

Brazilian Attitude toward Nature*

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Introduction

In the States of Paraná and São Paulo, Brazil almost all the forests have disappeared during the last hundred years. For example in the State of Paraná, the primitive forests covering 84% of the whole land area of the State in 1855 had shrunk down to only 5% in 1980. This deadful situation arose a concern for reforestation in the both states, and the reforestation efforts in the last few decade have brought back the forest coverage in these two states back to more than ten percentages respectively.

In view of this history of deforestation and reforestation, it seems very important to survey how people feel and think about forests. Thus a survey which constitutes the basis of this study was carried out in 1984 on the citizens of Curitiba in the State of Paraná, and on the young people and forestry specialists in the State of Paraná and São Paulo in 1988. Forestry specialists here are researchers at the São Paulo State Forestry Institute. They are included in this survey since forestry specialists are socially influential in Brazil and their opinions are important in forest policy formation. The opinion of young people is important to consider the possible future forest policies. In this paper the opinions revealed by the 1988 poll are analyzed in comparison with the results of 1984 in Curitiba¹⁾ as well as with those of European countries and Japan²⁾.

Methods

The survey was carried out on five different categories of people both in the States of Paraná and São paulo.

The respondents were as follows:

- 1 High school students; a total of 112 students of the Dom Bosco Private School in

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Curitiba. They were in the second grade and ranged from fifteen to sixteen years of age. This school is rather highly ranked in Curitiba.

- 2 University students; 28 students of the Faculty of Forestry, Paraná University. Their ages ranged from nineteen to twenty-six years of age.
- 3 Agricultural technicians; 43 agricultural technicians from São Paulo. The survey on them was made at a meeting in Pindamonhangaba, São Paulo.
- 4 Forest researchers; 65 forest researchers working at the São Paulo State Forestry Institute. They belong either to the Division of Natural Forest or that of Artificial Forest.
- 5 Forest economists; 48 forest economists assembled for a forest economics meeting in Curitiba from every part of Brazil.

The questionnaire consisting of a face sheet and thirteen questions was handed to each respondent and then collected back after being filled in on the spot. In the survey carried out from May to June, 1988 the following five aspects were examined.

- 1 affections for forests in daily life.
- 2 mystic and holy feelings about trees and forests.
- 3 primitive and religious emotions toward nature.
- 4 attitude toward hunting.
- 5 propriety of forest management.

In evaluating the present poll, the results of the similar poll of 1984 in Curitiba, Brazil as well as those of 1978 to 1980 in Freiburg i. Br., Neuenburg, Goettingen and Hannover, West Germany, Nancy, France and Miyazaki, Ina, Tokyo, Tsuruoka, Kushibiki and Asahikawa, Japan were fully utilized for comparison.

Results and Discussion

1. Affection for forests in daily life

Fig. 1 shows the response to the question "What is your favorite tour destination? (Choose one)"

