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## Measuring The Nationalism Index of Malaysian Nation in Less Developed States

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### Abstract

Generally, Malaysia must reached the minimum level outlined by world bodies such as the OECD, World Bank and United Nations to be classified as a developed country. Therefore, states that target to become developed state status also needs to reach the minimum level stipulated by the world bodies for inline recognized as a developed country. The progress to be achieved by Malaysia is not limited to economic and social, but also includes spiritual, psychological and cultural community. Malaysia target was stated in the 9 challenges of Vision 2020, which to create a united Malaysian nation. Therefore, the objective of this study to measure the nationalism index of Malaysian people towards the establishment of 'bangsa Malaysia' as set out in Vision 2020. The study involved 504 respondents from five less developed states in Peninsular Malaysia, namely Kedah, Perlis, Pahang, Terengganu and Kelantan. A structured interview technique using a questionnaire was conducted to qualitatively determine the public perception of the formation of the Malaysian nation. Data was analyzed using fuzzy sets approach. The results showed that the index of nationalism and unity of Perlis residents higher than other states.

*Keywords:* fuzzy set approach, less developed states, nationalism

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## 1. Introduction

Based on the classification of developed countries set by international bodies such as the World Bank, a country said to be developed if the gross income per capita reached at US\$ 12,736 or more (World Bank, 2015). At present, Malaysia is still categorized as a middle-income country with a per capita income level of US\$10,760 in 2014 (World Bank, 2015). Thus, in the last 5 years by 2020, Malaysia quickly move to implement policies to improve the level of national income in order to aim Malaysia a high income country can be successfully achieved in 2020.

Since Malaysia consists of 14 states, all the states are divided into specific areas according to their position. There are four areas in the northern region of Peninsular Malaysia, comprising the states of Perlis, Kedah, Penang and Perak. Central region consists of Selangor, the Federal Territory of Kuala Lumpur, Putrajaya, Negeri Sembilan and Melaka. East region comprising the states of Pahang, Terengganu and Kelantan and southern region contain only one state, that is Johor (Asan Ali, 2007). While East Malaysia consists of two regions, namely Sabah and Sarawak and the Federal Territory of Labuan.

After the announcement to be a high income nation by the year 2020 or called Vision 2020 made by the former Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad in 1990, all states are racing strides to improve their economic development so as to achieve per capita income level set by the World Bank and world bodies such as OECD and United Nations. Starting in 2001, the Composite Development Index (CPI) is used and states in Malaysia have been divided into two categories based on their level of development (Asan Ali, 2007). These categories consist of developed states and less developed states. The developed states including Johor, Melaka, Negeri Sembilan, Perak, Penang, Selangor, Federal Territory of Kuala Lumpur and the Federal Territory of Putrajaya. While less developed states are Pahang, Terengganu, Kedah, Perlis, Kelantan, Sabah and Sarawak.

In a speech made by Tun Dr. Mahathir Mohamad related Malaysia Maju 2020, he emphasized that Malaysia needs to achieve a high income nation in our own mold which does not copied the form or the policies implemented by other developed countries. He also noted that there are nine major challenges that must be overcome by Malaysia to make sure the goals as developed country can be achieved. The first challenge is to build a country that is united and have a common goal and shared with each other. Since Malaysia is made up of various ethnic with different religions, languages and cultures, this differences must be dispensed. Therefore, Tun Dr. Mahathir Mohamad proposed to constitute a nation that has a strong solidarity and undivided loyalty to the nation (Mahathir Mohamad, 1991).

The other eight challenges are to create a psychologically liberated society that high self-confidence level and proud in their accomplishments; fostering a nurture and develop a mature democratic society; establishing a society with high moral and ethical; to establish a liberal society of mutual respect and tolerate each other, regardless of race; to create a society that is scientific and progressive, have high knowledge in technology, inventive and capable of contributing to the advancement of science in the future; creating a caring society; create a just society in the distribution of economic wealth and shared and lastly to create a prosperous society with an economy that can compete, dynamic and resilient (Mahathir Mohamad, 1991).

According to Tun Dr. Mahathir, the most important challenges that must be overcome by Malaysia to achieve high income developed nation is to ensure the formation 'bangsa Malaysia' that living in harmony and shared the same goals are achieved successfully. Thus, as a country consist of different races, we need to ensure that this goal can be implemented to achieve high income nation status by 2020. All races comprising Malays, Chinese, Indians and others play the most important role in facing this challenge.

