

## CHAPTER IV

### RESULTS

The results were collected from the distributed questionnaires, analyzed and divided into three parts: personal data of the visitors visiting Dusit Zoo, the satisfaction toward Dusit Zoo, and the problems and suggestions of Dusit Zoo. All results were analyzed by the SPSS program. Data analysis would be shown as follows:

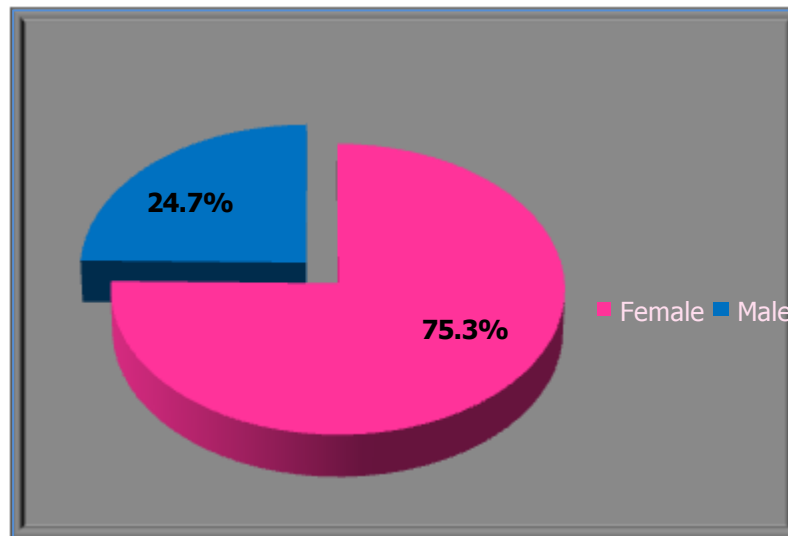
1. Personal Data
2. Satisfaction Toward Dusit
3. Dusit Zoo Problems and Suggested Solutions

#### Personal Data

In part one of the questionnaire, there were 10 questions asking about the respondents' personal data. The 400 respondents were interviewed at Dusit Zoo. Below are the results shown in terms of frequency and percentage.

**Table 6 Gender of the Respondents**

Gender	Frequency	Percentage
Male	99	24.7
Female	301	75.3
<b>Total</b>	<b>400</b>	<b>100</b>



**Figure 6 Gender of the Respondents**

Table 6 shows that most of the respondents in this survey are female, accounting for 75.3%, while the male respondents are at 24.7% of the all respondents.

**Table 7 Average Age of the Respondents**

Level	Years old
Minimum	15
Maximum	70
Mean	30.27

Table 7 shows that the minimum age of respondents in this survey is 15 years old while the maximum age is 70 years old. The average age of the all respondents is 30.27

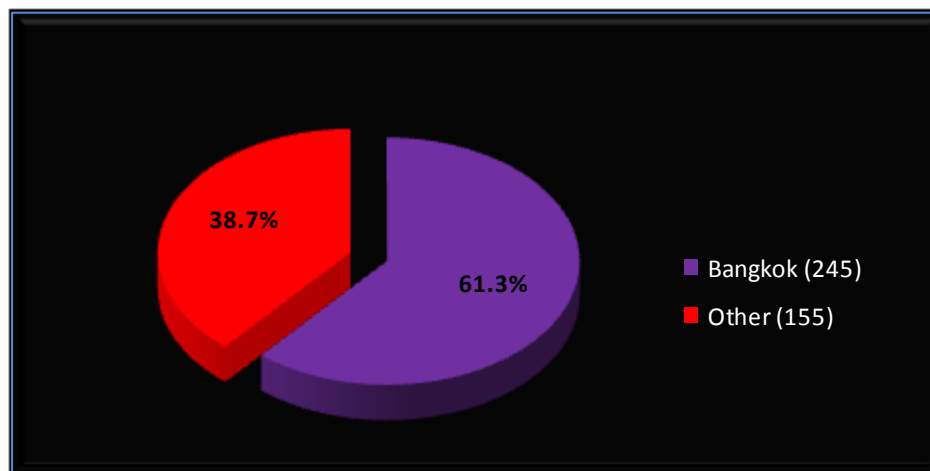
**Table 8 Ages of the Respondents**

Age (years olds)	Frequency	Percentage
Under 20	24	6.00
20-30	229	57.25
31-40	94	23.50
41-50	19	4.75
51-60	28	7.00
61-70	6	1.50
<b>Total</b>	<b>400</b>	<b>100</b>

Table 8 shows that the respondents' ages vary from 15 years old to 70 years old. According to the finding, most of the respondents visiting Dusit Zoo are at the age of 20-30 (57.25%), followed by the age of 31-40 (23.50%), 41-50 (4.75%), 51-60 (7%), and under 20 (6%) and 61-70 (1.50%) respectively

**Table 9 Place of Birth of the Respondents**

Place of birth	Frequency	Percentage
Bangkok	245	61.3
Other	155	38.7
<b>Total</b>	<b>400</b>	<b>100</b>