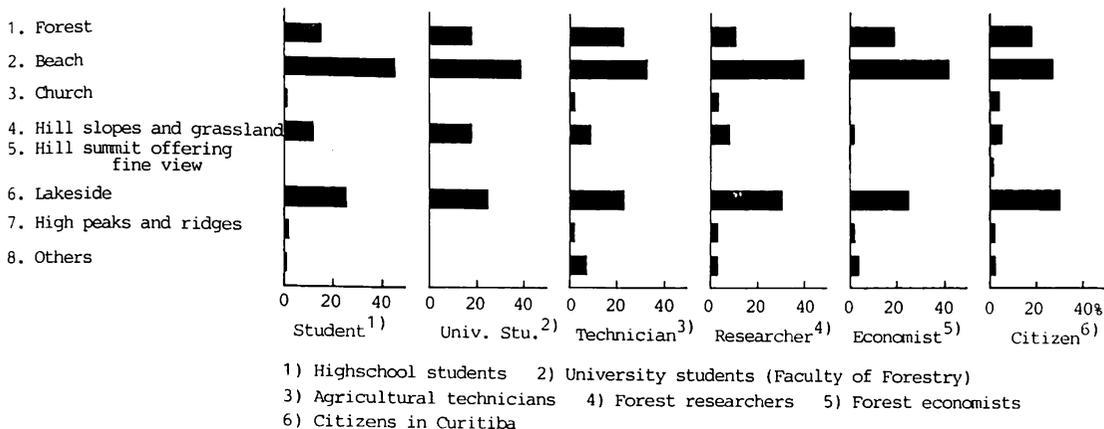


Fig.1 What is your favorite tour destination ? (Choose one)

It is clear from this Figure that the waterfronts, both beach and lakeside are Brazilian's exclusively favorite tour destination. The percentage who selected "forest" ranged from 11% to 24% depending on the group, a figure significantly less than 60% of West Germany, but significantly more than 5% of Japan.

Fig. 2 shows the answer to the question "Do you enjoy walking in the forest?". More than 80% of the people in each group selected "Enjoy". The percentage of forest walkers was less than 80% in Japan, while it was 92% in Nancy and more than 95% in West Germany. From the results above, it seems that Brazilians have deeper affection for forest than Japanese but are not as passionate as Continental Europeans.

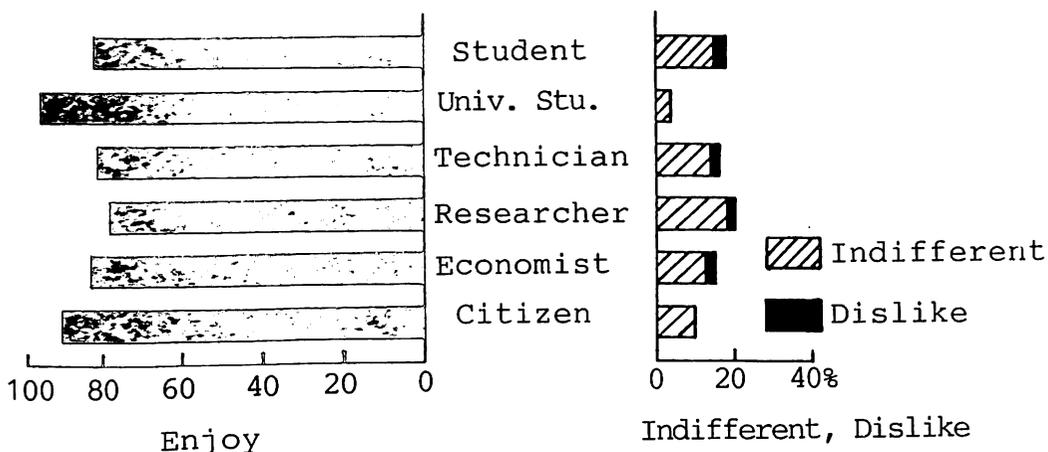


Fig.2 Do you enjoy walking in the forest?

2. On the mystic and holy feelings about trees and forests

To the question “When you look at a huge old tree, do you respond with a spiritual feeling?” 86 to 98% of the people in each group selected “Yes” as shown in Fig. 3. The percentage was much the same at about 90% in West Germany and the rest of Japan excluding Tokyo.

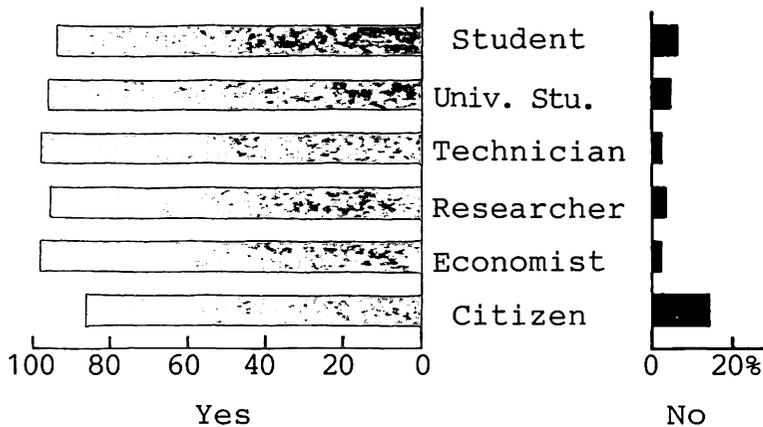


Fig.3 When you look at a huge old tree, do you respond with a spiritual feeling?

