

Correlation Analysis of Campaign Materials' Mode and Attributes Towards the Retention of the Respondents on Biodiversity Conservation in Carranglan, Nueva Ecija, Philippines

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ABSTRACT

People need to connect with biodiversity and understand it to identify what can be done to slow and even reverse its loss. It is therefore vital to evaluate the efficiency of IEC campaigns within the country's local and tribal communities. With the assistance of these instructional campaigns, it will boost awareness of the environment and assist change conduct by improving the participation of people, encouraging political choices that will safeguard the environment. This study was conducted mainly to distinguish the different mode of biodiversity conservation campaign used by the participants to determine the retention of the various campaign materials of a biodiversity conservation campaign. The questionnaire consisted of the method and characteristics of the IEC materials using a 5-point Likert scale to correctly assess the attitudes and views of the respondents regarding the effectiveness of the biodiversity campaign. Correlation analysis in Chi-Square was done to determine the relationship of the campaign modes and attributes with the retention of the biodiversity conservation campaign materials and strategies by the respondents. Results revealed that collateral materials, social media, and print media (brochures and posters) are effective instruments in the retention of participants on the relevance, significance, and effect of biodiversity conservation.

Keywords: collateral materials, printed materials, social media, attribute, mode, biodiversity conservation, retention

INTRODUCTION

For business or subsistence reasons, many stakeholders rely on the country's biodiversity riches. However, this dependence is essential because by empowering communities, it offers an extra avenue for financial diversification and poverty reduction. The Philippines is a tropical archipelago of 7,100 islands located off the southeastern coast of mainland Asia. It has vast natural resources that are sources of food, water, shelter, and livelihood for its rapidly growing population. It contains 2/3 of the earth's biodiversity and roughly 70-80% of the world's plant and animal species as one of the 18 mega biodiversity countries due to its geographical isolation, diverse habitats and high rates of endemism. Inopportunately, it is also one of the hotspots with a significant amount of endangered species, making it one of the top conservation areas in the world (CBD, 2015). The Philippines is projected to have lost 2.1% of its forest each year from 2000 to 2005, the second-fastest in Southeast Asia and the seventh in the globe (Echanove, 2008). Population growth and exploitation of forests are placing a lot of pressure on forest assets, including biodiversity.

The Philippines enacted RA 9512 or the National Environmental Awareness and Education Act of 2008, which enables the State to formulate a policy of protecting and educating people to a balanced and healthy ecology by the harmony of nature. Several organizations in the Philippines and other well-known government agencies such as the Foundation for Philippine Environment (FPE), Haribon Foundation, Biodiversity Management Bureau (BMB), Institute for Climate Change and Environmental Management (ICCEM) of the Central Luzon State University (CLSU)) are hosting seminars and training sessions, concerts for a cause and even using social media (Facebook, Twitter and Instagram) to promote biodiversity conservation.

However, humans are naturally inclined to disregard issues that are not directly present in his life. The continuous demands for food, energy, and other goods, coupled with the pressures exerted by rapid development, and economic growth are increasing, put more stress on the country's natural environment mainly resulting in ecosystem destabilization, loss of biodiversity and destruction of natural habitats. Some people lack knowledge of the biodiversity crisis. Some are aware of the effects of biodiversity loss but do not know what they can do to solve the problem. Some believe that they do not have the time or effort to make a difference. Small activities, however, can have a real impact on biodiversity loss problem.

The municipalities of Pantabangan and Carranglan in Nueva Ecija houses the Pantabangan-Carranglan Forest Reserve. The Pantabangan Dam and Reservoir is located in also these areas which supply irrigation water to Central Luzon farms. The sources of income of residents are wood and rattan craft making, animal dispersal, and small stores. Many residents depend on the goods and services provided by the watershed for their livelihood. The activities commonly being practiced in these areas are kaingin and charcoal-making, which affect the biodiversity in these areas.

Environmental awareness in vulnerable communities like Carranglan, Nueva Ecija can be improved through both formal, and non-formal education. Campaign materials such as print media, collateral materials, seminars, and social media are aspects that can significantly contribute to environmental protection and conservation awareness in these fields.

Effective biodiversity campaign and communication should engage people and encourage them to enjoy, conserve, and protect the biodiversity that is all around them. People must be familiar with all the steps to undertake to enhance their biodiversity and maximize their long-term benefits. The campaign should also induce a more profound sense of shared responsibility and ownership of biodiversity, thereby persuading people to protect it.

It is highly useful to communicate the concept of biodiversity by appealing to the emotions of the local stakeholders. Helping them to undergo bitter and personal experiences in nature can invoke in them a sense of compassion for biodiversity. Native and indigenous species in one's country are people's pride. Local campaigns can try concentrating on a species that is found in the local area and will be recognized by the community. Promoting nature action for local stakeholders in developing consciousness, comprehension, and empathy for biodiversity will lead to their active involvement and participation in the conservation and preservation of biodiversity.

People need to connect with biodiversity and understand it to identify what can be done to slow and even reverse its loss. Hence, evaluating the effectiveness of biodiversity awareness thru IEC and campaigns within the tribes and local communities of the country is essential. The educational campaigns can increase environmental awareness and concern and can change behavior by making citizens more engaged that supports political decisions that will protect the environment.

FRAMEWORK

Biodiversity is notoriously difficult to measure, which makes it difficult to conserve. Ignored in the past by awareness-raising campaigns, marketing is becoming an important means of presenting and selling the environmental concepts, particularly biodiversity in an attractive way easily understood by the public (Gunn, 2000). The analysis and selection of media and other communication aids are essential. Promoting the concepts and realities of biodiversity could engage the mindsets of the different stakeholders involved by informing them, sharing values and beliefs in the expectation that can be embraced over time.