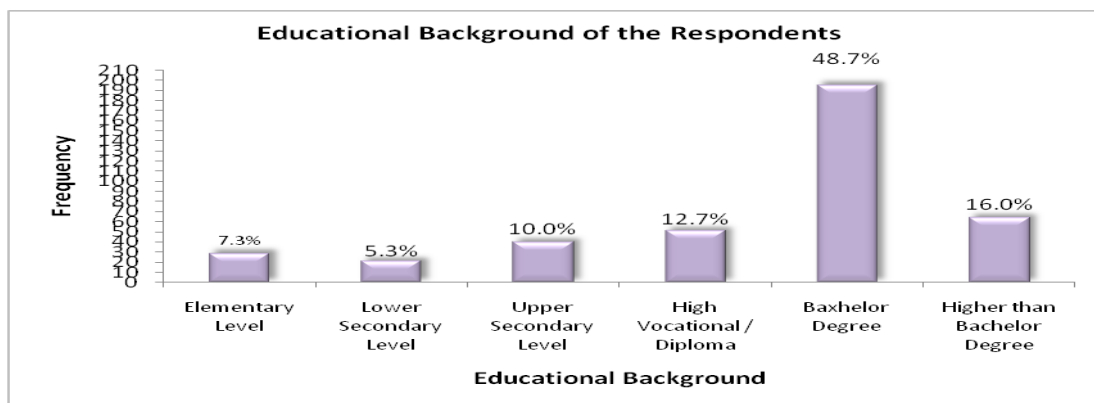


**Figure 7 Percentages of Respondents' Place of Birth**

This frequency table and figure shows that most of the respondents visiting Dusit Zoo (61.3%) are Bangkok people, followed by people from outside Bangkok (38.7%). According to the survey, the suburban respondents mostly come from Ratchaburi (4%), Songkla (3.3%), Nakornsrihammarat (3.3%), Nonthaburi (3.3%), and Ubonratchathani (2.7%).

**Table 10 Educational Background of the Respondents**

<b>Educational background</b>	<b>Frequency</b>	<b>Percentage</b>
Elementary Level	29	7.3
Lower Secondary Level	21	5.3
Upper Secondary Level	40	10
High Vocational / Diploma	51	12.7
Bachelor Degree	195	48.7
Higher than Bachelor Degree	64	16
<b>Total</b>	<b>400</b>	<b>100</b>

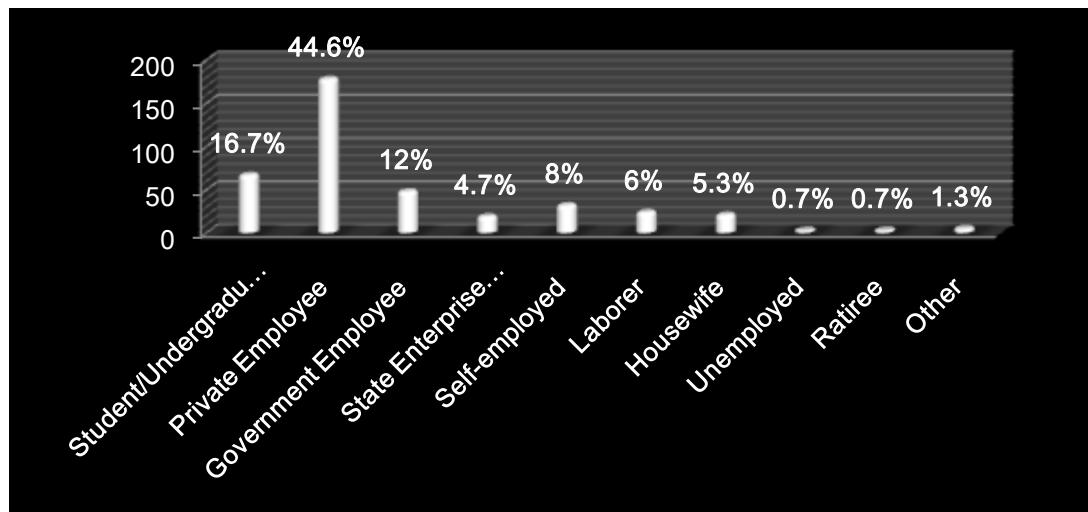


**Figure 8 Percentages of Respondents' Educational Background**

Table 10 shows that most of the respondents' educational background was a bachelor's degree (48.7%), followed by higher than bachelor's degree (16%) and high vocational / diploma (12.7%). The rest of the respondents' level of education is upper secondary level (10%), elementary level (7.3%), and lower secondary level (5.3%).

**Table 11 Occupation of the Respondents**

Occupation	Frequency	Percentage
Student / Undergraduate	67	16.7
Private Employee	178	44.6
Governmental Employee	48	12
State Enterprise Employee	19	4.7
Self-employed / Business Owner	32	8
Laborer	24	6
Housewife	21	5.3
Unemployed	3	0.7
Retiree	3	0.7
Other	5	1.3
<b>Total</b>	<b>400</b>	<b>100</b>

