

Communication for nature conservation. A case study of Dongtan Wetland Park, Shanghai, China.

Lukasz Madrzynski*

*Tongji University College of Environmental Science and Engineering, Shanghai, 200092, P.R. China

DOI: 10.29322/IJSRP.8.9.2018.p8185

<http://dx.doi.org/10.29322/IJSRP.8.9.2018.p8185>

Abstract: This article aims to review communication approaches and their practical application in nature conservation projects. It is based on a case study of Dongtan Wetland Park located in Shanghai, China and utilizes communication strategy planning approach in identifying main stakeholders and analyzing communication activities performed by the management of the park. It examines the core communication approaches of marketing, branding, public relations, fund raising, conflict management, environmental education, capacity building and stakeholder management. The article highlights the importance of communication strategy planning in nature conservation projects and provides recommendations for improved communication management of Dongtan Wetland Park.

Index Terms: Communication strategy planning, Stakeholder management, Nature conservation, Park visitors.

1. Introduction

Communication plays a crucial role in planning and management of nature conservation projects (IUCN, 2003; Gardner, 2009; F. Hesselink, 2007; L. A. Lindenfeld, 2012). The purpose of this paper is to review communication activities and their practical application in a nature conservation project. It is based on a case study of Dongtan Wetland Park located on Shanghai's Chongming Island. The park is an experimental nature conservation project located in a buffer zone of a strict wetland conservation area. The location makes its operations more dependent on external funding than nationally funded strict nature protection area to which it is adjacent. It relies on visitors to finance its operations and to effectively conserve the rehabilitated natural environment within its area. It was once degraded by intensive agriculture and has been brought back to life to serve as a bird sanctuary. Nowadays it is a home for many endangered species of birds and aquatic creatures. In recognition of the rehabilitation undertaken on the park's grounds, it has been listed as a RAMSAR site. Projects such as Dongtan Wetland Park must find efficient management and operations techniques to balance the goals of nature conservation with tourism activities that provide indispensable funding for its operations. This research is attempting to identify the efficient communication tools and techniques that will allow projects of this type to effectively conserve environment, provide environmental education and assure undisturbed funding.

2. Research Elaborations

Communication tools and theories, if used properly, allow efficient and effective distribution of resources and manpower used in planning and operating a nature conservation project (D. Elcome, 1999; IUCN-CEC, 2011; NAPANT, 2007; CI, 2006; Saeed, 1998). In this study we first gather information on the communication related activities that are being undertaken by the managing staff of Dongtan Wetland Park. We examine the main channels of communication and the importance of different stakeholders in achieving nature conservation goals. This is accomplished by the means of key person interview. Secondly, we collect and analyze data on one of the crucial stakeholder groups for Dongtan Wetland Park, namely the park visitors. This goal is achieved by conducting a park visitor questionnaire survey.

<http://dx.doi.org/10.29322/IJSRP.8.9.2018.p8185>

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Interviewed person has been selected from within the Marketing Department of Wetland Dongtan Park, due to high engagement level of this department in communication related activities. Mr. Zhu who is the Vice President of Marketing Department in Dongtan Wetland Park agreed to take part in the interview and to answer questions about park's communication activities as well as its main stakeholder groups and channels of communication. Mr. Zhu has been involved in the planning process and development of Dongtan Wetland Park prior to its public opening. His active engagement in the park's planning, development and operation make him valuable and credible source of information on park's communication management and operations.

The official interview was conducted on the 25th of May 2013 in the Marketing Department office of Dongtan Wetland Park at 4pm. The purpose of the interview was first explained to Mr. Zhu through electronic correspondence in early April 2013. That correspondence included also the list of questions and topics that would have been mentioned during the interview. Interview preparation was discussed again during a personal meeting, two weeks before the actual interview. Sending the interview questions beforehand allowed Mr. Zhu better preparation and guaranteed clear and undisturbed proceeding of the interview. The questions have been arranged in an easy-to-read form and incorporated check boxes for the interviewee's convenience. This form was prepared in both English and Chinese language versions. Interview lasted for 45 minutes and has been audio recorded in its entirety. It was conducted entirely in Chinese language and translated into English by one of the authors of this research.

