor, hatred of woman as a leader, illness, etc. Nevertheless, these problems slightly discouraged the leaders' intention to reach their success. All of them believe in their good intention, especially altruism and honesty, will ease the problems. Incidentally, all leaders should learn from each other how to have positive thinking as well as how to cope with various working problems in order to secure their teamwork and accomplish their goals.

3.7. Retirement and the successor

Doubtlessly, all woman environmental leaders have been working hard because they strict to their principle of moral and ethics. Responsibility and commitment to themselves and the publics are unavoidable so as to secure environmental system and webs of life. Although most of the leaders have completed their goals of environmental protection and maintenance such as community forest and wetlands, they still continue to extend their work limits of knowledge updating and collaboration with other communities in different provinces or even across national border. The enthusiastic leaders seem to work endlessly without exhaustion. When they were asked about their retirement, about 82.1 per cent will work until they physically drop out. However, within this group of leaders, 50.0 per cent of them have already prepared successors who are their sons, daughters, relatives, or young folks in the community, while 32.1 per cent did not have any

successor. For some leaders who decided to stop their role of leader, they want to be only a consultant for other people due to their age and health problem. Only 10.7 per cent of this group has their successors, whereas 7.1 per cent do not have anyone. Therefore, any leader who has not prepared her successor may have a difficult time to help other people in the community about environmental deterioration.

Prime reason of no successor especially from the younger generation is that the formal education system provided by the Thai state lessens youngsters' sense of belonging to their own community. As found from the field survey, most of them do not want to continue their parents' activity in particular agriculture because it is not a high-returned profit and it is a time-consuming activity. Therefore, they want to get a high-paid job in major cities after completing high school or university. For this reason, some environmental leaders attempted to recall useful experiences of the community through social media or local curriculum development concerning changing social and natural environment from the past till present in order to let youngsters be proud of their own history, local wisdom, and natural and cultural heritages. As a leader from Chiangmai province expressed that:

"I want to make a story telling of life-history in form of a book or a museum focusing on tools for lifesurvival, entitled '*Life of Lannapepole*'. This story telling will cover local wisdoms relating to ways of life with the changing social, cultural, and natural environments." (a leader from Amphoe Mueang, Chiangmai province, pers.comm., August 2013)

Further confirmation of another leader from Songkla province (pers.comm., June 2014) recalled her memory in 2001 that local people at Klong U-tapao asked her why many fishes were swimming at the water surface for breathing. Later, she exchanged information with them through 'Curriculum development for Klong U-tapao conservation' with the assistance of master students from Prince of Songkla University and Chumchonchai Foundation. This curriculum was useful to raise environmental awareness of the local people and it has been used in many schools of the province as to let students gain environmental ethics. Expectedly, this knowledge will restore environmental ethics as well as a sense of belonging to the community.

4. Conclusions

Considering back to all major issues shown in this article, further notices and queries from this lessons

learnt of Thai women environmental leaders can be raised starting from social and environmental impacts of the application of National Economic and Social Development Plans, environmental awareness/- ethics/- justice and leadership of the Thai women, till their successors.

Generally, the Office of National Economic and Social Development Board as a major public sector which designs and issues the national plans for all public and private organizations to follow and practice in order to achieve national aim for good quality of Thai people life. The Office has yet no lessons learnt of its mistakes. As stated in the Eleventh National Plan (2011), the First till Seventh National Plans (1961-1996) brought in 'good economy, social problems, and unsustainable development' due to the recommendation of the International Monetary Fund (IMF) and the World Bank (WB) with the hidden agenda of capitalism in resource exploitation for maximum profit. The Eighth National Plan (1997-2001) attempted to improve quality of life with the new focus of human-centered development in the balance of social, economic, and environmental dimensions following the direction of sustainable development declared in Rio de Janeiro in 1992. However, it failed to accomplish the goal due to economic crisis in Thailand in 1997. As a result, the Ninth till Eleventh National Plans want to recover such balance with the approach of sufficient economy with high involvement of public participation followed the initiative of His Majesty King Bhumibol Adulyadej. Still, Thailand has not fully achieved the national goals.

Although the central government has endeavored to restructure many departments and organizations as well as to assess working indicators and performances, few actors have had clear understanding of the development policies and implementation plans. In addition, human resource development of various sectors is less linked to economic, social, and environmental dimensions so that there is no control of these balances. As seen in the field survey, most local women leaders have established their own learning centers in order to raise awareness of the significance of environment linking to social and economic securities and to recover local wisdom and tradition in maintaining good ways of life. Doubtlessly, local environmental ethics in different regions also has been revived causing resistance to public and private invasions of new development schemes and petition of environmental justice. This situation raises major enquiries about why the public officials rarely show themselves as a good role model in environmental conservation and why formal education system discourages the young generation to serve their communities.

