Countries Cultural Protection Base on EDPs

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Abstract: *We have obligation and duty to help our fellow citizens when they face the threat of displacement. In this paper, we first predicted the number of EDPs, by fitting to get the rate of sea level rise increasing at first, and then by dividing EDPs into the number of gradual refugees and extreme disaster refugees. This paper divide culture into natural culture and human culture, and assess their risk of loss, and give the percentage of natural culture destroyed and the curve of the disappearance of human culture, which provides ideas for the cultural protection of the following text. Finally, in order to explore how these policies have impact on EDPs' ability to better adapt to responsible countries, this paper create an HLOY model to classify populations for the purpose of teaching.*

Keywords: *EDPs, culture, HLOY model*

1. Introduction

These people who have been forced to lose their homes because of the climate are defined as EDPs, they are the victims of modern society, and they face not only the threat of life and property, but also the demise of the nation and the extinction of culture.

In the face of the dangers of our fellow citizens, we certainly cannot sit back and wait. On the one hand, we need to provide them with a new living environment, and on the other hand, we need to protect their culture, which is also the brilliance of our human culture. Surely, this is not just a simple transfer, in the process, we also need to fully protect the fundamental rights of EDPs as human beings and to give them basic respect.

2. Model 1: The number of EDPs

2.1 Establishment of Model 1

First, according to the data [4], the sea level rise in the last five years is appropriate. It is predicted that sea levels will rise about 443.3mm by 2050, and the rate of increase will gradually increase.

Then the model of the world's total population is first fitted with Cftool in Matlab [2], according to the data. It can be predicted that by 2050, the total population in the world will reach 10.3 billion. Then, we can infer with assumption 3, the number of gradual refugees will be about 242.2 million in 2050.

Finally, a model of the refugee population of extreme disasters was adapted with Matlab based on the data [3]. According to the figures, the number of refugees from extreme disasters will increase at first and then decrease slowly, finally reaching 205.9 million by 2050.

2.2 Model Analysis

According to the calculations, the first model: R2= 0.995, SSE= 17.2, the second model: R2=0.999, SSE=8.6, the third model: R2=0.996, SSE=173.9. Therefore, the analysis of the world population forecast model and the population of extreme disaster refugee prediction model fit is quite good.

The first model shows that sea level is rising at an increasing rate, because of the increasing world's population and the development of industry, which cause the increase in total amount of greenhouse gases coming into the atmosphere in the future, hence, sea level will rise about 443.3mm in 2050.

The second model shows that the world's total population is steadily increasing, which results in the increase of gradual refugees. Taking the different rates of sea level rise into account, the proportion of climate refugees varies slightly over different periods, but not much from the 45:1 ratio in general.

The third model shows that with the increase of natural disasters, the number of natural disaster refugees will increase. With the progress of society and the improvement of related rescue measures, people's adaptability to some extreme disasters has improved. At the end of the first half of the century, the number of refugees due to extreme disasters will begin to decrease, which is in line with the routine of social development.

In summary, the number of EDPs will peak in 2032, taking factors such as rising sea levels and the resulting natural disasters such as people's response to them into account. A total of 448.1 million EDPs will appear in 2050---- of which 205.9 million are gradual refugees and 242.2 million are natural disaster refugees.

3. Model 2: The Risk of Culture

Risk countries are generally located on the coast, or at the junction of plates, so the essential one of their cultural values is fisheries, and secondly, these countries generally have their own characteristics and have unique religious food culture.

However, sea level rise will be first to affect some coastal risk countries. And the occurrence of natural disasters is more serious at the plate junction. The monsoon is more severe lying for coastal countries. In summary, it can be inferred that when the occurrence of enough to make people become natural disaster refugees, these people's original natural culture is not reserved. They can only be destroyed or disappeared. For those gradual refugees, they live in the places that are subject to wind, waves, etc., and natural cultures are affected more or less.