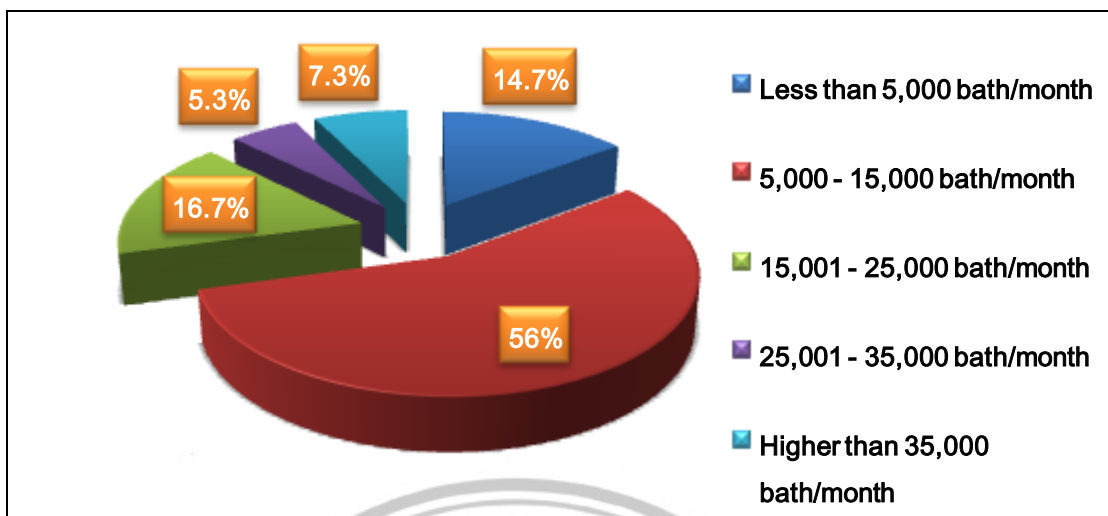


**Figure 9 Percentages of Respondents' Occupation**

Table 11 shows that most of the respondents (44.7%) are private employees, followed by student / undergraduate (16.7%) and governmental employee (12%). The rest of the respondents are self-employed / business owner, laborer, housewife, state enterprise employee, other, unemployed and retiree. The other two occupations are part-time teacher and part-time governmental employee.

**Table 12 Monthly Salary of the Respondents**

Monthly salary (baht)	Frequency	Percentage
Less than 5,000 baht/month	59	14.7
5,000 – 15,000 baht/month	224	56
15,001 – 25,000 baht/month	67	16.7
25,001 – 35,000 baht/month	21	5.3
Higher than 35,000 baht/month	29	7.3
<b>Total</b>	<b>400</b>	<b>100</b>

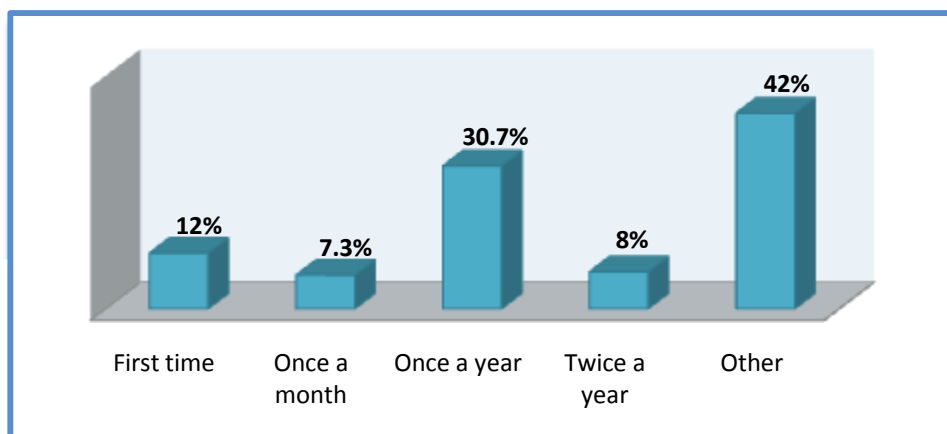


**Figure 10 Percentages of Respondents' Monthly Salary**

The chart shows that more than half of the respondents earn 5,000 – 15,000 baht/month (56%), followed by the respondents earning 15,001 – 25,000 baht/month (16.7%) and less than 5,000 baht/month (14.7%). The rest of the respondents earn higher than 35,000 baht/month and 25,001 – 35,000 baht/month at 7.3% and 5.3%.

**Table 13 The Respondents' Frequency of Visits to Dusit Zoo**

Frequent of visit to Dusit Zoo	Frequency	Percentage
First time	48	12
Once a month	29	7.3
Once a year	123	30.7
Twice a year	32	8
Other	168	42
<b>Total</b>	<b>400</b>	<b>100</b>



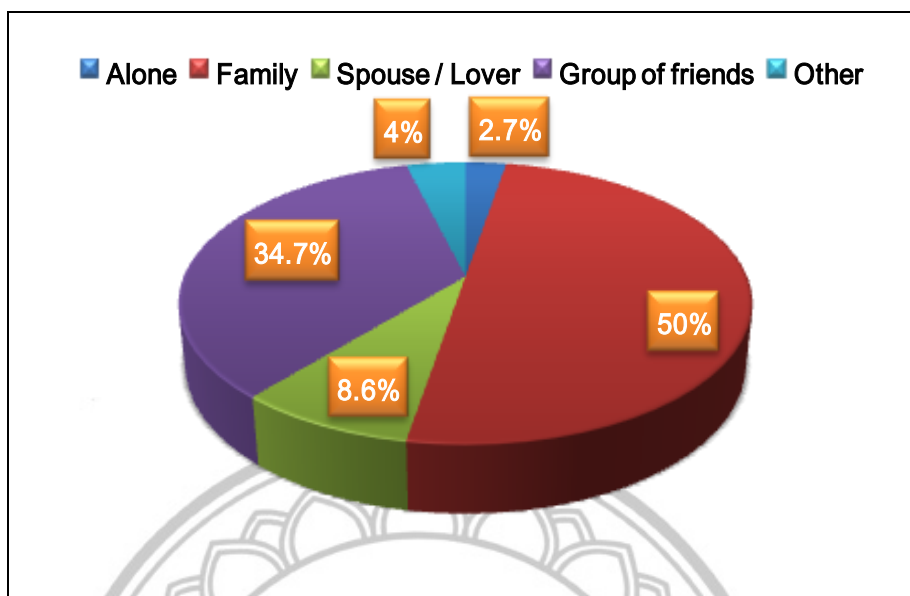
**Figure 11 Percentages of Respondents' Frequency of Visits to Dusit Zoo**