To the question “When in a deep forest do you experience a sense of mystery?” (Fig. 4), “Yes” ranged from 90 to 98%, while it was slightly more than 80% in Japan except Tokyo. From the results above it can be said that Brazilians have stronger mystic and holy feeling about trees and forests than Japanese.

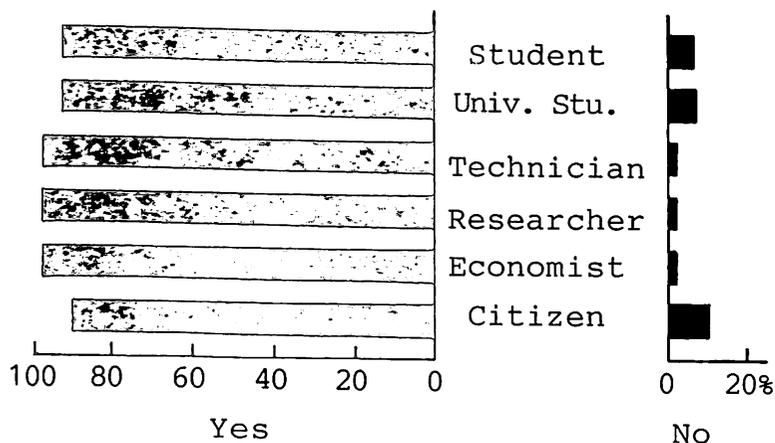


Fig.4 When in a deep forest do you experience a sense of mystery?

3. On the primitive and religious emotions toward nature

Fig. 5 shows the answer to the question “When you look at sunrise, sunset or silent mountain, are you moved emotionally?”. More than 90% of the people in every group except forest researchers selected “Yes”. To the question “Do you believe in a spirit in such natural things as mountains, valleys, streams, trees, plants etc. ?”, 69 to 89% of the people answered “Yes” as in Fig. 6. That percentage was higher than all the figures obtained in Japan and Nancy. It seems that the Brazilian have deeper primitive and religious emotion toward nature.

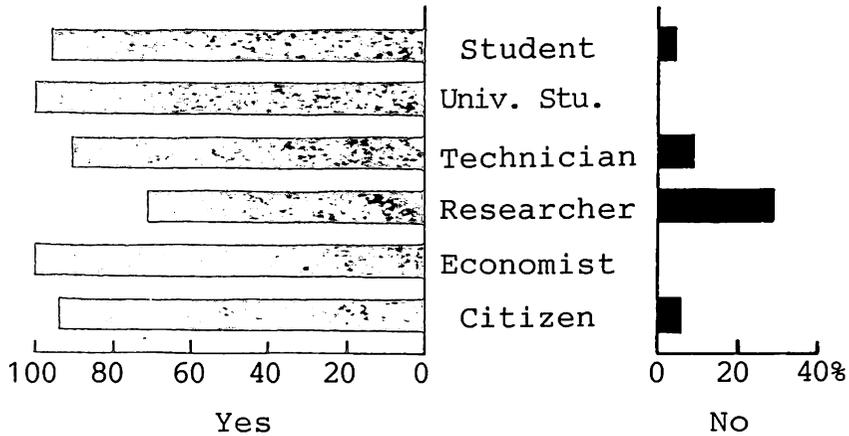


Fig.5 When you look at sunrise, sunset or silent mountain, are you moved emotionally?