Preparatory work indicated that the concept of 'Biodiversity' is either unfamiliar, or associated with distant wild life. It was therefore decided that the campaign must focus on showing the relevance of biodiversity and the implications it has for people's lives. To act, people must first realize that human society is a part of a larger system, and that the survival depends on the state of this system. Messages should highlight the fact that investment in biodiversity conservation will help safeguard the continued provision of nature's benefits such as food, medicines, fresh water, pollination on which people are dependent on.

Campaigns are often most successful when they are targeted at specific demographic groups because information can be tailored to the activities, needs and challenges of the group. Additionally, involving organizations and local communities in environmental protection and enforcement can create a sense of stewardship towards the environment, ease hardship through the collaboration and provide a forum for new ideas and greater participation.

The print, broadcast, outdoor and seminar/workshops can be powerful tools in educating the public on environmental matters specifically biodiversity. In order to perform this role effectively, it is significant to determine the preferred modes of biodiversity campaigns and its individual attributes in relation to the effectiveness of the campaign to the respondents.

Determining the right mode of biodiversity campaign will have a better impact, recall and reach to stakeholders hence leading to audience retention. The biodiversity campaign identified should not only support the marketing message but also set the objective of the project apart from the others (Greene, 1992). The different modes of biodiversity campaign and their attributes produced with the aid of survey questionnaire will enable to determine the preference, retention of the promotional campaigns and the effectiveness of the materials to the target stakeholders in preserving and conserving the biodiversity in Carranglan, Nueva

Ecija.

Figure 1 shows the conceptual framework of the study which depicts that by determining the demographic characteristics of the respondents, the given modes of biodiversity campaigns and their attributes and content could aid in the effectiveness of biodiversity campaign; and to further help retain the contents of the campaign in the minds of the respondents.

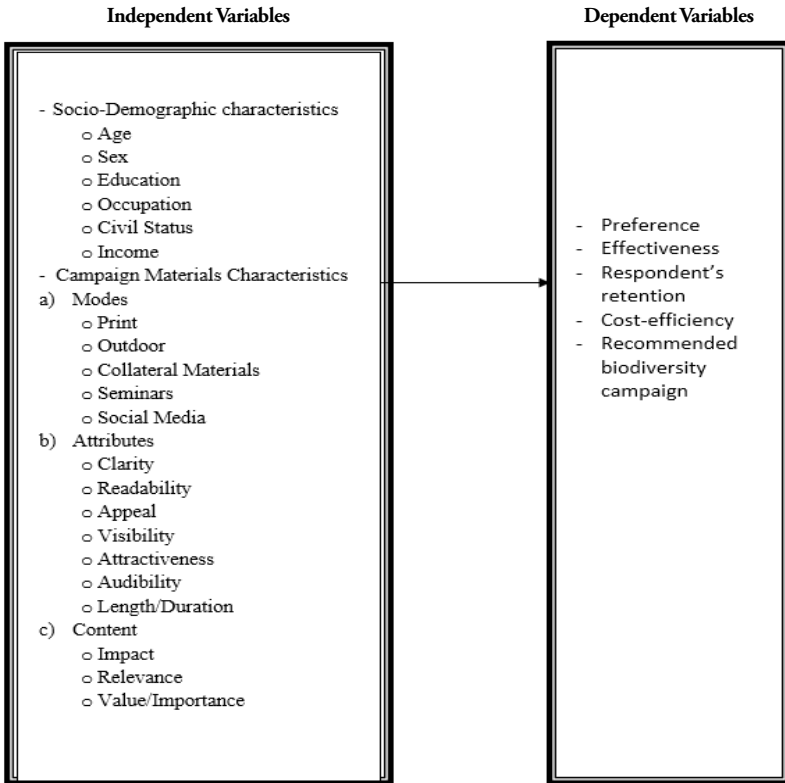


Figure 1. Conceptual framework of the study

OBJECTIVES OF THE STUDY

This study was conducted primarily to identify the different biodiversity conservation campaign materials, their attributes, and content. The study also determined the relationship of the campaign's methods and characteristics with the retention of the biodiversity conservation campaign materials and strategies by the respondents.

METHODS

The area of study is at Sitio Binbin, Brgy. General Luna in Carranglan, Nueva Ecija, Philippines, especially the inhabitants of the Sitio and the indigenous people closer to the conservation site of biodiversity. There were a total of 83 respondents who were representatives of each sector in Sitio Binbin, Barangay General Luna, Carranglan, Nueva Ecija. All of whom were subjected to campaign equipment and attended ICCEM's training and workshop as part of the project financed by PCAARRD, DOST.

A questionnaire was used to gather the mode, attributes, contents, and the respondents' retention of the biodiversity campaign data from the respondents, relative to their level of awareness and promotional material preferences. For elementary school teachers, local government and municipal unit employees and officials, grade school students, and indigenous people, the Tagalog/Filipino version of the questionnaire were used to ensure correct understanding of the questions (Table 1). The questionnaire consisted of the modes, attributes, and the contents of the IEC materials using a 5-point Likert scale to accurately measure the attitudes and opinions of the respondents about the effectiveness of the biodiversity campaign used.

The Central Luzon State University (CLSU), Institute for Climate Change and Environmental Management, provided all advertising campaign materials. A 5-point Likert scale type of survey questionnaire with the following components: biodiversity campaign materials used, their characteristics, and contents distributed. The efficacy of the respondents' evaluation of the biodiversity campaign recognition and retention used open-ended questions.