Another stage of the research was to collect and analyze information on one of the crucial stakeholder groups for Dongtan Wetland Park, namely the park visitors. A survey has been conducted to collect quantitative data on the visitor profile and opinions. The methodology and questionnaire for the survey have been developed with the help of publication titled *Designing and Testing a Park-based Visitor Survey* (Susan A. Moore, 2009). Other sources included Peak District National Park Authority Visitor Survey 2005 (Davies, 2005) and a summary report prepared for Minnesota State Park Visitor Survey (Anderson Dorothy, 2002). The questionnaire was composed of the questions relating to age, gender, education, occupation, income, residence, purpose of travel, type of travel, overnight stay, accommodation type, source of information about DWP, number of previous visits, overall and specific satisfaction levels, suggested improvements, important aspects of wetland conservation and if park will be recommended to friends. All questions were equipped with multiple answer options.

Visitor survey was conducted during Labor Day holiday on 29th April and 2nd May 2013. It was estimated that the daily number of visitors for that holiday period should fluctuate between 1000 to 2000 visitors. Building on that visitor number estimate, it was agreed that the surveyed should be set for 5-10% of total daily visitor count and the survey should be conducted twice on two separate days of the holiday period. Consequently, the target number of completed questionnaire was set for 200 questionnaires in total, one hundred per one survey day. The survey was undertaken both inside the visitor reception center (stationary surveying desk) and outside on the grounds of the wetland park (at resting spots).

3. Findings

3.1. Stakeholder Communication Management

Mr. Zhu has identified the Dongtan Wetland Park staff, local industry, general public and visitors as crucial stakeholder groups for the operations of the park (Table 1).

Table 1: Stakeholder importance.

What is the importance of each group in achieving park's nature conservation goals?					
	<i>Not important</i>	<i>Not very important</i>	<i>Important</i>	<i>Very important</i>	<i>Crucial</i>
<i>Colleagues ,supervisors, subordinates</i>					X
<i>Local residents</i>				X	
<i>Local farmers</i>				X	
<i>Local business owners</i>		X			
<i>Local industry</i>					X
<i>General public</i>					X
<i>Local NGO's</i>			X		
<i>International NGO's</i>		X			
<i>Local government</i>				X	
<i>Provincial government</i>				X	
<i>National government and Ministries</i>			X		
<i>Private donors and foundations</i>			X		
<i>Tourists/ Visitors</i>					X
<i>Tourism industry (agencies, hotels...)</i>				X	

Communication channels (Table 2) that are used by the Dongtan Wetland Park in the greatest extend include: posters, brochures/leaflets and phone calls. Channels that are being used often include:

- TV broadcasts - approximately one broadcast in Shanghai TV Channel every season.
- Radio broadcast – Park’s representatives are often on radio. Mr. Zhu himself appeared on local radio three times.
- Newspaper articles
- Meetings – Meetings are being held for marketing purposes as well as organizational meetings with supervisors and leaders.
- Site visits/Park visits
- Information centers - Tourist inquiry desk provides information to many visitors.
- Displays and Exhibitions - Displays and exhibitions inside the park are organized often. Exhibitions outside the park are organized rarely.
- Reports/Annual reports - Annual plans and reports are prepared for internal circulation.
- Websites - There were around 800.000 visits on park’s website within last three years.
- CD-ROMs – Promotional Video CD’s are given to companies and enterprises.

- Emails
- Social-networking websites – Dongtan Wetland Park is active on Weibo and Weixin.

The only communication channel that is never being used is newsletter.

Table 2: Communication channels.

How frequently do you use each communication media/channel?					
	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>
<i>TV broadcasts</i>				X	
<i>Radio broadcasts</i>				X	
<i>Newspaper articles</i>				X	
<i>Journals/Magazines</i>			X		
<i>Press releases</i>			X		
<i>Meetings</i>				X	
<i>Workshops</i>			X		
<i>Site visits/Park visits</i>				X	
<i>Information centers</i>				X	
<i>Displays/Exhibitions</i>				X	
<i>Films/Videos</i>			X		
<i>Posters</i>					X
<i>Brochures/Leaflets</i>					X
<i>Reports/Annual reports</i>				X	
<i>Websites</i>				X	
<i>CD-Roms</i>				X	
<i>Emails</i>				X	
<i>Phone calls</i>					X
<i>Newsletters</i>	X				
<i>Social-networking websites</i>				X	

