

# ENHANCING THE EFFECTIVENESS OF CLIMATE CHANGE COMMUNICATION MESSAGES IN LOCAL NEWSPAPERS IN THE MEKONG DELTA REGION

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## **Abstract**

*With severe impacts on livelihoods, climate change (CC) is considered as one of the biggest challenges of humankind in the 21st century. Vietnam is among 5 countries that are mostly affected by CC, while the Mekong Delta area of Vietnam is one of the three global deltas vulnerable to sea-level rise. Considering its influence, communications in general, printed newspapers in particular in Mekong Delta provinces have been increasing its impacts positively to help local communities enhance their awareness and change their behaviors so as to adapt to CC. Nevertheless, CC messages in newspapers remain specific limits, resulting in the communication unable to reach its ultimate effectiveness. This article points out the reality and some recommendations related to the adjustment of content and form of CC articles in printed newspapers in Mekong Delta to raise the impact to the public in the future.*

**Key words:** *climate change; local printed newspapers; Mekong Delta; messages*

## **1. Introduction**

The Mekong Delta of Vietnam contributes 18% to the national GDP, with 90% contribution to the export rice, 60% of aquaculture products, and 70% of fruits. According to CC scenarios, by the end of the 21<sup>st</sup> century, the annual average temperature in Vietnam increases by 2 to 30 degrees Celcius, and the sea level is 75 cm to 1 meter higher than it was in the period of 1980 – 1999. By that time, there will be 40% of the total area of the Mekong Delta being flooded, and 35% of the population badly affected by complex weather. In reality, recent weather conditions in the Mekong Delta have shown several abnormal signs, and drought, saline intrusion, flooding, etc have become more serious, threatening livelihoods of local communities as well as the regional sustainability. The importance of the Mekong Delta to the whole country and the risks and dangers from CC encountered by this land requires its communities to have appropriate awareness, knowledge, and skills to proactively adapt to CC. This very much depends on the messages local people receive from the media, among which is the printed newspapers. Are local newspapers in the Mekong Delta doing well in their roles of social orientation in building and transferring CC information to the public in a scientific, diverse, objective, systematic, and easy-to-understand way? From the survey of 3 printed newspapers in the region – An Giang, Ca Mau, and Can Tho newspapers from 2017 to June

2019, this article will provide the reality of CC messages and some recommendations to enhance the message quality so as to improve the influence effectiveness of CC communications by printed newspapers in the Mekong Delta.

## **2. Literature Review**

In this article, the definition of CC is understood in accordance with Article 3, Clause 13, Vietnamese Law of Meteorology and Hydrology in 2015 “CC is the change of climate in a long period of time due to the impacts of natural conditions and human activities. Currently, CC is expressed in global warming, sea-level rise and the increase of severe meteorological and hydrological phenomena”.

A message is a fundamental factor of a communication process, “the information given from the source to the receiver. The message includes thoughts, emotions, aspirations, requests, opinions, understanding, living experience, scientific and technological knowledge, etc which are coded in accordance with one particular symbolic system. This system must be agreed by both the source and the receiver, and contains a common way of understanding, in other words, being able to decode. Speech, handwriting, signals, pictures, and human expressive gestures are all used to transform messages.” (Dung and Hang, 2012, p.13)

Messages in printed newspapers are core information forming meanings of the text. On the article perspective, each one contains a message (the target message the newspaper is aiming for) formed by detailed messages (parts) and they may be relevant or completely independent with messages in other articles of the same publication. On the publication perspective, a message of an article on a particular issue is a part message, contributing to the forming of the target message on that issue, which the newspaper wants to convey to the public.