Table 1

Modes of biodiversity campaign used in the study

CAMPAIGN STRATEGIES	BIODIVERSITY CAMPAIGN MODES USED	
Print	Posters Pamphlet	Leaflet Brochures
Outdoor	Field Demonstration	
Seminar/Workshop	Seminar-workshop on Biodiversity Conservation in Carranglan Watershed, Carranglan, Nueva Ecija	
Collateral Materials	Ecobags Shirts	Pens Notebook
Social Media	Facebook Instagram	Twitter

ICCEM had already conducted a pre-test with the same respondents and gathered the initial data to provide timely feedback. In comparing the collected information, the questionnaires offered sufficient time for the participants to evaluate the campaign materials and measure their retention level, which also determined the efficiency of the campaign.

The data acquired in the study were analyzed descriptively. In determining the retention rate of the respondents to the campaign conducted, preferred modes, attributes, and contents of the biodiversity campaign utilized the close-ended questions using the 5-point Likert Scale, and the open-ended questions.

Chi-Square Correlation Analysis was conducted to determine the connection of campaign methods and characteristics with the respondents' retention of biodiversity conservation campaign materials and policies. Frequency counts and percentages were used to assess the preferred mode of campaign products, percentage analysis to determine the characteristics, content, and retention rates of biodiversity campaigns. In the percentage analysis, the proponent calculated the total quantity of campaign products retained over the total amount of campaign materials used.

All statistical analysis was carried out using the Social Sciences Statistical Package (SPSS) with a probability rate of 5%.

RESULTS AND DISCUSSION

Demographic Characteristics

A total of 83 respondents, who were representatives of each industry in Sitio Binbin, Barangay General Luna, Carranglan, Nueva Ecija, were exposed to the campaign materials (Table 2).

Table 2

Study respondent categories in Sitio Binbin, Carranglan, Nueva Ecija

CATEGORY	NUMBER	PERCENTAGE (%)
Elementary school teachers	3	3.61
Grade students (Grades 4, 5 & 6)	14	16.87
LGU & Government employees	8	9.63
Indigenous people	58	69.87
TOTAL	83	100

The modal age group is above 41 years of era, with about 36.1% of the complete sample; followed by 20.1% from 26 to 30 years of age. The apparent result of this finding is the predominance of middle-aged participants for campaign materials relative to the young and elderly population. These participants were keen to explore the advantages of the campaign because they were more worried about the location's biodiversity condition. Females are discovered to be slightly higher than men by 12%, which could suggest gender neutrality in the interest of biodiversity conservation campaign.

More than eighty percent (81.9%) finished the 6th grade while 4.8% and 2.4% finished tertiary and masters education, respectively. This data depicts how distance can significantly affect their learning. Participants living far from the municipality or closer to the mountain range are having a tough time going to school, pushing them to focus on agriculture and animal husbandry. On the other hand, more than seventy percent (73.5%) of the total participants were married, concentrating on raising a family instead of completing their education. Moreover, most of the respondents residing in the research site were more

interested in agriculture, gardening, cattle, and poultry raising than working in a private and public organization (55.4%). The respondents residing closer to the conservation site (indigenous people) consider farming as their primary livelihood with an estimated monthly income of Php 6,000 to Php 15,000.

Mode of Campaign Materials and their Attributes and Content

Table 3

Collateral materials and their attributes as perceived by the respondents

ATTRIBUTE		MODES			
		Eco bags	Shirts	Pen	Notebook
<i>Appeal</i>	Reminding the importance	98.59%	98.59%	88.73%	88.73%
	Functional	98.59%	98.59%	90.14%	90.14%
	Has entertaining look	98.59%	98.59%	63.38%	63.38%
	Has an intriguing effect	98.59%	98.59%	87.32%	87.32%
	Instrumental at home	98.59%	98.59%	90.14%	90.14%
	Serving as Inspiration to Act	98.59%	98.59%	61.97%	61.97%
	Useful to their lives	98.59%	98.59%	90.14%	90.14%
<i>Visibility</i>	The images have the right size	90.14%	90.14%	85.91%	85.91%
<i>Attractiveness</i>	The colors are suitable to the them	95.77 %	95.77 %	84.50%	84.50%
	Enticing to read	98.59%	98.59%	84.50%	84.50%
	Believable	98.59%	98.59%	88.73%	88.73%
	Eye-catching	98.59%	98.59%	63.38%	63.38%

Table 3 shows how environmental bags are noticeable to them as it is straightforward for them to see and comprehend the message transmitted in the logo and design integrated into the bag. Eco bags have a large-scale appeal, according to Blattberg et al. (2013). Besides being reusable, they have endless designs and texts that can be incorporated to fit the media.

Eco bags are attractive as this is an efficient way to market advocacy, brand, event, or company (Eco Promotional Products, 2014). Bags are considered to be long-lasting branded and highly reusable goods that can continually remind customers of the message and advocacy of the product. Any promotional message imprinted on the bag will convey the message whenever the individual carries the bag.

The majority of respondents (98.59%) also regarded the environmental bags as very appealing as they said the design, color, and image matched the campaign message (Table 3). Eco bags are durable, functional, simple to customize in a multitude of colors and materials that can be provided and circulated. Eco bags are appealing because they are cost-effective. They come in a variety of colors,

sizes, and range from one compartment to more mixed bags with strengthened shoulder straps or various pockets.

Also, most participants regarded shirts as very appealing (98.59%). According to PPAI (2014), the inclusion of the logo and name of the institution in the jacket are helpful to them vital, mainly if the message was relevant to the participants. Shirts are regarded to be a sign of status, mostly if the fabric and imprint are of high quality. Similarly, the more helpful the item, the more ready people are to take one and hang on it. The longer the thing is around, the higher the advertising message's reach and retention.

Most of the participants (90.14%) regarded the design and text imprinted on the shirts, as shown in Table 3. The shirts are attractive, and the texts are evident and straightforward to comprehend, which helps to raise awareness of advocacy (Levy, 2012).