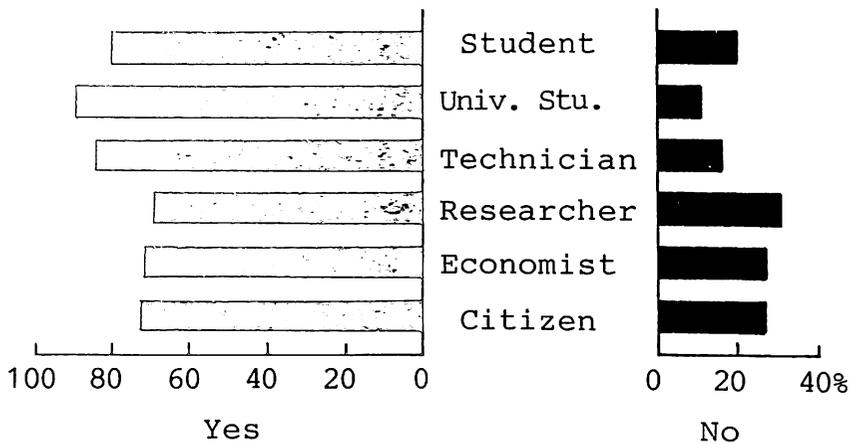


Fig.6 Do you believe in a spirit in such natural things as mountains, valleys, streams, trees, plants etc.?

4. On the attitude toward hunting

Firstly, a question "Which of the following sporting activities do you like best?" was asked to sort out "hunting" lovers. As shown in Fig. 7, the percentage of the "hunting" lovers was quite low. Fig. 8 shows the response to the question "Do you think hunting is a good sport?". In each group 5 to 23% of the people answered "Yes". The percentage of "Yes"

among the Curitiba citizens was higher than that of any other Brazilian group. And this value was almost the same as that of Continental Europeans.

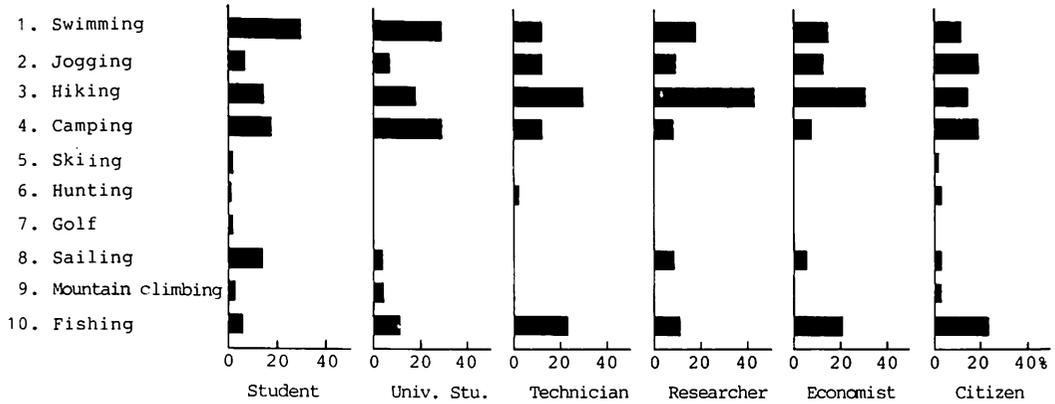


Fig.7 Which of the following sporting activities do you like best?