## **3. Method**

To evaluate the CC messages in Mekong Delta newspapers, the author has carried out the quantitative and qualitative research via 3 main methods:

Study the content: among 2,037 publications from 2017 to June 2019 of 3 representatives, An Giang (648 publications), Ca Mau (499), and Can Tho (890), 1,290 articles have been selected as they satisfy one of the following criteria:

- The article directly mentions the phrase “CC”.
- The article has words relevant to CC expressions - such as: atmosphere warming (or global warming), polar ice melting, sea-level rise – or words of typical expression of CC impacts in the Mekong Delta – such as: storm, flood, inundation, drought, landslide, land subsidence, land erosion, tornados, heatwave, irregular rain or abnormal intensity rain – as well as El Nino phenomenon, saline intrusion, biodiversity loss.

These articles are analyzed mainly in two aspects: message content and form.

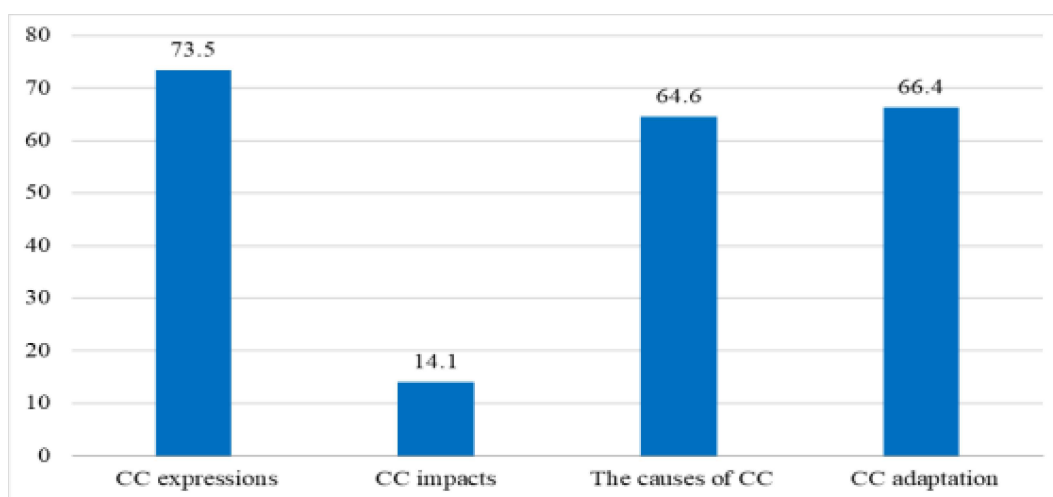
Questionnaires are also used to survey public opinions on their assessment on CC information provided by the local newspapers, as well as information demands of the public in this matter. Questionnaire respondents are also asked if they have any suggestions for their local newspapers to improve the quality and effectiveness of CC messages. In each province of the surveyed area (An Giang, Ca Mau, and Can Tho), 150 questionnaires are collected.

#### 4. Results

With 1,290 articles containing CC messages among 2,037 publications, it can be seen that CC is concerned by local newspapers in the Mekong Delta. However, among these articles, there are only 462 having content primarily about CC, while in the remaining 828 articles, CC messages are part messages, not primary content that the article is aiming at. These indicators have shown that although the frequency of CC messages in total surveyed publications is quite high, the actual in-depth articles with primary content of CC are not many in local newspapers in the Mekong Delta.

##### 4.1. Message content

Goals of the CC communication campaign are the public is able to identify CC expressions, understand impact and forming procedures of the expressions, current development, tendency forecast in the future, as well as proactive solutions for prevention and adaptation. In line with these goals, CC messages are considered in 4 aspects, including: (1) messages on CC expressions, (2) messages on CC impacts, (3) messages on the causes of CC, and (4) messages on CC adaptation. Results show that the number of articles mentioning CC expressions is the highest, with 943 articles accounting for 73.5% of the total surveyed publications. The runners-up are on CC adaptation (66.4%), and CC impacts (64.6%), while the causes of CC is the least mentioned content, with only 14.1% figure.