This chart shows Percentages of Respondents' Frequency of Visits to Dusit Zoo, that most of the respondents (42%) could not definitely specify how often they visit Dusit Zoo. They usually visit Dusit Zoo when they have free time, especially at the special occasions like Father's Day or Mother's Day and at the long holiday like Songkarn's Day or New Year's Day. The rest of the respondents visit Dusit Zoo once a year (30.7%), first time visiting Dusit Zoo (12%), twice a year (8%), and once a month (7.3%).

**Table 14 The Respondents' Companion**

Companion	Frequency	Percentage
Alone	11	2.7
Family	200	50
Spouse / Lover	34	8.6
Group of friends	139	34.7
Other	16	4
<b>Total</b>	<b>400</b>	<b>100</b>



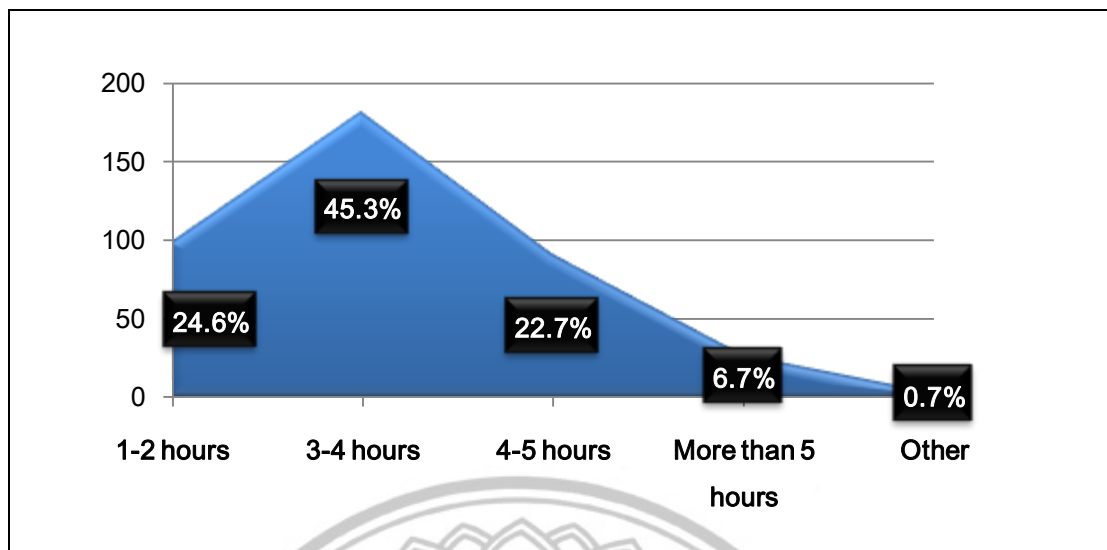


**Figure 12 Percentages of Respondents' Companion**

Table 14 shows that half of the respondents visit Dusit Zoo with their families (50%), followed by visiting with their friends, spouse / lover, other people, and alone.

**Table 15 The Respondents' Time Spent at Dusit Zoo**

Time spent at Dusit Zoo	Frequency	Percentage
1-2 hours	98	24.6
3-4 hours	181	45.3
4-5 hours	91	22.7
More than 5 hours	27	6.7
Other	3	0.7
<b>Total</b>	<b>400</b>	<b>100</b>