(Choose one)

- 1. Swimming 2. Jogging 3. Hiking 4. Camping 5. Skiing
- 6. Hunting 7. Golf 8. Sailing 9. Mountain climbing
- 10. Fishing

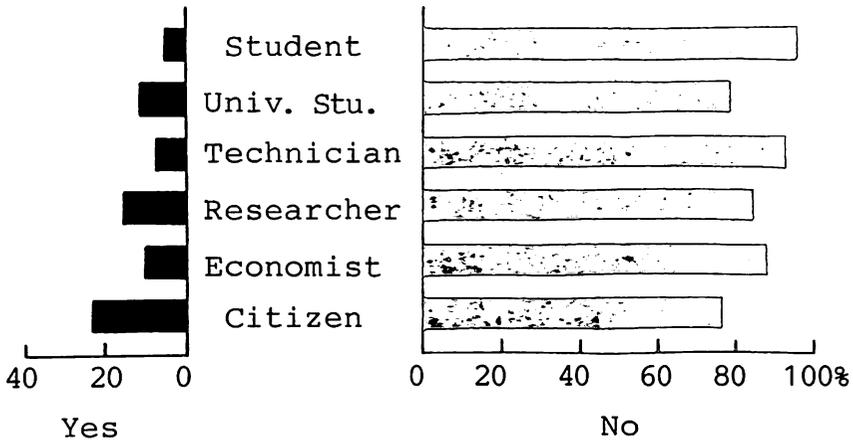


Fig.8 Do you think hunting is a good sport?

Fig. 7 shows other interesting results. In this question, the percentage of "hiking" lovers ranged 15 to 43%. Hiking lovers accounted for 30 to 46% in Japan, 53 to 67% in West Germany and 42% in Nancy. It seems that in spite of the love for walking in the forest (Fig. 2), poisonous snakes and other dangerous animals deter Brazilians from doing so. The percentage of people who selected "fishing" was rather higher than in other countries.

5. On the propriety of forest management

The answer to the question "Do you think a) Forests should be cultivated and controlled in order to look beautiful, or b) they should be left to grow wild." is given in Fig. 9. The pro-management answer ranged 45 to 87% in Japan, while it was about 80% in Europe. In Brazil it was more than 70% except for high school students. Forestry specialists i. e. the forest researchers, forest economists and forestry students favored management than did the other people.

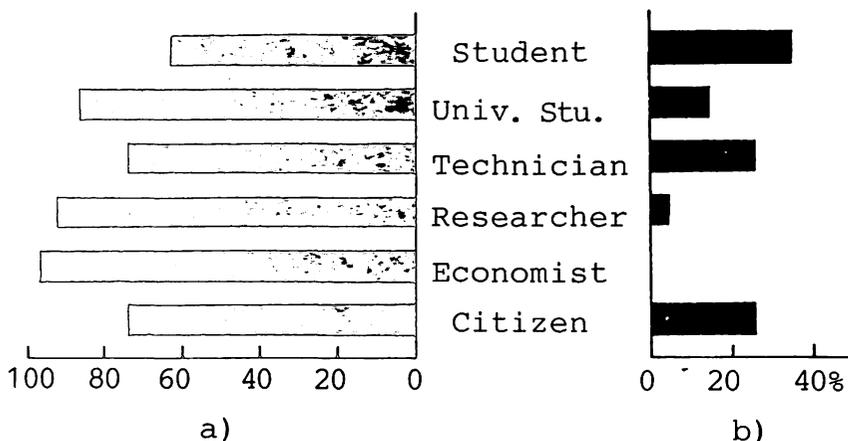


Fig.9 Do you think a) Forests should be cultivated and controlled in order to look beautiful, or b) they should be left to grow wild.

The next question was "Which of the following settings do you prefer? a) A cultivated natural environment-mixed farm, meadow and forest. b) Uncultivated nature-*virgin forest and wilderness.*" Fig. 10 shows that both the high school and university students opted for wilderness over cultivated nature. On the contrary, the other group made an inverse selection. It is interesting and worth noting that the opinion of young generation showed a marked difference from that of grown-ups. Fig. 11 and Fig. 12 show a comparison among high school and university students of three different countries. Fig. 11 shows that only high school students in Curitiba, Brazil selected more a) than b). That means they favored pro-management. Though high school and university students opted for wilderness over cultivated nature, as shown in Fig. 12.