Also, 98.59% of participants indicate that shirts are appealing to them. Usually, customers are thankful when they receive logo imprinted apparel products. Even if it is a classy embroidered shirt to a silk-screened shirt, it is regarded to be a walking billboard as they wear it every time (threemarketers.net, 2014). Shirts or apparels are appealing as they are both promotional and functional. Mueller (2014) said shirts have this customization impact on customers that can be very attractive.

Approximately 88.73% of participants, as shown in Table 3, indicated how appealing writing instruments such as pens were to participants. Pens are beneficial to people, according to Jiang (2005). People always run out of pens and need more, yet they're still pleased to receive them and appreciate the designs. Writing instruments are also useful, particularly for farmers who need to calculate and write their transactions and expenditures in time (Mueller, 2014). Also, when participants receive pens, there's a distinct feeling, because it's not just the ink that influences them, but the distinctive experience of using the pen in writing.

Also, 85.91% of participants regard the pen prints as noticeable even it is tiny as it can still depict the logo, color, and message (Table 3). The majority of participants (84.50%) said that pens were appealing campaign materials for they can adapt the different colors of the theme, matching the natural shades of green and brown. Pens are trendy and cost-effective and are regarded to be ever-reliable. Fifty-six percent (56%) of individuals liked or valued getting pens and used their logo pens three or four times a day. Research by Mueller (2014) encourages the outcomes of Jiang (2005) that shirt-like pens and notebooks can also be tailored to the consumer's preference, making it attractive.

However, the significance of biodiversity is the only characteristic of the notebook that the participants deemed appealing. All the other components used were also attractive to them, but some of the participants (2%) thought of it either not engaging or ineffective. Data suggests that the design, logo, colors, and messages of notebooks helped participants to remember the campaign message. However, for some participants, notebooks were not helpful to them.

Notebooks have a surprising effect on parents and kids because their kids can use them, and the kids can demonstrate the message and product at the classroom and to their colleagues. They also thought that notebooks and notepads are great promotional tools because they can be handy as writing instruments by distinct age groups as a partner for the pen.

The majority of participants (85.91%) agreed that notebooks were very efficient in providing the campaign message in terms of visibility. The participants stated that the front cover page of the notebooks had more room compared to the pens in which the advertisers had more place to integrate their layout and texts.

Most participants (84.50%) preferred notebooks as appealing products for supporting biodiversity, and the notebooks provided to them were also lovely. Besides its usefulness and functionality, whether it is a school or an office product, the material will serve as a type of advertising and promotion with the logo and design imprinted on it. Notebooks are not just about expression, but the person's usage in writing significant facts, information, and stories that can be a component of good memories. The results of this research are in line with those of Jiang (2005) and Mueller (2014) on advertising products.

Larson (2014) claimed that these campaign materials were essential because of their impressions on the participants. The longer the individual keeps the item. More memories will form the more prolonged the individual holds the object. It makes when anyone else see it, helping the individual remember the type of campaign or product received and remember the message. It can also be useful to the receiver relative to the message for better recollection in the future.

Social networks are computer-aided instruments that enable individuals or businesses to generate, share, or exchange data in virtual communities and networks. The social media produced for the research were Twitter, Instagram, and Facebook, with a current more than 13,000 supporters.

More than fifty (55.4%) of the total participants, mostly from different ages ranging from 11 to 36, had access and were acquainted with social media. Moreover, the frequency of its use was quite frequent. Table 4 revealed that clarity and attractiveness of the campaign materials are essential characteristics among

all participants (100%). Social networks like Facebook, Instagram, and Twitter urged the crowd to read with the mixture of creativity in terms of design and color mix, which is why the public entered and visited the site.

Table 4

Social network and its characteristics perceived by the participants

ATTRIBUTES		PERCENTAGE
Clarity	Full of information	100%
	The message is easy to understand	100%
	The message is easy to remember	80.40%
	The letters and pictures used are suitable for the theme	95.65%
Readability	The presentation is very noticeable and pleasing	43.40%
	The letters and font used are of the right size and style	97.82%
	The font style is easy to read	97.82%
Appeal	Attracts you to attend	80.43%
	Easy to comprehend	97.82%
	Useful to their lives	78.26%
Visibility	The images and texts used are at the right size	82.61%
Attractiveness	The background music and images	95.65%

Also, Table 4 shows that 82.6% of the 46 participants who used and exposed to social media said the text and pictures were noticeable enough for them to read and see. The messages transmitted in the social network, are evident in terms of data that is simple to comprehend. In terms of readability of the social media campaign, most participants (97.82%) indicated that the letters, text, font styles, and designs were simple to read and comprehend.

The majority of participants using social media agreed on how effective and attractive it is for them. Social networks improve brand recognition and support for these services as new channels for the voice and content of the campaign. Social networks are also more convenient and more available to customers who

have access and acknowledge the campaign or product for fresh customers and customers. Visual materials in social networks (text, images, and videos), are effectively essential in conserving biodiversity (Demers, 2015).

Moreover, most participants (80.43%) regarded the social media campaign as extremely efficient in terms of attraction (80.43%), visibility (82.61%), and attractiveness (80.43%). Social media creates brand visibility allowing advertisers to have networking opportunities (Caffeine, 2012), while marketing and branding are becoming an essential component of client outreach (Daye, 2015). It reaches customers of all ages, nationality, and ethnicity, which make it vital as a social platform. Various social media posts allow community-based aid organizations to build linkages, assist, and promote any campaigns. The social network interacts with 300 million clients globally. It is becoming more appealing because it is simple to set up and visually enjoyable and engaging to do. Social media enables users to personalize and customize their account layout and have the authority to decide what to share, post comparatively distinct campaigns and product advertisements helping to generate consciousness and brand loyalty (WordPress, 2014).