Internal communication in Dongtan Wetland Park between colleagues, supervisors and subordinates is conducted mainly through meetings, reports, emails and phone calls (Table 3). Local residents, farmers, business owners, general public and visitors are being communicated with through the following channels: TV and radio broadcasts, newspaper and magazine articles, posters, websites and social networks. To contact Local Non-Governmental Organizations the park is using meetings, park visits, exhibitions, CD-ROMs and emails. International NGO’s are contacted through emails. Local, provincial and national government leaders are being communicated with through meetings, park visits, exhibitions and films/videos.

Table 3: Stakeholders and communication channels.

Stakeholders:	Answers:		Channel:
<i>Colleagues, supervisors, subordinates</i>	6,14,17,18	1	<i>TV broadcasts</i>
<i>Local residents</i>	1,2,3,4,12,15,20	2	<i>Radio broadcasts</i>
<i>Local farmers</i>	1,2,3,4,12,15,20	3	<i>Newspaper articles</i>
<i>Local business owners</i>	1,2,3,4,12,15,20	4	<i>Journal/Magazine articles</i>
<i>Local industry</i>	-----	5	<i>Press releases</i>
<i>General public</i>	1,2,3,4,12,15,20	6	<i>Meetings</i>
<i>Local NGO's</i>	6,8,10,16,17	7	<i>Workshops</i>
<i>International NGO's</i>	17	8	<i>Site visits/Park visits</i>
<i>Local government</i>	6,8,10,11	9	<i>Information centers</i>
<i>Provincial government</i>	6,8,10,11	10	<i>Displays/Exhibitions</i>
<i>National government and Ministries</i>	6,8,10,11	11	<i>Films/Videos</i>
<i>Private donors and foundations</i>	6,8,10,11	12	<i>Posters</i>
<i>Tourists/ Visitors</i>	1,2,3,4,12,15,20	13	<i>Brochures/Leaflets</i>
<i>Tourism industry (agencies, hotels...)</i>	13,15,17,18	14	<i>Reports/Annual reports</i>
...		15	<i>Websites</i>
...		16	<i>CD-Roms</i>
...		17	<i>Emails</i>
...		18	<i>Phone calls</i>
...		19	<i>Newsletters</i>
...		20	<i>Social-networking websites</i>

According to Mr. Zhu, the four main stakeholder groups with crucial importance to Dongtan Wetland Park are parks personnel, general public, visitors and local industry. It could be argued however that even though the industry has a big potential of damaging park's environment it has recently been curbed in that area due to strict environmental regulations of Chongming County as part of the Chongming Eco-island project (Z.O. Huang, 2008). Local, provincial and national governments have a great greater impact on the parks operation through planning, implementation and enforcement of new regulations. In that sense, governmental institutions of all levels have greater impact on the operations and objectives of Dongtan Wetland Park than local industry itself. General public and visitors considered by Mr. Zhu as essentially the same stakeholder group. However, those two groups should be treated differently. Visitor group is a subgroup of general public that have decided to visit Dongtan Wetland Park. It should be pointed that park visitors do not represent the majority of general public, but only the group that decided to visit the park. The communication channels used for those two groups should also be clearly separated. General public is communicated through marketing, branding and public relations. Visitors are communicated through personal interactions with park's personnel, environmental education and interpretation as well as the available facilities and activities.

3.2. Park Visitor Survey

According to the results of park visitor survey (Table 4), respondents that come to Dongtan Wetland Park are men (54.8%) and women (45.2%) from Shanghai (83.9%) between 18 and 45 years old (72.8%). Majority of visitors has Junior College, Bachelor or Master diploma (72%) and are employees of Chinese or joint venture companies (53.3%) with annual income between 100.000 to

