Pop-up book design of the West Sumatra endemic primates

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ABSTRACT: In 2020, the primate population in West Sumatra, Indonesia was very scarce due to a lack of knowledge and community awareness which resulted in wild forest burning, poaching, and the wildlife trade, especially in Bukittinggi, Agam Regency. Based on the author's data from the method of observation, interviews, questionnaires, and literature studies, knowledge about endemic Sumatran primates is still lacking, especially for children ages 7–12 years. The way to raise awareness for this endangered population is in the form of a pop-up book with the theme of introducing and protecting endemic primates in West Sumatra, Indonesia. The pop-up storybook's design style can attract the interest of elementary school children ages 7–12 because of its three-dimensional illustrations that can be touched and folded, creating great enthusiasm. It is hoped that this book design will provide readers with a pleasant reading experience.

Keywords: endemic primates, pop-up book, design, West Sumatra, Indonesia

1 INTRODUCTION

Rare primate populations in Bukittinggi, Agam Regency, West Sumatra, especially in the wild, are increasingly shrinking. Six endemic Sumatra primates are *Siamang Hitam*, *Simpai*, *Kukang Sumatra*, *Owa Ungko*, *Lutung Kelabu*, and *Sumatran Orangutan*. These primates are almost extinct due to a lack of knowledge and community awareness from an early age. According to West Java Profauna Coordinator (PFI), Nadya Andriani, many Indonesian people do not know the role primates play in the preservation of human life, such as playing a role in the spreading of seeds in the forest (Muhartati 2017). Many government regulations were made to protect wild animals and especially for Indonesian primates, however these regulations do not guarantee the preservation of primates. Wild animals, especially primates, are considered to be very disturbing to crop yields. When entering agricultural land, these primates will take or eat part of the cultivated plant and then leave (Wallace & Hill 2012). Due to the scarcity of primate food in nature, agricultural plants are considered more nutritious and cause primates to attack crops on agricultural land. These animals often interfere with the crop, which is why primates are called plant pests by the public (Utami 2016). According to the head of the Bukittinggi Natural Resource Conservation Center resort, the scarcity of primates in the Agam Regency is due to their habitat being disturbed by humans. This is a result of hunting wild animals, and their number of births is small because they are monogamous animals, which means they mate for life (Ciko 2020). Endemic Sumatran primates in Bukittinggi, Agam Regency, West Sumatra face extinction due to the illegal burning of forests, poaching of wild animals, and wildlife trade. This occurs because of the public's lack of awareness and knowledge about the rare species of primates that live in their environment (Aida 2020).

In Bukittinggi, Agam Regency, West Sumatra, children (boys and girls) aged 7–12 years need education about endemic Sumatran primates, which are almost extinct. Therefore, it is imperative that an awareness of these primates and their impending extinction be taught from childhood so that we can expect the next generation to protect the forest ecosystem. Therefore, the authors are interested in designing an informational medium about rare primates in West Sumatra, Indonesia, especially in Bukittinggi, Agam Regency, where they are almost extinct.

This medium will be in the design of pop-up books that aim to provide education and awareness to children about rare primates in Bukit Tinggi, West Sumatra. The selection of books as a medium offers something concrete that children can touch. Also, books are healthier for children to use as compared to gadgets (Wulandari & Arumsari 2017). With the form of three-dimensional illustrations that can be touched and folded, children are more enthusiastic and have a pleasant reading experience. The pop-up book can arouse the interest of infants or children, increasing understanding of the story and increasing learning (Wen et al. 2015).

2 METHOD

The qualitative method was used in this study to analyze the data documentation, determine the types of respondents, display data for each variable, and test hypotheses to answer the problem formulation. The analysis is using SWOT analysis to used for this research to evaluate the strengths, weaknesses, opportunities, and threats involved in an organization, plan, project, person, or business activity (Gurel 2017).

2.1 *Data collection methods*

Data collection techniques were achieved through observation, interviews, and literature studies. Observations were carried out by gathering information about rare primates at the Natural Resource Conservation Center and Kinantan Buktitinggi Wildlife Park. In addition, direct observations were the best way to discover the right way to get the information about these endangered primates to the public. Interviews were conducted with experts on Bukittinggi primates, and the experts interviewed were considered part of the book design process. A literature study was completed by collecting data from various literature sources and a variety of media, such as books, articles, and the internet.