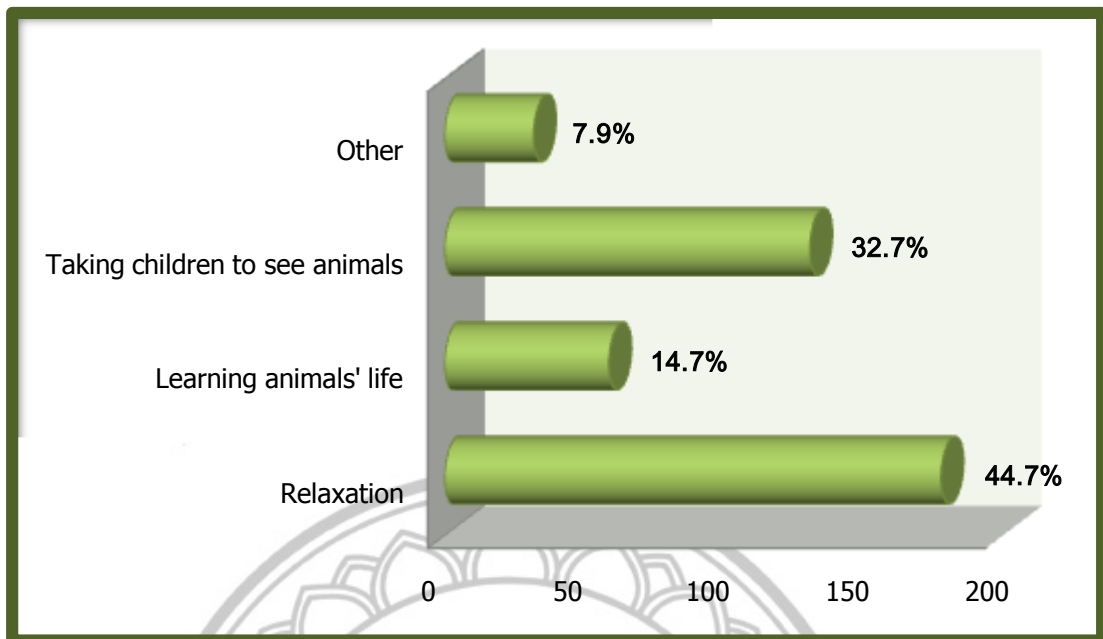


**Figure 13 Percentages of Respondents' Time Spent at Dusit Zoo**

Table 15 shows that nearly half of the respondents spend 3-4 hours at Dusit Zoo (45.3%), followed by 1-2 hours (24.7%), 4-5 hours (22.7%), more than 5 hours (6.7%) and other (.7%).

**Table 16 The Respondents' Main Purpose for Visiting Dusit Zoo**

Main purpose for visiting Dusit Zoo	Frequency	Percentage
Relaxation	178	44.7
Learning animals' life	59	14.7
Taking children to see animals	131	32.7
Other	32	7.9
<b>Total</b>	<b>400</b>	<b>100</b>



**Figure 14 Percentages of Respondents' Main Purpose for Visiting Dusit Zoo**

Table 16 shows that most of the respondents' main purpose for visiting Dusit Zoo is for relaxation (44.7%). The rest of the respondents come to Dusit Zoo for taking children to see animals, learning animals' life and for other purposes.

### **Satisfaction toward Dusit Zoo**

From part two to part four of questionnaire, the respondents were asked to give the level of satisfaction toward the facilities, the animals and their habitats, and the environment inside Dusit Zoo. Below are the results shown in terms of frequency, percentage, and means.

#### **1. Satisfaction toward the Facilities**

**Table 17 Satisfaction toward the Facilities inside Dusit Zoo**

Dusit Zoo's Facilities	Level of Satisfaction by Percentage (%)						Mean	Meaning
	Very Satisfied 5	4	Neutral 3	Dissatisfied 2	Very Dissatisfied 1			
1. The service that visitors gain when contacting with public relations section of Dusit Zoo	38 9.3%	157 39.3%	189 47.3%	16 4%	-	3.54 (100%)	Satisfied	
2. The decoration of Zoo Museum / Education Center	32 8%	219 54.7%	136 34%	13 3.3%	-	3.67 (100%)	Satisfied	
3. The space of parking lot	16 4%	131 32.7%	184 46%	59 14.7%	10 2.7%	3.20 (100%)	Neutral	
4. The cleanliness of resting shelter	16 4%	157 39.3%	133 33.3%	94 23.3%	-	3.24 (100%)	Neutral	
5. The number of resting shelters	16 4%	168 42%	91 22.7%	115 28.7%	10 2.7%	3.16 (100%)	Neutral	
6. The cleanliness inside Food center	16 4%	163 40.7%	152 38%	69 17.3%	-	3.31 (100%)	Neutral	
7. The number of souvenir shops	11 2.7%	149 37.3%	176 44%	64 16%	-	3.26 (100%)	Neutral	
8. The number of public telephones	21 5.3%	171 42.7%	181 45.3%	27 6.7%	-	3.46 (100%)	Satisfied	
9. The number of trash cans	43 10.7%	221 55.3%	67 16.7%	69 17.3%	-	3.59 (100%)	Satisfied	
10. The clearness of signs and direction	48 12%	211 52.7%	69 17.3%	48 12%	24 6%	3.52 (100%)	Satisfied	
11. The safety of play land and its equipment	5 13%	131 32.7%	195 48.7%	64 16%	5 1.3%	3.16 (100%)	Neutral	

The respondents' satisfaction toward the facilities inside Dusit Zoo is satisfied, The decoration of Zoo Museum / Education Center (Mean = 3.67 ), The number of trash can (Mean = 3.59), The service that visitors gain when contacting with public relation section of Dusit Zoo( Mean =3.54 ), The system of security inside Dusit Zoo (Mean = 3.53), The clearness of signs and direction (Mean = 3.52), The number of public telephone (Mean = 3.46) and The generality of mini trains / tram cars (Mean = 3.41).

The respondents' satisfaction toward the facilities inside Dusit Zoo is neutral, The cleanliness inside Food center (Mean = 3.31), The cleanliness of resting shelter (Mean = 3.24), The cleanliness of each toilet spots (Mean = 3.24), The number of souvenir Shops (Mean = 3.26), The number of toilet spots (Mean = 3.26), The space of parking lot (Mean = 3.20), The number of resting shelters (Mean = 3.16), The safety of play land and its equipment (Mean = 3.16) and The safety system of boat biking (Mean = 3.10).

According to the finding, respondents are most satisfied with the decoration of Zoo Museum / Education Center at 3.67 that means it is at a satisfactory level, whereas respondents are least satisfied with the safety system of boat biking at 3.10 that means it is at a medium level.