180.000 RMB (52%). Great majority of visitors came to park for the first time (86.4%) as a result of friend introduction (39.2%) or information provided on the internet (34.5%). 62.5% of them drove their own cars to the park seeking relaxation (42.6%) and closure with nature (22.8%). They were satisfied with being close to nature (54.37%) and with the beauty of park's environment (30.42%). They suggested that improvements should be made to park's infrastructure (24.91%), restaurants (23.08%), activity choice (21.98%) and transportation (20.15%). They also suggested that park should provide more fishing (42.40%) and water game (33.3%) activities. Nearly 60% of visitors spent the night on Chongming Island in a local guesthouse (58.8%) or economy hotel (29.40%) They believe that the main reasons for protecting wetlands are its function as a bird sanctuary (34.05%) and biodiversity reserve (30.47%). 15.4% of visitors were very satisfied with the park and 46.2% were quite satisfied. 34.4% of visitors thought the park visit experience was average. Great majority of visitors (78%) will recommend Dongtan Wetland Park to their friends.

Table 4: Visitor survey results.

1) Gender:	Male	109	54.80%
	Female	90	45.20%
	TOTAL	199	100.00%
2) Age group:	Under 17	14	7.20%
	18-25	36	18.50%
	26-35	66	33.80%
	36-45	40	20.50%
	46-55	21	10.80%
	56-69	16	8.20%
	Over 70	2	1.00%
	TOTAL	195	100.00%
3) Education level:	Under High School	26	13.00%
	High School	26	13.00%
	Junior College	42	21.00%
	Bachelor	74	37.00%
	Master	28	14.00%
	Doctoral and over	4	2.00%
	TOTAL	200	100.00%
4) Occupation:	Company employee	57	29.20%
	Join-venture company	47	24.10%
	Freelance	33	16.90%
	Student	30	15.40%
	Other	12	6.20%
	Retired	11	5.60%
	Government position	4	2.10%
	Farmer	1	0.50%
	TOTAL	195	100.00%
5) Annual income:	Under 30.000 RMB	34	19.40%
	30.000-50.000 RMB	31	17.70%
	50.000-100.000 RMB	56	32.00%
	100.000-180.000 RMB	35	20.00%
	180.000-300.000 RMB	7	4.00%

	Over 300.000 RMB	12	6.90%
	TOTAL	175	100.00%
6) Residence:	Shanghai	161	83.90%
	External provinces	16	8.30%
	Zhejiang, Jiangsu, Jiangxi	8	4.20%
	Abroad	7	3.60%

7) Number of visits in DWP:	First time	172	86.40%
	Second time	21	10.60%
	Third time	1	0.50%
	Over three times	5	2.50%
	TOTAL	199	100.00%
8) Type of travel:	Self-driving trip	125	62.50%
	Public transportation	71	35.50%
	Guided group tour	4	2.00%
	TOTAL	200	100.00%
9) Source of info about DWP:	Friend introduction	76	39.20%
	Internet	67	34.50%
	Television	29	14.90%
	Newspaper	16	8.20%
	Magazine	4	2.10%
	Travel Agent	2	1.00%
	TOTAL	194	100.00%
10) Purpose of travel to DWP:	Relaxation	84	42.60%
	Closure with nature	45	22.80%
	Family trip	28	14.20%
	Bird watching	18	9.10%
	Friends outing	11	5.60%
	Photography	7	3.60%
	Learning about wetlands	4	2.00%
	TOTAL	197	100.00%
11) Satisfied with:	Closure with nature	143	54.37%
	Beautiful environment	80	30.42%
	Learning about wetlands	13	4.94%
	Service quality	12	4.56%
	Architecture style	6	2.28%
	Availability of activities	6	2.28%
	Restaurants quality	3	1.14%
	TOTAL	263	100.00%
12) Aspects of DWP that should be improved:	Park's infrastructure	68	24.91%
	Restaurants	63	23.08%

	Activity choice	60	21.98%
	Transportation	55	20.15%
	Service quality	20	7.33%
	Souvenirs and shopping	7	2.56%
	TOTAL	273	100.00%