Set up a model based on assumptions.

$$y = 100\exp\left(\frac{-10000wx + \sin(10zx - \pi)}{100000Q}\right) * 100\%$$

It has been calculated that if a natural culture is destroyed by natural factors, it will take at least 2000 years. Thus, it shows that the damage caused by external acts such as wind and water conservancy can be ignored, but man-made destruction cannot be ruled out.

According to the number of people birth, by 2050, the number of people accepting the knowledge of human culture in EDP is about 8.962 million, which will be reduced later. As time goes on, the number of people in a cultural society will be fewer and fewer, and eventually disappear, which is under the influence of no external interference.

When EDP enters a new country, the environment, does not need its own human culture, by 2050, this figure will become 4.481 million people.

When the country entering has the government to protect and support human culture, 44.81 million people will receive the knowledge by 2050.
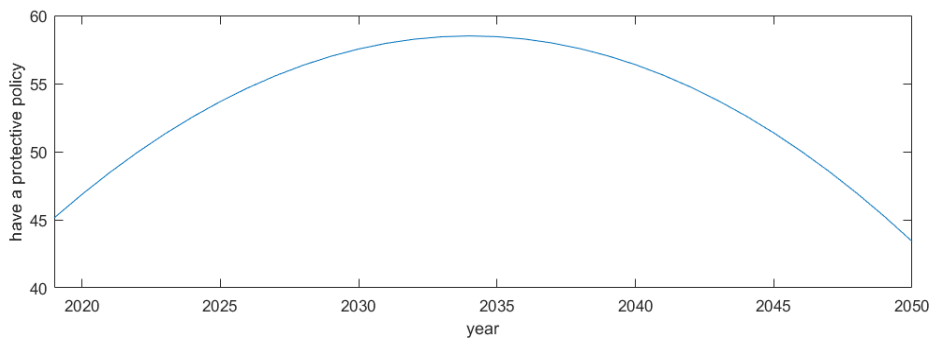

Figure 1: Protective with year

But in whatever case, it's only a matter of time before the human culture disappears.

4. Model 3: How to Ensure EDPs' Resettlement and Human Rights

We define the degree of integration of EDPs and nationals of the countries responsible as F. In order to measure the degree of integration of EDPs and nationals of the responsible countries, we selected four

indicators: Language Integration (I), Economic Participation (E), Legal Recognition (L), and Population Mobility (P). From this, it can be seen that T=I+E+L+P.

We discuss the functional models of each indicator and time as follow.

4.1 Model Base

Based on the biological population growth model, the model of language fusion (I) changing over time is:

$$\frac{dI}{dt} = \frac{rI(M - I)}{M}$$

Being similar to the population growth rate of living organisms, this function is also a typical S-shaped curve. Language fusion in the first contact time is slow. The language fusion began to progress rapidly in the medium term, to the end of a vertex, that is, the maximum fusion of language.

The model explains that EDPs and the responsible country society in the initial contact, may be completely unable to communicate. Grammar, word spelling, etc. may be in the two civilizations have a large difference. Since people are strange, they become cautious, so the initial integration is slow. In the medium term, after mastering the basic language, the language fusion of the two rapidly advanced. When the fusion reach a certain extent, some spoken words have been deeply rooted, the language cannot be further fusion, when the integration speed slows down until the maximum degree of fusion.

Our policy encourages EDPs to learn the language and script of the responsible country in order to increase the value of r and promote to reach the peaks faster in language fusion between the two sides.

4.2 Model Establishment

The model of Economic Engagement (E) is as follows:

$$E = ke^t + a(t \geq 0)$$

The model was small in the initial period, but grew exponentially, and there is no upper limit.

Our explanation is that in the early period, EDPs will certainly trade with the local in exchange for their basic necessities. However, because of language or strange issues, economic exchanges will not be too close. When the language integration arrive at a certain extent, economic exchanges will increase rapidly, Finally, EDPs will participate in the country's economic system, as will citizens of the responsible country.