Table 5

Percentage and number of participants per category who responded and chose the outstanding characteristics of social media as a strategy for a biodiversity conservation

	Student	%	Govt. Employee	%	Indigenous People	%	Teacher	%
Attracts you to attend	7	50.00	9	81.82	29	63.04	1	8.33
Easy to comprehend	7	50.00	9	81.82	29	63.04	1	8.33
Useful	7	50.00	9	81.82	29	63.04	1	8.33
The images have the right size	7	50.00	9	81.82	29	63.04	1	8.33
The music & images are enticing	7	50.00	9	81.82	29	63.04	1	8.33
Believable	7	50.00	9	81.82	29	63.04	1	8.33
Captivating	7	50.00	9	81.82	29	63.04	1	8.33
Color matches the theme	7	50.00	9	81.82	29	63.04	1	8.33

Table 5 also states that learners and public staff regarded the social network as appealing, visible, and attractive. Students see the social network as one manner to learn and interact. It is also considered as their reference desk as it offers responses to their inquiries. Employees, specifically public staff, understand the uses and activation of social networks because they have exposure and internet access.

Print materials were the simplest to distribute among all the campaign materials submitted and circulated; hence, most participants (97.6%) were more responsive to seeing these materials.

Table 6

Printed materials and their attributes as perceived by the respondents

ATTRIBUTES		POSTER	BROCHURE	LEAFLET	PAMPHLET
Clarity	The message is clear	62.96%	69.13%	46.91%	96.30%
	Easy to comprehend	62.96%	69.13%	46.91%	96.30%
	The message is accurate and precise	62.96%	69.13%	46.91%	96.30%
Readability	Easy to understand	62.96%	56.79%	30.86%	46.91%
	The letters are easy to read	62.96%	96.30%	30.86%	30.86%
	The designs are comprehensible	61.7%	45.67%	96.30%	30.86%
Appeal	Easy to remember	74.07%	69.13%	96.30%	96.30%
	Functional	69.13%	96.30%	96.30%	96.30%
	Entice you to take a second glimpse	56.79%	96.30%	30.86%	96.30%
Visibility	The images and texts used are in right size	55.56%	96.30%	30.86%	30.86%
Attractiveness	Captivating	71.60%	96.3%	30.86%	30.86%
	Believable	96.30%	69.13%	30.86%	30.86%
	Eye-catching	96.30%	69.13%	30.86%	48.14%

Table 6 illustrates that 62.98% of participants agreed that the posters have the capability of conveying messages in brief phrases, and are very accurate in transmitting the message of the campaign. On the other hand, the posters have font styles, design, and size that can genuinely be seen and noticed.

As revealed in Table 6, most of the participants viewed posters as appealing, visible, and attractive. Based on the attraction of the posters, 96.30% of the participants regarded them as very appealing owing to their color richness, which matched the theme and atmosphere. Overall, posters were eye-catching and allowed readers and passers-by to think more in-depth about the significance of biodiversity.

Posters are ample, visible, and attractive, and are useful marketing instruments for multiple kinds of organizations involved in separate companies. Similarly, posters can attract onlookers from a distance and accommodate a larger quantity of text and picture. Correspondingly, they are easy to spot and read and can be repositioned anywhere in the neighborhood (captivating-signs.com, 2016).

Posters are also essential for a place's life and culture. These may embody accessibility, directness, simplicity, and action. Posters also promote a civic culture that reflects something more profound, creativity, enthusiasm, advocacy, thoughts, entrepreneurship, and even community political ideals.

Among print advertising, posters allow repetition because individuals are exposed to them regularly. Seeing the message often helps drive the message home and can be instilled into their minds. Posters are cost-effective and practical for advertisers while they are free for budget-friendly audiences. Posters have the authority to reach individuals who are actively looking for something to do, whether committing to advocacy or doing an activity (Peer, 2012).

Brochures are informative paper documents. Four brochures were used and circulated with subjects related to wildlife hunting, slashing, and burning (kaingin), mining, and biodiversity conservation to the participants.

About 96.30% of the respondents claimed that brochures are appealing in terms of functionality and attraction. It was captivating for respondents to read the text easily; 69.13% of the respondents claimed that the messages in the brochures were clear (Table 6). Data suggests that the respondents still prefer posters to brochures because of the mixture of pictures and texts while the posters are full of images, colors, and a little text. Also, 56.79% of participants claimed that they were readable, while 1.23% said that the brochures were extremely efficient because they contained more data than posters. Correspondingly, the participants stated that the font style and size was simple to read. Concerning the brochure's visibility and appeal, 96.30% of the respondents replied that they were captivating, could influence them to read, and enabled them to know the situation.

Table 7

Percentage and number of respondents per category who answered and chose the excellent attributes of brochures as a biodiversity conservation campaign material

	Student	%	Govt. Employee	%	Indigenous People	%	Teacher	%
Easy to remember	13	92.86	11	100.00	46	100.00	11	91.67
Functional	13	92.86	11	100.00	46	100.00	11	91.67
Enticed you take a second glimpse	13	92.86	11	100.00	46	100.00	11	91.67
The images have the right size	13	92.86	11	100.00	46	100.00	11	91.67
Captivating	13	92.86	11	100.00	46	100.00	11	91.67
Believable	13	92.86	11	100.00	46	100.00	11	91.67
Eye-catching	13	92.86	11	100.00	46	100.00	11	91.67

Also, 100% of public staff and indigenous people said brochures were simple to remember as texts dominated the images and of the correct size (Table 7). They were functional, captivating, believable, and eye-catching as well.

Despite increasing online marketing projects, brochures are an essential component of traditional printed marketing collaterals (Chadwich,2013). These types of IEC materials are more efficient, user-friendly, and cost-effective than TV and print advertisements.

Generally, people use leaflets for advertising and marketing purposes and additional label data. It can be folded in half, thirds or fourths. More than ninety percent (96.30%) of the participants claimed that flyers were effective in stimulating a call to action, while 30.86% said they were eye-catching (Table 6).