13) Suggested development of DWP:	Fishing activities	75	42.40%
	Water games and activities	59	33.30%
	Big scale theme park rides	30	16.90%
	Sport activities	13	7.30%
	TOTAL	177	100.00%
14) Staying overnight:	Yes	119	59.20%
	No	82	40.80%
	TOTAL	201	100.00%
15) Accommodation type:	Local guesthouse	70	58.80%
	Economy accommodation	35	29.40%
	Luxurious Hotel	8	6.70%
	3 star hotel	6	5.00%
	TOTAL	119	100.00%
16) Overall satisfaction:	Very satisfied	30	15.40%
	Quite satisfied	90	46.20%
	Average	67	34.40%
	Not very satisfied	6	3.10%
	Very unsatisfied	2	1.00%
	TOTAL	195	100.00%
17) Reasons for protecting wetlands:	Bird sanctuary	95	34.05%
	Biodiversity	85	30.47%
	Landscape value	60	21.51%
	Water treatment	28	10.04%
	Carbon sequestration	11	3.94%
	TOTAL	279	100.00%
18) Will recommend DWP to friends:	Yes	156	78.00%
	Maybe	40	20.00%
	No	4	2.00%
	TOTAL	200	100.00%

Gender difference did not have any significant influence on majority of the answers, as in case of question concerning overall satisfaction and reasons for protecting wetlands. The only answer where man and women differed was the question of purpose of travel to Dongtan Wetland Park. Women were nearly twice more likely to come to park to enjoy family trip. This information could be used to in the marketing efforts of the park to promote the park as a suitable family trip destination.

There have been some differences in answer trends of different age groups. The data reveals a slight trend of satisfaction rates related to parks beautiful environment and closure with nature. Data suggests that the older the visitors the more satisfied they are with park's environment (landscape) and the younger they are the more satisfied they are with closure to nature. It could be argued that these seemingly similar answers are in fact different in their very nature. Beautiful environment refers to senses of esthetics while closure with nature refers to a more spiritual aspect of satisfaction. A cross-analysis of aspects of satisfaction and education levels has revealed a very similar trend. It seems as the satisfaction from the closure with nature becomes higher with each higher education level. On the other hand, satisfaction with landscape/environment beauty becomes higher for respondents in each lower education level. In conclusion, data suggests that the younger and the more educated respondents are the more satisfied they are with closure with nature and the older and less educated the more satisfied with beauty of landscape.

Visitors under 17 years old were the most satisfied group of all respondents. 58.3% of these young people have been overall very satisfied with their visit and 33.3% quite satisfied. The aspects of park that should be improved according to this age group were activity choice and parks infrastructure. Nearly 40% of the respondents in that age group suggested development of big scale amusement park rides, which was the highest answer rate for this type of development among all other age groups. Data reveals that the need of developing such infrastructure diminishes with each higher age group. 50% of respondents under 17 years old and 43.2% of those who identified themselves as students think that wetlands should be protected because of its importance as a bird sanctuary. It can be speculated that such a high answer rate among the youngest generation could be attributed to environmental education and communication activities that are available on the parks grounds and their apparent suitability for this age group.

Collected data shows correlation between overall satisfaction and education level. Respondents with higher education levels (bachelor degree and above) were on average more satisfied than the remaining groups. The exception to this trend is the group of respondents with less than high school education level that noted high satisfaction rates. Most of the respondents in this group were people below 17 years old and as it was shown above, they are one of the most satisfied groups of visitors. The place of residence has also shown correlation with the overall satisfaction. Respondents from Shanghai and external provinces have been on average more satisfied with their park visit than respondents from the three provinces directly adjacent to Shanghai; namely Jiangsu, Jiangxi and Zhejiang. All of the 6 foreign respondents that have participated in the survey evaluated their park experience as quite satisfactory. Respondents from Shanghai have mentioned all of the communication channels as the sources of information about the park while the other residence groups pointed to friend's introduction and internet as the only two sources of information. This is most likely due to the fact that Dongtan Wetland Park's marketing activities have been concentrating solely on Shanghai residents.

Age groups have shown some differences in their source of information about Dongtan Wetland Park. Respondents under 35 years old were more likely to get their information about the park from internet. Older groups over 45 years old were more likely to get their information from newspapers and TV. Students and retired people differ substantially in their preference of information source. This data can be used in preparing tailored communication campaigns for each of the two age groups.

3.3. Communication Strategy Planning.

The results gathered through the interview with Mr. Zhu the Vice Director of Marketing Department of Dongtan Wetland Park show that the park management is making use of majority communication tools that have been selected and reviewed in this research (Table 5). Park is actively undertaking activities in fields of marketing, public relations, branding, fund rising, environmental

education and conflict management. Stakeholder management and internal capacity building have not been so far adequately applied in the park management. Additionally, the park does not have a clear communication strategy that encompasses and coordinates all of their communication activities.