Our policy is to give EDPs certain items at first so that they can get basic living resources without communication. It shows in the model is as far as possible to get negative value of a. Reducing the contact between the two can avoid the language problems and other issues caused by misunderstandings or contradictions. EDPs needn't worry about their basic survival problems. But after that, we should encourage economic exchanges and raise the value of a as much as possible, so that economic exchanges are more frequent.

We give a linear relationship:

$$L = nt + b$$

Each person's situation is different, so the value of n is not the same, what we have to do is to increase publicity and education to increase the value of b. At the same time, let EDPs from the placed on the responsible country's legal rules and regulations have a preliminary understanding. Of course, there is no clear upper limit on the degree of legal acceptance.

Population mobility (P) models can also be basically simulated as linear relationships:

$$P = \begin{cases} c_1 t & 0 \leq t < d \\ c_2 t + (c_1 - c_2)d & t \geq d \end{cases}, (c_1 < c_2)$$

Because of the 'transition zone', people's early movements are sure to be smaller which is what we'd love to see, so we can avoid some friction and conflict. What we have to do is to determine the time to establish a 'transition zone' to grasp the value of d. Only when EDPs and the responsible state have a certain basis of communication, with a certain amount of trade and a certain understanding of the law, can the 'transition zone barrier' be removed. When people can move freely, in the absence of outside

interference, c2 will certainly be greater than c1.

Model Analysis:

As mentioned above, each of our policies is designed to change the direction or trend of the value of each indicator, either to avoid unnecessary contradictions or frictions or to better promote integration, but there are some problems with our policies.

For example, the establishment of 'transition zones' may prevent normal communication. However, compared to conflicts and contradictions, this sacrifice is worthwhile.

Everyone's expectations for the future are different. Some people may not want to spend energy to learn knowledge, but we can ensure that the whole EDPs in progress, the overall will have a good future.

Some incentives are unfair to their citizens, but they are only temporary, just to better integrate EDPs, and then they are phased out.

Therefore, from a large point of view, with the overall development of EDPs and responsible attitude towards their own citizens, our policies can be a good solution to the problem of domestic resettlement of EDPs. They fully protect the human rights of people from all walks of life, let the whole have found their social status, and then boldly plan for the future.

4.3 Our Policy

4.3.1 The World's Overall Planning Aspects

Since there is no universal definition and agreement on EDPs in the international community at present, we first suggest that the world should first establish a special system of international law and classification standard for EDPs which means to develop a convention for a specific EDPs is much more effective than expanding the scope of application of refugees in refugee conventions. In formulating such a convention, respect EDPs' rights of life, health, land, work, self-determination, property rights and the pursuit of the arts and culture, in accordance with the framework of existing conventions on rights, such as the Convention on Civil and Political Rights and the Convention on Economic, Social and Cultural Rights. This is also the basic policy we are considering in the policies we give later.

The project provisions of the Convention should be:

a) Determining the identity of EDPs.

b) Full consideration of EDPs' intention to resettle.

c) Clarify the integrated role of the United Nations.

d) Clarify the responsibilities of each State Party.

When we use professional international law to complete the legislative protection of EDPs, practical action needs to begin. Based on the previous forecast of the number of EDPs, the number in the first half of the century reached the maximum number. Hence, parties need to be proactive, prepared in advance. Don't wait for the number of bursts before thinking. The United Nations needs to play an integrated planning role here.

A dedicated relief fund need be established. The majority of the countries above should be responsible for huge amounts. The rest is for other countries. Also, the World Bank needs to take some money to help the fund.

Organize an international team of experts to assess the risks of EDPs and plan the relocation time - not until a disaster strikes. It should also monitor whether the basic human rights of EDPs are guaranteed and whether the cultural protection of EDPs meets a criterion.

Coordinate the conclusion of treaties by the responsible States, recognizing and respecting for the fundamental principles of the 1951 Refugee Convention - the principle of not pushing back, not to shirk responsibilities against the will of refugees to sent to the third country, nor to push EDPs back to an environment where their lives are threatened. They need to provide adequate living space for EDPs. After the country of resettlement has been identified, other countries need to provide economic, material and other assistance for EDPs' problems.