**Figure 1: Aspects of CC messages in Mekong Delta newspapers**

(Source: Surveyed newspapers in An Giang, Ca Mau, and Can Tho from 2017 to June 2019)

### *- Messages on CC expressions*

Messages on CC expressions are shown in descriptive articles on one or more expressions of CC, with a particular time and locations occurring the expressions, data on frequency and intensity of the expression, as well as forecast on following happenings, and consequences of the expression. Messages on CC expression are particularly meaningful in helping the public to identify symbols and progress of the expressions, as a result, to have attention and concern to know about abnormal symbols.

CC expressions are the content that appears most among the four CC message contents which this article surveys. All three newspapers are concerned of providing information in a timely manner and reflecting the correct reality of CC expressions to warn local people, and help them to have proper activities. The frequency of CC expressions mentioned is compatible with the happening and frequency of these expressions in reality in the Mekong Delta recently. Moreover, the focus is on riverbank landslide and coastal erosion, which are occurring in a complicated way. Besides, drought and saline intrusion are having more impacts on livelihood and socio-economic development of the region. Nevertheless, information on the expressions is mainly descriptive and not having forecasting information for local people to prevent proactively. Furthermore, newspapers pay much attention on direct and visible expressions; they do not have sufficient reflection on severe and secretive CC expressions such as subsidence and loss of biodiversity. This will lead to the fact that local people will be slow in identifying the problem and awareing risks from such CC expressions. Therefore, it is less feasible for the citizens to adjust their behaviors to mitigate negative impacts of these expressions.

### *-Messages on CC impacts*

This message helps the public to be aware of the impacts that climate change has on human life, thereby taking practical actions to deal with this issue. Statistics on surveyed articles with CC messages showed that 64.6% (833) articles mentioned the impacts of climate change.

The survey shows that articles on the impacts of climate change are published in the Mekong Delta with high frequency. However, the vast majority of these articles see climate change as a negative issue, while the positive side of climate change is rarely mentioned. The scope of reflection is mainly local. The areas affected by climate change mentioned are quite diverse, but the most are still observable consequences, especially physical factors such as houses, roads, dikes, money, crops, number of people injured or killed... but less focused on clarifying the psychological consequences and long-term health impacts of climate change on humans. Likewise, vulnerable groups such as children, the elderly, women and the poor - who are most affected - are also rarely mentioned in the messages on the impacts of climate change.

- *Messages on CC causes*

Information on the causes of climate change is one of the important contents of communication on climate change because clarifying the cause with deep, scientific analysis, from highly reliable sources will help the public to properly understand the reason for the increasing climate change. It also has the effect of "waking up", helping the public to review and adjust their behaviors. On the contrary, superficial information on the basis of the author's prejudiced thinking or from inaccurate and unreliable sources will lead to misunderstandings about climate change, or less convincing the media public.

However, information about the causes of climate change requires a high degree of expertise, not everyone can arbitrarily make judgments, but it is often spoken by knowledgeable people such as experts and scientists. In addition, the process of analyzing, dissecting and explaining the causes of climate change expressions requires the use of many scientific terms that are not easy to understand; this forces journalists to thoroughly understand the problem and be able to express in popular terms, close but accurate. Therefore, information on the causes of climate change is a group of content that is rarely mentioned in articles on climate change in the Mekong Delta newspapers, accounting for only 14.1%, with 182 articles.

Content analysis shows that most of the articles explaining the causes of climate change are articles that cover the entire topic of climate change and often refer to the chain of causes rather than just one single cause. In particular, the group of human causes is mentioned more than the group of natural causes. However, there are few messages that "show face and name" groups of people in specific areas. Instead, the articles do not refer to the subject performing the behavior or describe it with the generic nouns, such as "human", "farmer", etc., therefore, it is difficult to make the subjects perceive their behaviors to adjust as well as create a flow of public opinion in order to condemn wrongdoings and violations of the law, affecting the environment and social life. In addition, information on these aspects is highly specialized, while most reporters do not have expertise in the field of climate change, so their handling of specialized terms is not flexible. Therefore, many messages about the causes of climate change still contain many technical words and phrases that have not been popularized, making it difficult for the public to understand.