Table 5: Communication activities.

What communication activities are being undertaken by the park?	
Marketing of park products and services:	Yes
Fund rising, funding application/documentation preparation:	Yes
Public relations, mass media content development:	Yes
Branding, park culture and image development:	Yes
Environmental education activities:	Yes
Conflict management:	Yes
Internal trainings for staff in personal communication skills:	No
Stakeholder management:	No

Marketing activities of Dongtan Wetland Park have been concentrating on the product, price and promotion. Product placement (Jurin, 2010), understood in this context as availability and accessibility of park’s entrance tickets, has been limited mainly to one place, namely; ticket counter at park’s entrance. As it is shown in the results of park visitor survey only 2% of respondents have traveled to park as part of a tourism agency’s guided tour. If the management of Dongtan Wetland Park wants to increase the number of guided travel groups, it is recommended to improve the cooperation with tourism agencies. Greater cooperation with those agencies will not only increase the numbers of well organized groups but will also benefit the environment by decreasing amount of CO2 that is produced by the visitors when traveling in busses as opposed to private cars.

Branding has been an important part of park’s planning and operations. Learning from the experiences of *Low Tatra National Park* (NAPANT, 2007) it could be suggested to increase park’s brand visibility by placing park logo on the directing panels situated on the roads of Chongming Island if existing regulations allow. This approach would not only help to improve park’s brand recognition but might also make it more convenient for the travelers to find the park itself. As the survey results show 20% of respondents expressed their dissatisfaction with transportation to the park. The cross-analysis suggests that over 60% of respondents that were dissatisfied with transportation were driving their private cars. It could be assumed that the dissatisfaction is attributed partially to the poor visibility of guiding panels. Placing a clear uniform Dongtan Wetland Park’s logo on those panels might improve their visibility and consequently ease the difficulty of finding the park. Overall, branding can be a useful communication approach for sustainable development of nature conservation projects (M. Woodland & T.G. Acott, 2007).

Public relation activities have played an important role in operations of the park. They have been targeted mainly at governmental leaders, general public, tourists and business enterprises. It would be beneficial to know more about those groups and on their perception of Dongtan Wetland Park’s image and brand. This data could be collected and analyzed with the support of stakeholder management tools as surveying. Gathering the data on and feedback of those groups would allow tailoring more effective communication strategies and could improve the image of Dongtan Wetland Park among those groups.

Fund raising activities of the park have concentrated on one stakeholder group, namely business enterprises. *Guidelines for Tourism in Parks and Protected Areas of East Asia* (Eagles, 2001) suggests that some of the viable sources of funding in East Asia can include government budgets, grants from nonprofit organizations and international environmental institutions. It might prove worthwhile for the Dongtan Wetland Park to consider other sources of funding and not to concentrate solely on business enterprises.

Environmental education is one of the aspects that park management has been actively working on in recent years. Dongtan Wetland Park is currently applying to Shanghai Science and Management Institute to become an officially listed base for education. If this can be achieved, Dongtan Wetland Park would gain an opportunity to invite more schools to organize trips for their students to the park. If environmental education activities of this type are to be effective and efficient it will require good planning and preparation in the field of internal capacity building to assure availability of qualified guides. It will also require tailored marketing to assure many schools would participate in those environmental education activities. In the field of environmental education and interpretation targeted at all groups of visitors, Dongtan Wetland Park provides a number of displays and exhibitions. According to Elcome (1999), focusing on “flagship species,” can increase the overall effectiveness of environmental education activities undertaken by nature conservation area. Dongtan Wetland Park has been proudly promoting its engagement in bringing the endangered Yangtze River alligator to its natural habitat. It could be beneficiary to further accentuate this involvement in order to improve the effectiveness of park’s environmental education objectives. Recognizing Yangtze River alligator as one of the park’s “flagship species” could also improve the image of park among all stakeholders if properly incorporated in marketing, public relations and branding activities (M.J. Walpole & N. Leader-Williams, 2002).