In terms of attractiveness and visibility, 69.13% of participants stated that flyers were also practical and appealing compared to posters and brochures. Dim (2014) said that even with the benefits of brochures over flyers, the latter could provide a lot of data that is not present in other campaign materials. Leaflets can provide direct distribution, and the target market can see the message. It has more responsiveness as it enables for higher inquiries. Leafletting is fundamentally about local / scale mass advertising. It allows advertisers to inform everyone in that region about their message, advocacy, and goods (marketingdonut.com, 2015).

People prefer posters to leaflets, brochures, and pamphlets because color

impacts the human brain and psychology (Doyle, 2014). Posters are rich in colors; they can fill the extra space of the paper. Colors not only enhance the presentation of the item but can also affect our behavior; they also affect procedures, values, and culture (Daye, 2015).

On the other hand, pamphlets are unbound booklets, consisting of a single sheet of paper printed on both sides and folded in half. As shown in Table 6, 96.30% of participants thought that the pamphlets were handy in terms of their clarity and their capacity for readers to readily comprehend the content of the material. In terms of readability, 46.91% of the respondents were unsure if the pamphlets were easy to read as the majority still consider posters and brochures as fun to read. Around 30.86% of the participants claimed that the pamphlets were extraordinarily readable and compelling. In terms of appeal and attractiveness, 96.30% of participants said pamphlets could induce an information-rich call for action and could foster advocacy promotion in preserving biodiversity in their region. However, 30,86% of them said they were extremely appealing, which could suggest that they were full of texts rather than images, unlike the posters.

Pamphlets have complete control over where they will be positioned and have the capacity to reach the target audience rapidly with the message. The results of this research are comparable to Peer's (2012) findings.

Figure 2 provides the respondents' knowledge of the significance of conservation products for biodiversity. Results indicated that participants regarded posters as appropriate campaign materials for the present condition of Carranglan biodiversity, followed by shirts, brochures, and the seminar-workshop.

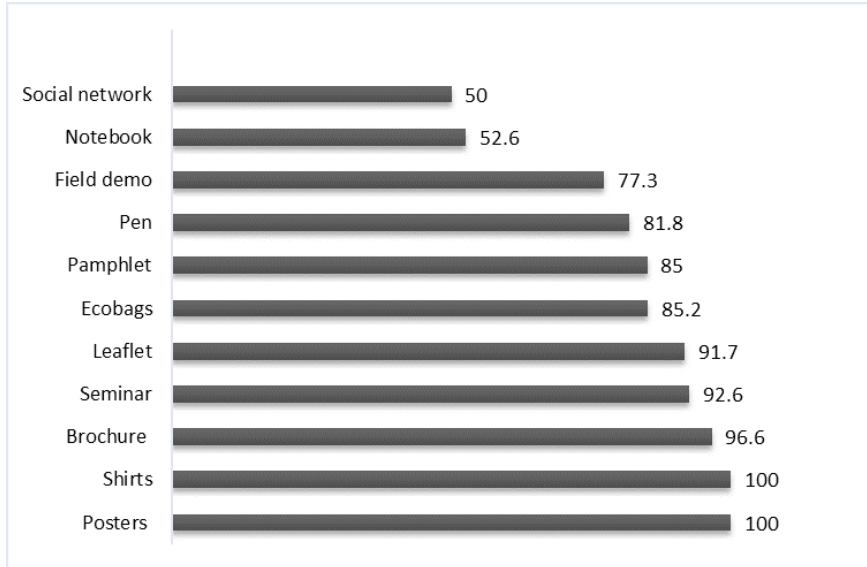


Figure 2. The response of participants who gave relevance to the multiple biodiversity conservation campaign materials and strategies

Likewise, several studies on print material showed that its readers can still read lengthy articles regardless of their age. It is because they have complete attention on the content, generating retention. The lack of disturbance allows each reader to get the moment when he is fully absorbed in a substantial piece of information.

As shown in Figure 3, posters obtained the highest number of responses on the importance of the campaign materials by the respondents, followed by seminar-workshops, shirts, and brochures. Posters are used to educate the public about the recent trend and happenings in which they draw people's attention. The richness of the text, layout, and images can somehow voice the campaign message that the participants can rapidly find, comprehend, and appreciate.

Arens and Rossiter (2012) asserted that posters and brochures are crucial for advertising retention because they can be displayed anywhere. This situation

depicts that the distributor has many places at his disposal to attract a captive audience. Print materials are also cheap, making it easier to produce to reach a vast audience. Print materials attract the attention of readers. The client can also bring the pamphlets, leaflets, and brochures home so that they can better comprehend the data.

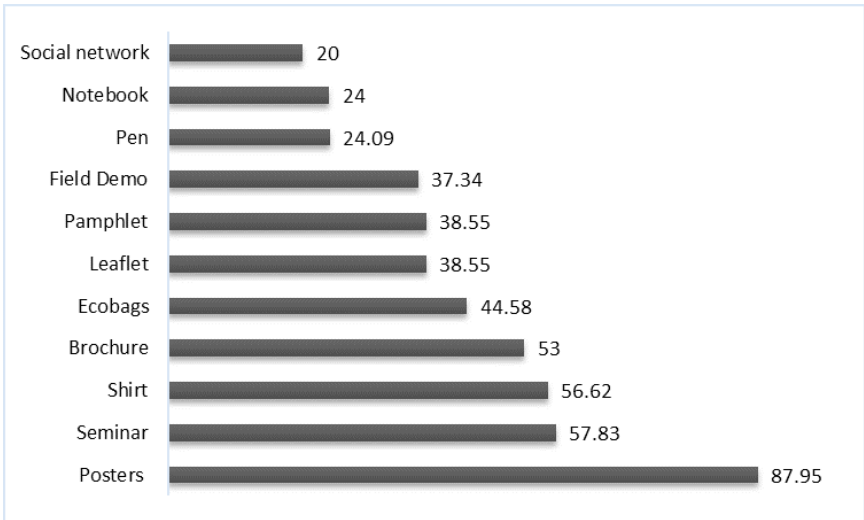


Figure 3. The response of the respondents who gave importance to the various biodiversity conservation campaign materials and strategies

On the other hand, seminar-workshops (57.83%) are essential for participants. According to Levy (2012), this type of advertising promotes partnerships, collaboration, and cooperation in distinct target audiences to work together for advocacy advantage. Likewise, seminar workshops create favorable pictures and data and establish connections in purchasing and support organizations with employees of advocacy centers.