4.3.2 Policies within Resettlement Countries

The above world policies show what to do in general, these policies are the most basic things to

consider, and when EDPs come to the settlement, the next step is to recommend the specific policies of the responsible countries for EDPs.

1) Helping refugees set up a living area, also known as a 'transition zone'.

As EDPs have been uprooted and lost their land, it is also a respect for their basic human rights to find a place for refugees to be accommodated. It should also be taken into account that the cultural laws of the EDPs' home countries may differ from those of the responsible countries. Mixing EDPs and citizens of the countries responsible for them directly may not only result in the cultural lifestyle of both parties not being respected by the other, but may also cause social unrest and friction.

Therefore, our advice is that the population of the responsible country plus the number of EDPs, recalculate the per capita living area, and according to this area to give EDPs a certain amount of land, to prepare them housing, water and other basic conditions for living, at the same time should be provided with basic food and fresh water. However, at this time, the 'transition zone' should be clearly defined EDPs and nationals of the clear line. If there is no emergency, the two sides cannot arbitrarily infringe on each other.

2) The government needs to take on the education of EDPs.

While to expand the market to create jobs to help EDPs have ability to become self-reliant, there is a saying in China that "it is better to give fish than to fish", so they should be provided with appropriate education and work.

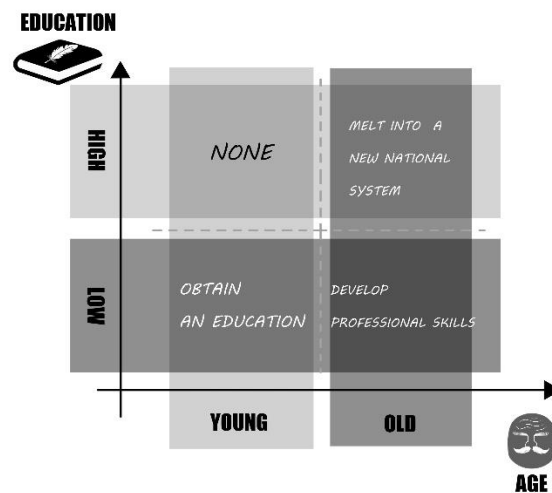Based on the Maslow matrix in economics, we designed an HLOY model. (Figure 2)

Figure 2: HLOY model

It can be roughly divided into four parts of the population LY (low education and young population), LO (low education but old group), HY (high education but young group), HO (highly educated and old people) in accordance with age and education. Of these four categories, HY (highly educated, young people) is rare so we assume he does not exist.

3) Governments should also take specific incentive systems into account.

For example, in school-age education, children who can communicate or take examinations in the responsible country may consider giving appropriate bonus policies. Children should be encouraged and supported if they are fluent in their new country's mother tongue. Let the children not only master the same communication with the responsible country, but also pass on and protect the civilization of the home country.

At work, given their displacement and the fact that they have nothing, the government s need to give them appropriate treatment above the average wage, which, of course, can only be temporary, and need to be slowly eliminated when it is assessed that there is no threat to their survival.

The government needs to organize some cultural exchange and friendship activities to make EDPs and the nationals of the responsible countries better and more in-depth communicate, which will help to establish mutual affection and mutual respect.

4) When EDPs begin to communicate in a normal society.

Integrate into their own political system, enjoy rights and fulfill their obligations to the State. In general speaking, they are no different from the nationals of the responsible State, the governments need to consider granting them nationality, recognizing their identity and changing their labels from vagrants to citizens. Encourage them to move freely, but also to preserve their right to autonomy in their original region.

5. Advantages and Disadvantages

Advantages:

①The trend of EDPs' number is predicted better;

②The model can better describe the development of events.

Disadvantages:

①The impact of extreme emergencies, such as earthquake and other sudden disasters on population and nature, is not considered;

②Without considering the existence of minority's special hobbies and personalities, this model is aimed at the public.

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