- *Messages on CC adaptation*

Climate change is an existential threat to the goal of sustainable development and poverty reduction of the country, with an increasing level of loss and disadvantage, requiring urgent actions to promptly mitigate the harmful damages. Facing that alarming situation, finding and providing solutions to adapt to climate change is something that the society is extremely interested in. With the press in general, and the local print press in the Mekong Delta in particular, the content of solutions to climate change adaptation is also focused with

many rich and diverse expressions. There are 711 articles containing the message of solutions to adapt to climate change with contents referring to the guidelines of the Party, the policies of the State and the implementation of those policies of the political system at all levels, accounting for 55.1%. The order of the remaining contents is Application of advances in science and technology - 24.6%, Education and communication to change awareness and behavior -17.4%, International cooperation - 8.6% and Self-referencing experience/skills -7.8%. In addition, there are 10 articles mentioning Other solutions -1.2%.

These messages have shown the public the decisions and efforts of the whole political system; bringing to the public valuable knowledge and experiences on climate change adaptation, in which many experiences have been formed and drawn from practice... thereby contributing to forging more trust and motivation for the public. However, there is a significant imbalance in the content of messages about solutions to climate change, as most of the messages focus on information about conferences, reports and activities and direction of leaders, rather than finding and introducing effective models and ways of doing things from practice. The proposed solution messages to mobilize and educate people to understand and adjust their behaviors accordingly are still general, not directed at specific target groups, so it is difficult to create behavior changes in the desired target audience.

#### ***4.2. Form of the messages***

To express the content of the message, it is necessary to find the tone, words, illustrations... that are reasonably consistent, helping to describe and express the content accurately, vividly and attractively. No matter how meaningful and novel the content you want to convey is, but the form of delivery is not consistent, it will not create a clear, valuable and effective message. Therefore, evaluating the value of journalistic works in general and press messages in particular, besides the content, it is necessary to consider more about the form as an inseparable whole. The form of the message in the article is considered in two main criteria: structure (genre, capacity, language) and how to organize the message (frequency, posting location, author).

Statistical results of 1,290 surveyed works show that the type of journalism that expresses climate change messages in printed newspapers in the Mekong Delta has not been diversified. News groups, news articles (including all kinds of news, news articles, reports, reflections, interviews, reports, investigations, etc.), account for the majority with 1,195 works (92.6%). Among which, news and articles are the most used by newspapers. This is also understandable because news and articles have the strength of being able to act quickly, succinctly and meet current requirements. However, due to limited capacity, there are many articles in the 3 surveyed newspapers published with very brief content, with a reception nature; a lot of information is exploited from old reports, but little information is newly discovered. Articles belonging to the political group such as commentaries, treatises,

systematically analyzing and explaining problems with strong arguments are often highly persuasive but did not appear much in the newspapers during the survey period – only 8. Articles translated from foreign newspapers or international organizations are 85, accounting for 6.6%, only appearing in An Giang and Can Tho newspapers. During the survey period, only 8 articles were in the treatise category (0.6%) and all 3 newspapers and no article were in the infographic category.