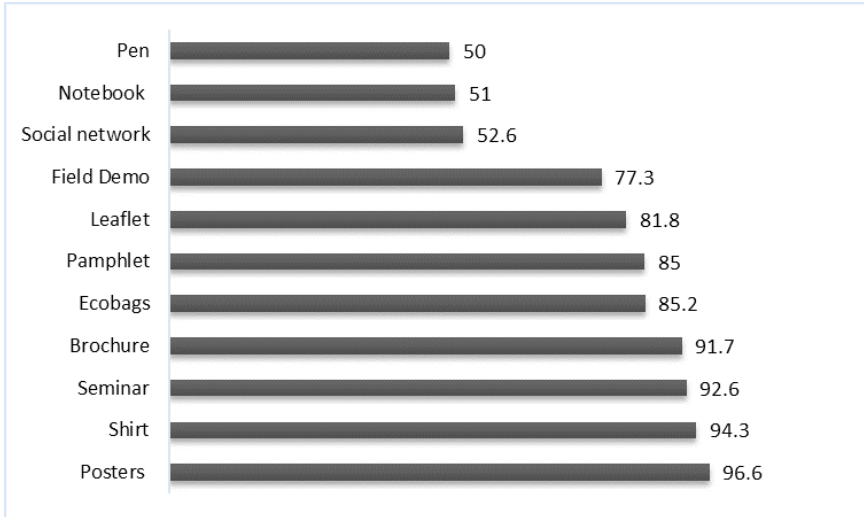


Figure 4. The response of the respondents who made an impact on the various biodiversity Conservation campaign materials and strategies

Furthermore, the findings stated that posters (96.60%) received the most considerable amount of answers in terms of effect from participants, followed by shirts (94.30%), seminar workshops (92.60%), and brochures (91.70%) (Figure 4).

Table 8

The number of participants per category, indicating their view on the effect of biodiversity conservation campaign products and strategies

	Student	%	Govt. Employee	%	Indigenous People	%	Teacher	%
Post	13	92.86	6	54.55	33	71.74	11	91.67
Brochures	11	78.57	7	63.64	19	41.30	9	75.00
Leaflet	11	78.57	7	63.64	4	8.70	8	66.67
Pamphlet	11	78.57	7	63.64	5	10.87	8	66.67
Field demonstration	2	14.29	3	27.27	21	45.65	4	33.33
Bag	8	57.14	4	36.36	14	30.43	9	75.00
Shirt	10	71.43	8	72.73	24	52.17	9	75.00
Pens	4	28.57	2	18.18	3	6.52	4	33.33
Notebook	4	28.57	2	18.18	4	8.70	4	33.33
Pins	3	51.43	2	18.18	0	0.00	1	8.33
Seminar	2	14.29	8	72.73	29	63.04	9	75.00
Social media	3	24.43	4	36.36	8	17.39	5	41.67

Table 8 shows that learners (92.86%), and educators (91.57%) considered posters the one having a substantial effect compared to other promotional materials. On the other hand, brochures, leaflets, and pamphlets had the most significant impact on public staff due to their wealth of data.

Ellis-Chadwick (2016) stated that posters are media types capable of creating fast effects. The frequency of impact, even on passers-by, builds a cumulative effect. The designs, color, text, and images of these advertising products generate surprising implications that can create captivation and awe for the audience, particularly for the inhabitants of Sitio Binbin, Carranglan, Nueva Ecija. Print materials such as posters and brochures promote repeated exposure, mainly if they are situated in strategic locations in the region, leading in effect and retention.

Shirts are wearable anytime and create a favorable impression. Individuals choose to wear collateral materials such as shirts, caps, and bags as they like to receive such products because it is helpful in their daily life.

Relationship of Campaign's Mode and Attribute with the Retention of the Respondents

Table 9

Relationship of collateral materials and their attributes for retention of the relevance, importance, and impact on biodiversity conservation campaign.

	COLLATERAL MATERIALS	RELEVANCE	IMPORTANCE	IMPACT
Appeal	Ecobags	-0.06	0.094	0.092
	Shirts	-0.06	0.094	0.092
	Pens	-0.011	.292*	.283*
	Notebooks	-0.011	.292*	.283*
Visible	Ecobags	-0.094	.275*	.276*
	Shirts	-0.094	.275*	.276*
	Pens	-0.11	.300*	.328**
	Notebooks	-0.11	.300*	.328**
Attractiveness	Ecobags	-0.059	0.095	0.091
	Shirts	-0.059	0.095	0.091
	Pens	-0.122	0.171	0.163
	Notebooks	-0.127	0.184	0.179

**Correlation is significant at the 0.01 level (2-tailed).

*. At a rate of 0.05, the correlation is relevant.

The respondents regarded advertising materials as needed because of their pictures, designs, and colors that suit the campaign theme. They are noticeable, eye-catching, and attractive; therefore, these campaign materials are beneficial to them. Table 9 presents the connection between collateral products and their characteristics for retaining significance, significance, and effect during the biodiversity conservation campaign.