## 2. Satisfaction toward the Animals and their Habitats

**Table 18 Satisfaction toward the Animals and their Habitats inside Dusit Zoo**

The animals and their habitats	Level of Satisfaction by Percentage (%)						Mean	Meaning
	Very Satisfied	5 Satisfied	4 Neutral	3 Dissatisfied	2 Very Dissatisfied	1		
1. The variety of animals displayed in Dusit Zoo such as animals displayed in Reptile House, etc.	77 19.3%	187 46.7%	117 29.3%	16 4%	3 0.7%	3.80 (100%)	Satisfied	

Table 18 (Cont.)

The animals and their habitats	Level of Satisfaction by Percentage (%)						Mean	Meaning
	Very Satisfied 5	Satisfied 4	Neutral 3	Dissatisfied 2	Very Dissatisfied 1			
2. The cleanliness of animals like having good smell or tidy feather	32 8%	131 32.7%	112 28%	117 29.3%	8 2%	3.67 (100%)	Satisfied	
3. The organization of animals' category	67 16.8%	211 52.7%	112 28%	10 2.5%	-	3.84 (100%)	Satisfied	
4. The distance of each animals' habitats	21 5.3%	213 53.3%	147 36.7%	16 4%	3 0.7%	3.58 (100%)	Satisfied	
5. The space of habitats for each animal's species.	27 6.7%	152 38%	109 27.3%	99 24.7%	13 3.3%	3.20 (100%)	Neutral	
6. The cleanliness of animals' habitats like having good smell or not	5 1.3%	141 35.3%	112 28%	123 30.7%	19 4.7%	2.98 (100%)	Neutral	
7. The natural blending of the animals' habitats	21 5.3%	163 40.7%	112 28%	96 24%	8 2%	3.23 (100%)	Neutral	
8. The durability of animals' habitats such as the safety when visiting ferocious animals	32 8%	219 54.7%	85 21.3%	64 16%	-	3.55 (100%)	Satisfied	

Table 18 shows the respondents' satisfaction toward the animals and their habitats inside Dusit Zoo that can be divided into eight items as followed:

Satisfaction Toward the Animals and their Habitats inside Dusit Zoo is satisfied level, the organization of animals' category (Mean = 3.84), The variety of

animals displayed in Dusit Zoo such as animals displayed in Reptile House, etc. (Mean = 3.80), The cleanliness of animals like having good smell or tidy feather (Mean = 3.67), The distance of each animals' habitats (Mean = 3.58) and The durability of animals' habitats such as the safety when visiting ferocious animals (Mean = 3.55).

According to the finding, respondents are most satisfied with the organization of animals' category at 3.84 that means it is at a satisfactory level, whereas respondents are least satisfied with the cleanliness of animals' habitats at 2.98 that mean it is at a medium level.

### 3. Satisfaction toward the Environment

**Table 19 Satisfaction toward the Environment inside Dusit Zoo**

Dusit Zoo's Environment	Level of Satisfaction by Percentage (%)					Mean	Meaning
	Very Satisfied 5	Satisfied 4	Neutral 3	Dissatisfied 2	Very Dissatisfied 1		
1. The space of the activity ground for organizing the occasional activities	21 5.3%	168 42%	179 44.7%	24 6%	8 2%	3.42 (100%)	Satisfied
2. The size of the pond when compared with total area of Dusit Zoo	16 4%	200 50%	125 31.3%	59 14.7%	-	3.43 (100%)	Satisfied
3. The Cleanliness of water in the pond	6 1.3%	99 24.7%	112 28%	168 42%	16 4%	2.77 (100%)	Neutral
4. The decoration of the gardens such as the beauty of garden	45 1.3%	213 53.3%	125 31.3%	16 4%	-	3.72 (100%)	Satisfied
5. The variety and numbers of flowers and trees	69 17.3%	211 52.7%	96 24%	24 6%	-	3.81 (100%)	Satisfied

**Table 19 (Cont.)**

<b>Dusit Zoo's Environment</b>	<b>Level of Satisfaction by Percentage (%)</b>						<b>Mean</b>	<b>Meaning</b>
	<b>Very Satisfied</b>	<b>5 Satisfied</b>	<b>4 Neutral</b>	<b>3 Dissatisfied</b>	<b>2 Very Dissatisfied</b>	<b>1</b>		
5. The variety and numbers of flowers and trees	69 17.3%	211 52.7%	96 24%	24 6%	-	3.81 (100%)	Satisfied	
6. Greenness and shadiness	101 25.3%	219 54%	69 17.3%	11 2.7%	-	4.02 (100%)	Satisfied	
7. Natural blending	51 12.7%	216 54%	112 28%	16 4%	5 1.3%	3.72 (100%)	Satisfied	
8. The cleanliness of path / road	27 6.7%	195 48.7%	136 34%	12 10.7%	-	3.51 (100%)	Satisfied	

Table 19 shows the respondents' satisfaction toward the environment inside Dusit Zoo that can be divided into eight items as followed:

Satisfaction toward the Environment inside Dusit Zoo is Satisfied level , Greenness and shadiness (Mean = 4.02), The variety and numbers of flowers and trees(Mean= 3.81), The decoration of the gardens such as the beauty of gardens (Mean = 3.72), Natural blending (Mean = 3.72), The cleanliness of path / road (Mean = 3.51), The size of pond when compared with total area of Dusit Zoo (Mean = 3.34), The space of the activity ground for organizing the occasional activities (Mean = 3.42).