Good environmental conservation practice clearly depends on a strong leader who has a moral teamwork. For this reason, local people will pay respect and trust to the working team and they, themselves, will act as a good follower. However, some leaders cannot find any successor who can contribute her goodwill to the public. Some leaders solve this difficulty by letting everyone in the working team act as a leader. As a leader from Amphoe Yan Ta Khao, Trang province shared her opinion:

"Once, I had been a formal leader of the group for a few years. By now, I stepped down and all of my colleagues equally act as a panel of leaders. Everyone can have a chance to experience in this position." (*pers.comm., April, 2014*)

Working through the networks has flourished the leaders' knowledge and experiences. Some leaders have practiced database management as well as gained communication skill by employing local radio broadcast and social media such as Facebook and other internet systems. These tools of practice for environmental conservation and movement are useful for knowledge management within and inter-community.

Thus, the lessons learnt of Thai women environmental leaders do not provide what leadership properties they have and how and why these people achieve their goals, but everyone can also learn their experiences in order to lessen the risk of repeating mistakes and increase the chance that successes are recurrent.

References

- Carli LL, Eagly AH. Overcoming resistance to women leaders: the importance of leadership style. *In: Women and leadership: The state of play and strategies of changes* (Eds: Kellerman B, Rhode D). Jossey-Bass, San Francisco, USA. 2007; 127-48.
- Curry P. *Ecological ethics: An introduction*. Polity Press, Cambridge. 2011.
- Dankelman I, Davidson J. *Women and environment in the third world: Alliance for the future*. Earthscan Publications Ltd., London, UK. 1988.
- Dent CM. The political economy of foreign direct investment in Southeast Asia. *In: The future of foreign investment in Southeast Asia* (Eds: Freeman NJ, Bartels FL). Routledge Curzon, London, UK. 2004; 32-48.
- DesJardins JR. *Environmental ethics: An introduction to environmental philosophy*. Wadsworth: Cengage Learning, USA. 2013.
- Gardner JW. *Morale*. W.W. Norton, New York, USA. 1978.
- Harvey D. *Justice, nature and the geography of difference*. Blackwell Publishers Inc., Cambridge, USA. 1996.

- Hewison K. Bankers and bureaucrats: Capital and the role of the state in Thailand. Yale University Southeast Asia Studies, New Haven, USA. 1989.
- Kumar R. Research methodology: A step-by-step guide for beginners. SAGE, Los Angeles, USA. 2011.
- Neher CD. Southeast Asia in the new international Era. Westview Press, Boulder, USA. 1994.
- Office of National Economic and Social Development Board. The seventh national economic and social development plan (1992-1996). Kurusapa Press, Bangkok, Thailand. 1991.
- Office of National Economic and Social Development Board. The ninth national economic and social development plan (2002-2006). Kurusapa Press, Bangkok, Thailand. 2001.
- Office of National Economic and Social Development Board. The eleventh national economic and social development plan (2012-2016). Kurusapa Press, Bangkok, Thailand. 2011.
- Panayotou T, Sussengkarn C. Case study for Thailand. *In: Structural adjustment and the environment (Ed: Reed D)*. Earthscan Publications Ltd, London, UK. 1992; 99-138.
- Pittinsky TL, Bacon LM, Welle B. The great women theory of leadership?: perils of positive stereotypes and precarious pedestals. *In: Women and leadership: The state of play and strategies of changes (Eds: Kellerman B, Rhode DL)*. Jossey-Bass, San Francisco, USA. 2007; 93-125.
- PrawetVasi. RabopKan Sang Pu Num: SumrupPratet Thai Yuk Mai (in Thai). Ammarin Printing and Publishing, Bangkok, Thailand. 2014.
- Roberts LM. Bridging your whole self to work: Lessons in authentic engagement from women leaders. *In: Women and leadership: The state of play and strategies of changes (Eds: Kellerman B, Rhode DL)*. Jossey-Bass, San Francisco, USA. 2007; 329-60.
- Silliman J. Introduction. *In: Dangerous intersections: Feminism, population and the environment (Eds: Silliman J, King Y)*. Zed Books Ltd, London, UK. 1999; 8-24.
- Suehiro A. Capital accumulation in Thailand: 1855-1985. Silkworm Books, Chiang Mai, Thailand. 1989.
- Tanabe S. Ecology and practical technology: Peasant farming systems in Thailand. White Lotus, Bangkok, Thailand. 1994.
- UNEP and WorldWIDENetwork. Women and the environment: An analytical review of success stories. United Nations Environment Program and WorldWIDE Network Inc., Washington D.C., USA. 1992.
- Wellington J, Szczerbinski M. Research methods for the social sciences. Continuum International Publishing Group, London, UK. 2007.

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Correspondence to

Assistant Professor Dr. Sittipong Dilokwanich
Faculty of Environment and Resource Studies,
Mahidol University,
Salaya, Phutthamonthon,
NakhonPathom 73170,
Thailand
E-mail: sittipong.dil@mahidol.ac.th