Information on climate change needs to be stated accurately, from clear sources, so the information is mainly expressed in scientific language style. The results of the qualitative analysis of the articles in the survey also show the style of scientific language, such as using many scientific terms, using only one meaning, not using rhetorical devices; tight, coherent sentences, standard syntax; sentences are neutral... However, in some articles, there are still too many technical terms or confusing terms used. Qualitative analysis also shows, to describe climate change, there are words/phrases repeated many times in articles such as: "global danger", "top danger", "humanity's greatest danger", "disaster", "problem", "irreversible", "than one would expect", "utterly bad". Talking about the impacts of climate change, words usually are "horrifying", "terrible", "severe", "catastrophic"... The frequent use of such "shocking" language may lead the public to think that climate change is a problem beyond human control and that there is absolutely no way to prevent it. The use of non-literate languages to express messages about climate change in Mekong Delta newspapers is also very limited, monotonous, and images are the main type of non-literary language. Out of 787 articles with accompanying images, there are 419 articles (54.7%) with images of climate change taken directly from the scene where the phenomenon occurs, 42 images of climate change (5.3%) for illustrative purposes and 40 % other images (in articles where climate change content is mentioned very little). The images of the scene increase the persuasiveness of the information by the readers such as "seeing with their own eyes" the events and models that the article mentions. Besides, images help to add information, create "highlights" for the article. However, the images used in some articles are still limited, such as: the image quality is not good (the image is too dark or blurred); the layout of the image does not highlight the content or the content of the image does not match the content of the article. The improper placement of images and text makes the form of the article unattractive. In addition, some images have a not-so-beautiful layout, are not in the style of press photos, and some illustrations are not suitable for the content of the article...

Analysis of posting frequency shows that the number of articles containing messages about climate change in 2017 is the highest, 610 articles. In 2018 there were 442 articles and the first 6 months of 2019, there were 238 articles. Although the information flow is still guaranteed, the number of articles on climate change in local newspapers is often unstable and varies with the number and extent of events on climate change organized and impacts

of climate change locally. This can, in some cases, affect the effectiveness of the communication campaign against the target audience it is targeting.

All three survey newspapers do not have a climate change column as well as a fixed page for this content. Regarding posting position, 42.2% of articles are introduced on page 1 and more than 50% of articles are published on important pages (pages 2- 3, color pages). Articles posted in important positions, easy to impress the public and easy to read will help the message reach and spread more easily.

The collaborators are "eyes and ears", helping the editorial office to promptly detect and provide information on the changes and impacts of climate change, the implementation of climate change policies, etc., ensuring profound practicality. It is both a feedback channel to evaluate journalistic work - an important measure of the quality of the newspaper. However, the survey results show that the local newspapers in the Mekong Delta have not done well in building and developing a team of collaborators for articles on climate change. The authors of these articles are mainly journalists (96.7%), The number of articles written by experts, scientists, informants, collaborators... is only 3.3%.

### ***4.3. Successes, limits, and solutions to enhance quality of CC messages in Mekong Delta newspapers***

#### *4.3.1. Successes and limits*

Surveyed data reveal that Mekong Delta newspapers have much effort in building and carrying out articles on CC, contributing considerably in the provision of information, knowledge, and action orientation to cope with CC for local communities. Systematic and rather comprehensive information have brought useful and multifaceted knowledge for the public, helping them identify CC expressions and impacts, as well as causes, especially causes by human beings, so that they can change their habits and behaviors to reduce negative influences of CC. Many messages contained in the articles of Mekong Delta newspapers introduce and explain the policies, meanwhile promote and guide citizens for their understanding, supporting, and abiding by such policies. On the other hand, the public understands and approaches rapidly with the CC mitigation policies that are applied by the State, has better awareness on rights and responsibilities. From that, governmental regulations on CC are concretized and merged to the reality. By continuously informing activities of local authorities, updated technological solutions, and lessons learnt from the public experience, newspapers and media have helped the public to learn new knowledge, gain more experience and skills with high applicable values, contributing to the creative capability for coping with CC.

Valuable messages have helped the public to aware of the reality and severe impacts of CC on the livelihood of Vietnamese people and the world, especially people in the Mekong Delta. Results of the questionnaires show that 92.2% readers of Mekong Delta newspapers have



concerns and high concerns on CC; 92.1% readers are aware that CC is causing huge impacts on livelihood. 100% readers know about typical expressions of CC in Mekong Delta; 74% readers express their belief and ultimate belief in the victory of humans over CC in the future if we are determined and agreeing on changing daily and production behaviors.