Satisfaction toward the Environment inside Dusit Zoo is Neutral level, The Cleanliness of water in the pond (Mean = 2.77)

According to the finding, respondents are most satisfied with greenness and shadiness at 4.02 that means it is at a satisfactory level, whereas respondents are least satisfied with the cleanliness of water in the pond at 2.77 that means it is at a medium level.



**Table 20 Overall Satisfaction of Visitors toward Dusit Zoo**

<b>Satisfaction with Dusit Zoo</b>	<b>Mean</b>	<b>Meaning</b>
Satisfaction toward the facilities	3.35	Neutral
Satisfaction toward the animals and their habitats	3.48	Satisfied
Satisfaction toward the environment	3.55	Satisfied
<b>Overall Satisfaction</b>	<b>3.46</b>	<b>Satisfied</b>

In this survey, the satisfactory level is ranged into five as follows:

Very Satisfied = 5.00 – 4.21, Satisfied = 4.20 – 3.41, Neutral = 3.50 – 2.61, Dissatisfied = 2.60 – 1.81 and Very Dissatisfied = 1.80 – 1.00.

According to table 20, there are three different satisfactions of visitors toward Dusit Zoo. The first one is the satisfaction of visitors toward the facilities inside Dusit Zoo is at 3.35 that means it is at a neutral level. The second one is the satisfaction of visitors toward the animals and their habitats are at 3.48 that mean it is at a satisfactory level. The last one is the satisfaction of visitors toward the environment inside Dusit Zoo is at 3.55 that means it is a satisfactory level. Thus, the visitors' overall satisfaction toward Dusit Zoo is at 3.46 that mean it is at a satisfactory level.

### **Dusit Zoo Problems and Suggested Solutions**

In part five of the questionnaire, the respondent was asked to identify the problems as well as give suggestions about Dusit Zoo. Below are the results shown in terms of Level of Satisfaction and percentage.

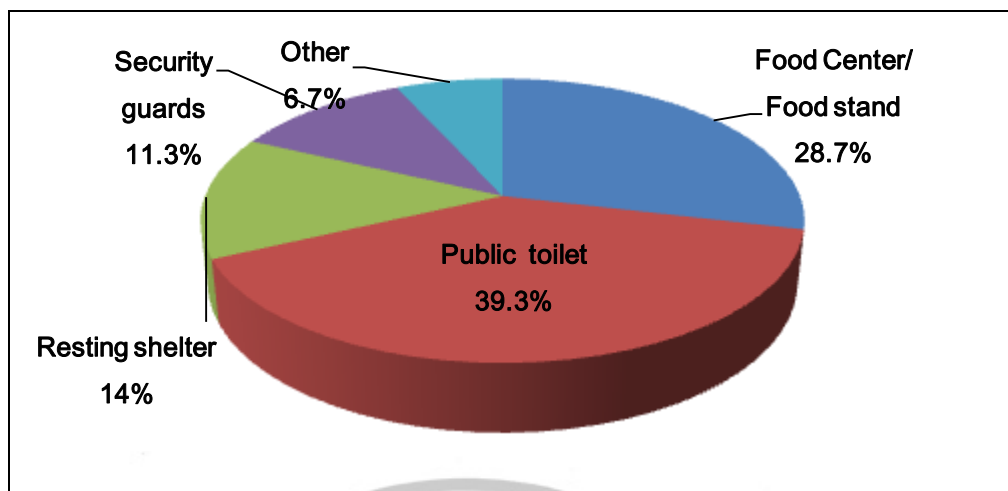
**Table 21 The Respondents' Opinion of Dusit Zoo**

<b>The Respondents' Opinion of Dusit Zoo</b>	<b>Satisfied</b>	<b>Dissatisfied</b>
Service hours on 8.00 am – 6.00 pm	384 (96%)	16 (4%)
Fee	301 (75.3%)	99 (24.75%)
Number of Visitors within Dusit Zoo	355 (88.7%)	45 (11.3%)

Table 21 shows the respondents' opinion of Dusit Zoo is that the service hours of Dusit Zoo on 8.00 am- 6.00 pm are satisfied (96%) and dissatisfied (4%). Fee is satisfied (75.3%) and dissatisfied (24.75 %) that 18.00 % of respondents think that Dusit Zoo's fees are too expensive and 6.75 % of respondents think that it is too cheap. The majority of the respondents (88.7%) are satisfied the number of visitors within Dusit Zoo while 11.3% of respondents are dissatisfied the number of visitors within Dusit Zoo. The respondents feel that Dusit Zoo is too crowded and makes them feel uncomfortable.

**Table 22 The Respondents' Opinion of the Facilities that they want Dusit Zoo to increase the most**

<b>Facilities wanted to increase the most</b>	<b>Frequency</b>	<b>Percentage</b>
Food center / food stand	115	28.7
Public toilet	157	39.3
Resting shelter	56	14
Security guards	45	11.3
Other	27	6.7
<b>Total</b>	<b>400</b>	<b>100</b>