Results show that the attraction and visibility of pens and notebooks gained a vital correlation with significance and effect. Likewise, the clarity of eco bags and shirts had a critical connection with importance and impact.

Promotional materials readily and creatively spread the word. The use of advertising materials provides listeners and readers an outstanding impact and interest. It also has a beneficial effect by enhancing the general picture, favorable perception of the promotion, enhanced probability of recommending the campaign theme, and reducing the likelihood of patronizing the products. For an average of two years, products found to be appealing, enjoyable, and attractive are held by people because they are pleasant and helpful, which is why they are appreciated. Because of their significance to government awareness campaign and brand awareness, loyalty, and promotion, they generate an effect. It enables the product to have exposure creating a favorable picture that leads to brand influence and high impact. Most respondents said they remember the advertiser, the message they would like to convey, and the content when they receive the advertising material (Plymouth Marketing, 2011). It merely implies they're happy with what they've received because it's usable that's why it's maintained (Oliver, 2010). As people keep the advertising materials longer, the more impressions it gives to the recipient and to anyone who sees it. Promotional materials are essential and generate an effect among recipients as it is a mixture of usefulness, uniqueness, and usefulness relative to the type for better recollection (Larson, 2014).

Table 10

Relationship of campaign materials and strategies and their attributes for retention of relevance, importance, and impact of the biodiversity conservation campaign

	RELEVANCE	IMPORTANCE	IMPACT
POSTERS	-0.05	-0.092	-.253*
BROCHURES	.238*	.314**	.278*
LEAFLETS	0.024	-0.032	-0.135
PAMPHLETS	0.125	0.171	0.092
FIELD DEMO	-0.177	0.082	-0.115
SOCIAL NETWORK	-0.192	.338*	.357*
SEMINAR	0.149	-0.047	-0.103

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

On the other hand, Table 10 shows the connection of other campaign products and strategies and their characteristics with retaining the significance, significance, and effect of the biodiversity conservation campaign undertaken by ICCEM, CLSU in the study area. Results indicated that brochures had a vital correlation with relevance, importance, and impact, while social media had a meaningful connection with relevance and impact. Results also showed that posters got a significant association only with effects.

Print media is not declining, even with the idea that this is television generation as attaining its golden age and social network emergence. It still captures the attention, which is an excellent way for advertisers to even seize it as a chance to improve their profit. The production of print media enables clients to nurture and understand their purchase. The internet is loved because customers can discover responses to almost anything except print media, where we go to ask questions. Print media, especially posters and brochures, are still considered to be the best medium to think outside the box, interpret and ask tough questions and even internalize the written messages. Posters express the message through simple pictures that are rich in colors while brochures combine text, content, and images that are accurate, and simple to comprehend. It excites individuals because of the term “print,” which is more than anything reliable to many individuals. The print is a sign of pride and stardom, which is why individuals still create posters and banners (Caffeine, 2012).

Similarly, promotional materials and print media advertising are rich in colors due to the logo printed on them, including the color of the promotional advertisements, the shirts, and the colors within the images. Promotional materials must be based on the psychology of color as it refers to marketing persuasion to generate an impact. Colors are essential for branding (Ciotti, 2012). Colors significantly influence purchasing intent due to their effect on how a brand is perceived, which implies that colors affect how customers perceive the brand's character and campaign.

The human brain also prefers identifiable font styles and sizes concerning color, which makes color extremely important when creating identity leading to promotion value. Appropriateness of color concerning the item is far more essential than the color itself. The colors integrated into the campaign materials that matched its theme could be the reason, participants remember the messages in the print materials (Bottomly, 2014). The colors generate sensation and mood on the pictures that the brand produces. These colors play an integral part in persuasion and retention (Widrich, 2014).

In the event of field protests and social networks, however, the methods and characteristics had no meaningful content-related connection with retention. It revealed that collateral and print media advertising still has the most significant influence in terms of generating value and effect.

CONCLUSIONS

Biodiversity conservation is more than an aesthetic problem; it is essential to our requirements, health, and economy. Life diversity is the basis on which sustainable development depends. Research and advancement through advocacy campaign using collateral materials, print materials, and campaign tactics such as seminar-workshop, field demonstration, and social media are practices and attempts towards a responsible course of action. Promotional materials such as collateral materials (pens and notebooks) and print media (posters and brochures) as well as social media are efficient instruments of campaign materials to promote retention in the minds of participants on the significance, significance and effects of biodiversity conservation in order to initiate intervention to manage and protect biodiversity in forest ecosystems.

RECOMMENDATIONS

1. Development of campaign materials should be performed to increase government knowledge of the significance of biodiversity for better appreciation and involvement in conservation programs in other forest ecosystems in Nueva Ecija and other areas of the nation;
2. Advertising has a significant impact on consumer education and consciousness. Therefore, continuous researches on the improvement of campaign materials and products must be carried out for the audience to learn. Develop more advertising campaigns, mainly through advocacy such as biodiversity, which can attract the public's attention and capture their interest in promoting action. Continue to integrate persuasive and reminder-oriented messages, incorporating the impact of color psychology in marketing. The messages must be compelling and attractive enough to convince and create brand preferences and promote a change of perception;
3. Posters and brochures have been discovered to be the most potent and cost-effective of all campaign materials in supporting biodiversity conservation. More budget and attention are essential to produce useful brochures and posters

intended for promotions in local communities. Also, other types of print media must be provided to encourage integrative advertising for advocacy reasons. In perspective of the public's preference for them, more budget could be dedicated to print media and advertising materials; and

4. Distinct research must be performed to evaluate the efficacy and efficiency of the biodiversity campaign materials and techniques used to assess and evaluate the respondents ' inducement of action.

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