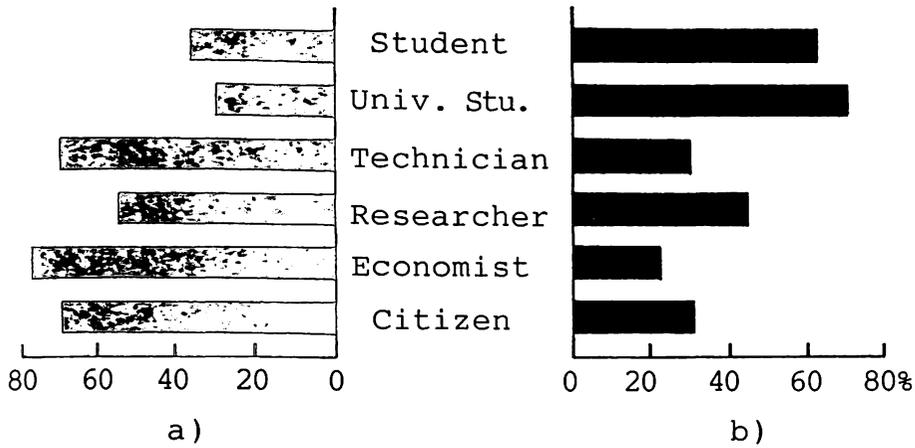


Fig.10 Which of the following settings do you prefer?
 a) A cultivated natural environment- mixed farm, meadow and forest. b) Uncultivated nature- virgin forest and wilderness.

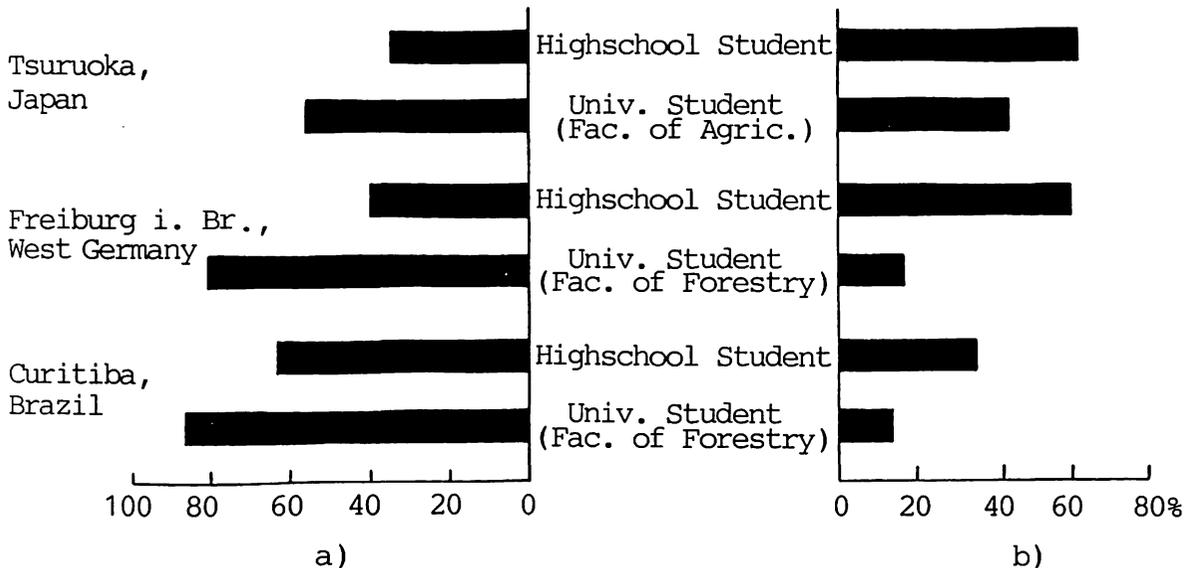


Fig.11 Do you think a) Forests should be cultivated and controlled in order to look beautiful, or b) they should be left to grow wild.