These figures are important illustrations for the impacts of CC messages in Mekong Delta newspapers in helping the public to gain their knowledge and participate more in the mitigation and adaptation of CC, a journey that the whole country is putting its best to achieve.

- Besides the successes, the complexity of CC and unfavorable factors of resources, both objective and subjective reasons have made it hard for local newspapers to accomplish what they want. As a result, information quality and value of CC message in newspapers in general and Mekong Delta newspapers in particular are affected.

On the content aspect, CC messages in Mekong Delta newspapers lack an overview and mention too much on CC expressions and consequences as well as activities coping with CC of local authorities. They do not cover enough articles on scientific information, and forecast of CC progress. Information on CC is biased, with the focus on negative impacts rather than on highlighting positive impacts of the changes of climate factors at one particular time and different geographies. Several articles contain severe pessimism; hence, they do not stir up beliefs and promote the community to act together. The communication of policies is mainly propaganda, with a focus on introducing, explaining, and encouraging the public to follow. It is rare that there are critical articles on the logic and appropriateness as well as the feasibility of CC policies in reality, stating inadequacies of economic development and CC targets so that the authorities must pay attention to have an adjustment of current policies. The situation of “reporting” the articles is quite common.

The ratio of CC messages with reflecting scope outside the Mekong Delta is quite modest (11.3%). Articles translated from foreign press are only 6.6%. As for Ca Mau newspaper, there are no translated articles, nor does it have any article on CC with the scope outside the country. This fact limits the public knowledge on CC; the public is not aware that coping with CC is a common effort of all human kinds and that it requires the participation of each individual. Needless to say, in front of the vital requirement of mitigating negative impacts of CC, many non-governmental organizations and international financial corporations have had supporting plans and programs to encourage sustainable economic development, with the scope to household level. Citizens would skip invaluable opportunities if they do not know about such information. Moreover, the effectiveness of mobilizing financial and technical resources from international organizations and countries to cope with CC may be minimized.

On the aspect of form, type diversity is an important requirement to ensure freshness and attraction of a newspaper message. Nevertheless, most articles containing CC messages

in Mekong Delta newspapers are descriptive and narrative articles. Treatises to analyze and explain an issue thoroughly are very rare. Infographic is not exploited ultimately by reporters, expressing during the preparation of the article message.

The processing of specialized words in some CC articles in Mekong Delta newspapers is not flexible; many terminologies are not explained, making it hard for the public to understand. CC is a scientific area requiring preciseness in wording; however, the language used in many articles is from the subjective guess of the writer, not based on scientific foundation. In addition, it is quite popular to have the “exaggeration” of words on CC impacts in a intimidating and severe way.

The fact that there is no column on CC is a huge limit in creating favorable conditions for CC messages conveyed to the public. Having a regular column helps readers to follow information, have a continuous insight on a specific topic, and create an intensive spread of the information. As Mekong Delta newspapers have no CC column, CC articles are scatterly published on many columns and pages, making it hard for the public to follow, feedback, and provide information and comments to the publishers.

#### *4.3.2 Solutions to enhance quality of CC messages in Mekong Delta newspapers*

Through the questionnaires, most feedbacks from the public are that CC information in Mekong Delta newspapers satisfy only a part of their demands (63.4%), while 12.2% respondents think that they are not satisfied; only 24.4% choose that they are satisfied. The result shows that CC messages in Mekong Delta newspapers need some changes to fit the reality and information demands of the public.

- ***On content:*** Articles in Mekong Delta newspapers need more diverse information from different aspects of CC with different approaching angles. The newspapers also need to increase the number of articles analyzing the causes of CC, stating the relevance between the increase of CC expressions, symbols, and impacts and bad rituals and habits in production, daily life, and behaviors related to unsustainable exploitation of natural resources. It is also suggested that further information on negative impacts of CC is added so that the communities can learn that CC does not only bring about threats but also opportunities for economic transformation, breakthrough development, as well as competitiveness.