Conflict management actions undertaken by the management and personnel of Dongtan Wetland Park were mainly related to inappropriate behavior and activities of visitors and local community on the park grounds. As it has been explained by Mr. Zhu, in case of bird hunting, individuals that were involved in such illegal activity have been handed over to authorities for legal investigation. We could try to see bird hunting as a conflict of interests between park’s objectives of nature protection and local community’s need to ease its economic pressures. Richard Jurin suggests that it is essential to “develop options for mutual gain by all parties involved” (Jurin, 2010) to achieve a successful resolution of a conflict. It could prove to be beneficial to involve and employ greater number of people from local community. Not only would it ease the economic pressures of households in the neighboring community, but it would also improve the public relations and image of Dongtan Wetland Park among this stakeholder group. If Dongtan Wetland Park is seen by the local community in positive light, then the nature conservation principles that it stands for will gradually influence the attitudes of local people.

Internal capacity building in the form of trainings for park’s staff has not been applied in the operations of Dongtan Wetland Park. Communication skills and techniques are considered to be an important tool in improving not only communication processes within the institution (NAPANT, 2007), but also the communication with main stakeholder groups (IUCN-CEC, 2011). Organizing trainings in personal communication skills for the different groups of personnel could improve the operations of Dongtan Wetland Park as well as its relations with important stakeholders. Visitors and general public have been identified as a crucial stakeholder groups for Dongtan Wetland Park. Park staff communicates with general public as potential visitors through TV and radio broadcasts, newspaper and magazine articles, posters, websites and social networks. Success of those communication activities, especially when interviews are involved, depends very often on the skills of individual managers. The personnel of Dongtan Wetland Park interact with visitors and can have a great impact on the overall satisfaction of visitor’s experience. According to the results of the visitor survey, 7% of respondents have suggested that park’s service quality needs further improvement. Even though this number relatively low, a significant improvement in this field could be achieved at a low expense.

Stakeholder management activities understood as identifying, collecting data and analyzing stakeholder groups had not been incorporated in the operations of Dongtan Wetland Park in the past. This research is the first attempt devoted to identifying, collecting and analyzing data on one of the crucial stakeholder groups for Dongtan Wetland Park. When planning communication, it is crucial to know your audience (Jurin, 2010; Robinson, 2003; WHO, 2008; Akpinar-Elci Muge, 2011). Information about stakeholders can be used in all communication related activities of Dongtan Wetland Park. It could be used to plan targeted marketing and public relation campaigns, in planning brand development, education, fund raising as well as resolving conflicts. The willingness of Dongtan Wetland Park's management to participate in interview conducted as part of this research and the enthusiasm and support in organizing the first park visitor survey shows great devotion in applying stakeholder management techniques in its operations.

4. Conclusions

The purpose of this research was to review the existing tools of communication and their practical application in a nature conservation project in Dongtan Wetland Park located on Shanghai's Chongming Island. Dongtan Wetland Park is actively searching for efficient management and operations techniques to balance the goals of nature conservation with the business model tourism activities that provide indispensable funding for its operations. Key person interview approach was applied to identify the main stakeholders in park's operations. Results suggest that tourists are a crucial stakeholder group for the sustainable operations of Dongtan Wetland Park. The second part of the research focused on collecting and analyzing data on this crucial stakeholder group. The park visitor survey undertaken in cooperation with park's management has allowed first insight into the profile of this crucial stakeholder group. The data gathered from this survey provides an indispensable source of information about park visitors and can be used to properly tailor future communication strategy. Being the first reliable source of information about park's visitors, the survey data will serve as a baseline for future endeavors of this type. This baseline will allow assessments of changing trends among the visitors and give direction to parks future operations, management techniques and development. The survey provided a quantifiable data that can now be used by Dongtan Wetland Park to adjust aspects of the park's management, service and infrastructure to improve park's brand and image, overall satisfaction of the park visit experience, develop more efficient and effective environmental education techniques and allow undisturbed financial operations of this nature conservation project by assuring a stable visitor count. It has been argued in this research that environmental communication provides many useful tools that can greatly improve the effectiveness and efficiency of parks operations and management.

5. References

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AUTHOR

Lukasz Madrzynski – Doctoral Program, College of Environmental Science and Engineering, Tongji University, Shanghai, China.
lukasz.madrzynski@yahoo.com