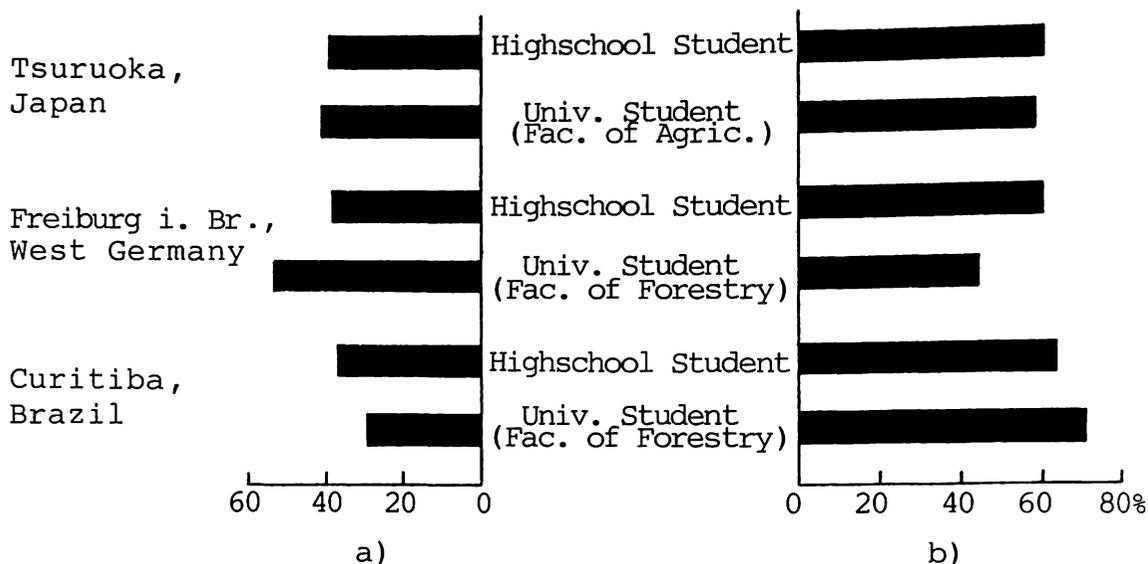


Fig.12 Which of the following settings do you prefer?
 a) A cultivated natural environment- mixed farm, meadow and forest. b) Uncultivated nature- virgin forest and wilderness.

From the results above it seems that the Brazilians-even high school students understand the importance of the forest management. The rapid deforestation in Brazil is likely to cause their attitude toward forest.

Summary

To investigate the Brazilians' attitude toward nature, an opinion survey was carried out in 1988.

The respondents were high school students, university students of the faculty of forestry, agricultural technicians, forest researchers and forest economists. The results of the poll were analyzed in comparison with the similar polls made earlier in Curitiba, Brazil as well as in Japan, West Germany and France. This survey revealed the following points:

- a Many Brazilians selected "beach" and "lakeside" as their most favorite tour destination. Although Brazilians' preference for forest was higher than that of Japanese, harmful animals in Brazilian forests seemed to deter people from walking in the forest.
- b Many Brazilians, even the young people, have strong mystic and holy feeling about trees and forests and deep primitive and religious emotion toward nature.
- c There were only a few pro-hunting in Brazil.
- d It seems that many Brazilians understand the importance of the forest management well. It may sound natural but forestry specialists showed a firmer opinion to manage forests to keep them beautiful.

e Young generations in Brazil the same as those in West Germany, Japan and Nancy favored the wilderness, but they understood the importance of forest management well.

References

- 1 Imanaga, M., Nakashima, Y., and Hosokawa, R. T.: International comparisons of attitudes toward nature (X I I). Questionnaire in Brazil, Transactions of the Meeting of the Kyushu Branch of the Japanese Forestry Society, No. 38, 29-30, 1985 (in Japanese)
- 2 Shidei, T. et al.: International comparisons of attitudes toward nature. Scientific Report of Toyota Foundation, I-007, 1-128, 1981 (in Japanese)