3 RESULT AND DISCUSSION

3.1 *Message concept*

The message in the pop-up book design is “protect primates”! It will strengthen children’s understanding of rare primates whose population is diminishing and teach them the essential roles these primates play such as spreading seeds in the forest. The design contains messages and information delivered to children aged 7–12 years who are currently in elementary school. The pop-up book design expects to change children’s views toward endemic Sumatran primates, which are rare, and invite them to love the forest as a place to live for endangered animals.

3.2 *Creative concept*

The storybook will be made in a pop-up style, using a cartoon illustration style, fonts that are simple and easy to read for children aged 7–12 years, and also use bright and natural colors. The pop-up book medium can attract children because it has a movable or three-dimensional element, thus providing a more interesting visualization of the story.

3.3 *Visual concept*

Visual concepts are created based on references, and the analysis results begin from sketching to the digital process.

Color

The colors used are bright, natural, and bold. Color can affect human emotions and describe a person’s mood (Darmaprawira 2002). So, the use of bright colors represents the nature of cheerful

children. Natural colors use green, brown, and yellow, which represent natural colors and represent the forest where primates live in Agam District, used as a setting in for the story. Simultaneously, bold colors use red, which reflects a child's character in a pop-up book story.

Typography

The book's typeface uses Berlin Sans FB. This typeface is bold, so it gives the impression of a massive and concentrated space (Sihombing 2017). Therefore, bold letters are better suited for short words like titles. The book content uses seven Soft Sans serif typefaces. This font is easy to read for children.

Figure 1. Berlin Sans FB Demi (left) and Soft Sans Serif 7 (right). (Source: www.fontoteka.com, www.1001freefonts.com).

Illustration style

The style of the illustrations that will be used is a cartoon style in the type of vector. Cartoon illustrations are suitable for children because cartoon characters have funny shapes that attract more attention from children. This type of vector image is used because the vector has a high resolution, so the lines and colors produced in the vector image will be sharper and can be applied to various media sizes, especially for supporting media.

Figure 2. Vector illustration. (Source: www.gumroad.com).

Character style

Character design uses references and analysis of native forms and characters from the environment in Bukit Tinggi, West Sumatra.

Figure 3. Main character in story (left) and endemic Sumatran primates. (Source: Kevyn Kurnia Adha 2020).

3.4 Design result

Character and background design

The first character in the storybook depicts a child who is active, funny, and has a caring nature about the environment wearing typical West Sumatra clothing. The second character reflects a forest ranger in Bukittinggi, Agam Regency, West Sumatra, which saves wildlife protected from genetic damage. Simultaneously, the last primates are the six species of endemic primates of West Sumatra that are protected by the government. For the background, the illustration uses the Gadang Minangkabau house, Ngarai Sianok (Sianok Canyon), and the tropical forest atmosphere in Bukittinggi, Agam Regency, West Sumatra.

Figure 4. Character and background design. (Source: Kevyn Kurnia Adha 2020).

Media design

The book is printed in hardcover with a size of 20 x 20 cm with doff laminate finishing and 230 gr art carton material for the contents page.

Figure 5. Book cover. (Source: Kevyn Kurnia Adha 2020).

Figure 6. Pop-up book design. (Source: Kevyn Kurnia Adha 2020).

4 CONCLUSION

The primate population growth in Agam District, West Sumatra, is decreasing, causing the scarcity of these animals. Therefore, a lot of information about the rare primates in Agam Regency, West Sumatra, is needed. It is hoped that the pop-up book design regarding rare primates in West Sumatra will become one of the media that can increase public awareness of the importance of protecting rare animals so that their sustainability is maintained essentially for kids age 7–12 years. Hopefully, the information and education about the rare primates of West Sumatra can be carried out in further research through other forms of media. It is important to educate about the preservation of rare primates so that young people can be expected to preserve the natural ecosystem.

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