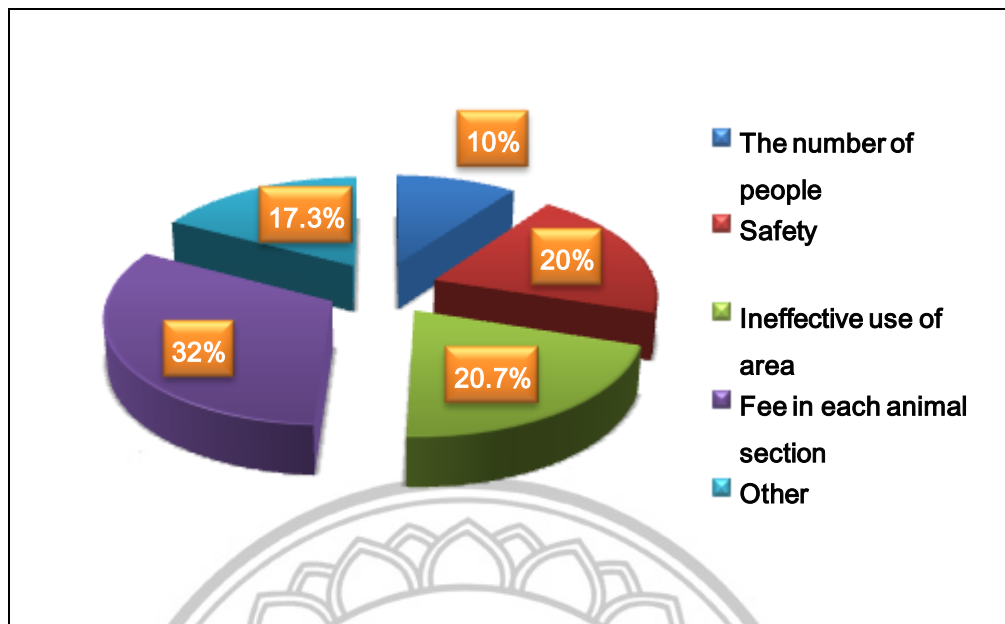


**Figure 15 Percentages of Respondents' Opinion of the Facilities that they want Dusit Zoo to increase the most**

This part is about Respondents' Opinion of the Facilities that they want Dusit Zoo to increase the most, the most of the respondents (39.3%) want Dusit Zoo to increase public toilet, followed by food center / food stand (28.7%), resting shelter (14%), security guards (11.3%) and other parts (6.7%). Apart from four facilities mentioned in questionnaire, the other parts that the respondents want Dusit Zoo to improve are signposts, animals' cages, equipment used inside Dusit Zoo and the number of public telephones.

**Table 23 The Respondents' Opinion of Dusit Zoo's Problem**

Dusit Zoo's problem	Frequency	Percentage
The number of people	40	10
Safety	80	20
Ineffective use of area	83	20.7
Fees in each animal section	128	32
Other	69	17.3
<b>Total</b>	<b>400</b>	<b>100</b>



**Figure 16 Percentages of Respondents' Opinion of Dusit Zoo's Problem**

According to Table 23, most of the respondents find that the biggest problem of Dusit Zoo is the repetition of fees in each animal section such as reptile house, nocturnal house, animal presentation, tram service and so forth (32%), followed by ineffective use of area (20.7%), safety (20%), other problem (17.3%) and the number of people (10%).

The respondents were asked to identify the problems as well as give suggestions, the detail of which are as follows:

Satisfaction toward the Environment inside Dusit Zoo almost satisfied level, Expect on Cleanliness of water in the pond is neutral level. The cleanliness inside Dusit Zoo should be improved. Most of the respondents complain that there are three places that they want Dusit Zoo to improve the most. The first one is water in the pond because it is so dirty and has bad smell. The second are toilets because they are quite dirty, especially on the crowded days. The last are the animal's habitats, especially water at hippopotami habitat. Additionally the space of each animal's habitat which is too small and looks uncomfortable for animals so if it is possible, the zoo should provide more space for animals and decorate their habitats as naturally as possible.

The respondents' satisfaction with the facilities inside Dusit Zoo is average or at neutral level, the facilities that need the most improvement is the safety of play

land and its equipment followed by the number of resting shelters, The space of parking lot, the number of souvenir shop, the cleanliness inside food center and the cleanliness of resting shelter.

This part is about Respondents' Opinion of the Facilities that they want Dusit Zoo to increase the most, the most of the respondents (39.3%) want Dusit Zoo to increase public toilet, followed by food center / food stand (28.7%), resting shelter (14%), security guards (11.3%); the security system inside the zoo should be improved, especially the safety when visiting ferocious animals. Moreover, Dusit Zoo should provide more security guards, especially on the crowded days and other parts (6.7%). Apart from four facilities mentioned in the questionnaire, the other parts that the respondents want Dusit Zoo to improve are signposts, Animals' cages; Dusit Zoo should enclose the pond with a fence in order to protect visitors, especially children from falling into the pond, Equipment used inside Dusit Zoo and the number of public telephones.

Management, the respondents find that the biggest problem of Dusit Zoo is the repetition of fees in each animal section such as reptile house, nocturnal house, animal presentation, tram service and so forth (32%), followed by ineffective use of area (20.7%), safety (20%); the security system inside the zoo should be improved, especially the safety when visiting ferocious animals. Moreover, Dusit Zoo should provide more security guards, especially on the crowded days. Other problems (17.3%) and the number of people (10%); Dusit Zoo should advertise itself to public more than at present by arranging some useful and interesting activities such as a natural conservation activity or animals' lives learning activity

In addition to the price of food at food center or food stand is too expensive. Dusit Zoo should establish a reasonable price for visitors. The tramcar service fee is too expensive so the zoo should reduce the fee or provide visitors the tramcar for free.

Dusit should increase the entrance fee in order to use these increased incomes for improving the facilities and the services of the zoo.