In order to enhance depth and applicable value for the messages, Mekong Delta newspapers with CC messages need to have more critical articles, avoiding biased and imposing information. Besides, it is required to refresh the thinking of topic selection, renovate the approach, and analyze the problem from fundamental level and from the real-life aspect. In particular, the focus should be on damages, expectations, and emotions of vulnerable groups from the unmeasurable impacts of CC. Internal conflicts of the society in the multifaceted impacts of CC, if initiated by reporters, using the power of the media to

make it pressing public opinion for the intervention of the authority, the value brought about is not only for the reflected object, but also faith for the newspaper agencies, trust and agreement of the citizens and the authority.

Furthermore, it is recommended that CC information scope is increased, so as to provide the communities with a comprehensive outlook of CC in the world, helping the public learn experience on CC adaptation that international counterparts are implementing. At the same time, more information on reality and achievements of CC adaptation of Vietnam should be promoted for the international communities to know more about what our country is doing. As a result, it will be easier to call for other countries and international organizations to come to Vietnam for studying solutions and financial support for Vietnam to cope with CC.

- On form, currently, CC articles in Mekong Delta newspapers are mainly reflective ones. Other strengths of printed newspapers such as reports, commentaries, and treatises are quite rare. Consequently, it is necessary to diversify the forms so that interested readers feel less boring upon receiving the information, at the same time promote the content effectiveness in some specific circumstances. In addition, having articles in infographic form requires more attention, as this is one of the latest forms of expression, reducing monotony for both the article and the publication.

It is appropriate that Mekong Delta newspapers are using mostly scientific language to convey CC information. However, scientific terminologies need to be processed more flexibly. Articles' writers should choose simple, easy-to-understand words and avoid academic phrases when describing CC. Moreover, it is recommended that non-writing forms of language are used more often, such as graphic and charts, etc. in order to make the article livelier. Pictures should have good quality, with a clear structure, and proper aesthetic and information values to the article.

Mekong Delta newspapers should prepare plans on CC communication annually for a continuous flow of information about CC in the news. Based on current item distribution of the surveyed newspapers, the author suggests "Climate change" column, located on middle pages (pages 6-7 of An Giang and Ca Mau newspapers, pages 8-9 of Can Tho newspaper). These pages are printed in color, so it is feasible to design attractive articles to catch the attention of readers.

To improve the current situation of few collaborators, Mekong Delta newspapers should have encouraging policies to attract experienced reporters and prestigious writers to participate in CC topic. Newspaper agencies should frequently organize trainings on article writing, as well as seminars for collaborators to reward and present active individuals, and create the close relations between the newspapers and their collaborators.

## 5. Conclusion

The Mekong Delta is one of the three most vulnerable deltas in the world from CC and sea-level rise. Local newspapers have been endeavoring to convey information to the public with diverse messages so that they can have knowledge and clear awareness on CC impacts, leading to the changes of behaviors and adaptation to CC. Nonetheless, the communications of CC in local newspapers still have several limits, for example, the messages do not cover CC aspects, information is biased, negative content outweigh positive ones. In addition, message forms are poor in categories, and words used are hard to understand. These drawbacks may have bad influence on the public, resulting in incomprehensive awareness and passive psychology. Besides, anxiety and fear of long-term impacts may erode the willingness and faith of the communities to their behavior changes to reduce the threats.

In the context of CC continuing its complex progress and impacts, in the upcoming years, CC adaptation needs to be enhanced, and the media in general, Mekong Delta newspapers in particular have to maintain their crucial roles in implementing the task. Therefore, some recommendations on content and form have been suggested to raise the message quality. The author believes that they can help to increase the effectiveness of communication, making a strong impact to contribute to the change in awareness and behavior of the communities in a positive way./.

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