The efforts to unite all the races have long been committed by the leader, that was after Malaysia gained independence in 1957. However, due to the separation between people based on the type of work undertaken by the British cause is difficult to achieve national unity. This situation continued until now seen where there are fights and disagreements between people just because of a trivial issue. Every race began to feel threatened and sensitive if a matter involving racial issues raised by any party. If the problem of unity among races are addressed promptly, the goal of achieving high-income developed countries are unlikely to be achieved. Therefore this study aims to measure the index of nationalism and unity among Malaysians on Malaysian nation-building as stated in Vision 2020.

## 2. Methodology

This study involved five of the less developed states in Peninsular Malaysia which are Kedah, Perlis, Terengganu, Pahang and Kelantan. There are 504 respondents that been chosen by stratified sampling technique based on urban and rural area and also by race, Malays, Chinese and Indians. The structured interview technique and face to face interview using a questionnaire have been conducted to identify qualitatively the perception of the community about the creation of the Malaysian nation (*Bangsa Malaysia*). The questionnaire used Likert scale 1 to 5 to identify the respondents perception whether they are strongly agree (5), agree (4), not sure (3), disagree (2) or strongly disagree (1). The data was analyzed using the fuzzy set approach to measure the nationalism index of the respondent by using Microsoft Excel.

The questions that been asked are about the perception of respondents about the creation of ‘*Bangsa Malaysia*’. The establishment of the Malaysian nation is seen by the nine challenges that must be overcome to ensure that Vision 2020 is achievable. From the nine challenges, we form the constructs that will be used in the questionnaire. There are six constructs had been formed, which are Construct 1 is about the spirit of nationalism and unity (9 questions), Construct 2 about democratic and liberal (8 questions), Construct 3 is moral and ethical (4 questions), Construct 4 about scientific and progressive society (7 questions), Construct 5 is integrity of caring society (7 questions) and Construct 6 about sharing nation’s wealth (4 questions).

### 2.1 Computation of nationalism index using fuzzy set approach

The application of fuzzy sets approach to economic and social science issues is relatively new. This methodology was adopted by Miceli (1998) and Cerioli & Zani (1990) in the context of poverty analysis (Lazim & Abu Osman, 2009). The concept of fuzzy sets provides an ideal framework to deal with problems of true or false. Mathematically, fuzzy sets can be defined as follows.

Let  $X$  be a set and  $x$  some element of  $X$ . A fuzzy set  $A$  of  $X$  is defined as the set of couples:

$$A = \{ x, \mu_A(x) \mid x \in X \},$$

and  $\mu_A(x)$ , is called a membership function, and is an application from  $X$  in  $[0, 1]$ . In other words, the fuzzy subset  $A$  of  $X$  is characterized by a membership function  $\mu_A(x)$  associating a real number in the interval  $[0, 1]$  to each point of  $X$ . The value of  $\mu_A(x)$  represents the degree of belonging of  $x$  to  $A$ . The degree of membership of  $x$  to  $A$  rises, as the values of  $\mu_A(x)$  get closer to 1. If  $A$  is a classical set, its membership function can then take only the values of 0 and 1. The basic operations on classical sets are union, intersection and complement (Lazim Abdullah & Zeti Farhana, 2013).

The fuzzy set approach was introduced by Lotfi Zadeh in 1965 to find the answer for the uncertainty situation. Zadeh (1965) defined fuzzy sets as ‘a class of objects with a continuum of grades of membership’. Degrees of membership, or compliance with goals, are commonly expressed by numbers belonging to the interval  $[0,1]$ . Fuzzy sets allow one to model gradual transition from membership to non-membership and vice versa. It is a concept that permits a meaningful representation of ambiguous and vague objects or outcomes (Bali moune-lutz, 2004).

Because nationalism is something that uncertainty, so we need to express by the index value, which describe by the membership function of fuzzy sets approach. The model is first developed by Bali moune-Lutz (2004). The fuzzy membership function is expressed as follows:

$$\mu(x) = \frac{1}{1 + e^{-a(x-b)}} \tag{1}$$

The parameters  $a$  and  $b$  can be derived as follows. Let  $\mu_h$  be the membership degree of the highest achievement ( $x_h$ ) of the goal. Similarly, let  $\mu_l$  be the membership degree of the lowest achievement ( $x_l$ ) of the goal. From equation (1), and given  $\mu_h$  and  $\mu_l$ , we can solve for  $a$  (using Equation 2) and  $b$  (using Equation 3), that:

$$a = \frac{\ln\left(\frac{\mu h}{1 - \mu h}\right) - \ln\left(\frac{\mu l}{1 - \mu l}\right)}{xh - xl} \quad (2)$$

and

$$b = \frac{xl \ln\left(\frac{\mu h}{1 - \mu h}\right) - xh \ln\left(\frac{\mu l}{1 - \mu l}\right)}{\ln\left(\frac{\mu h}{1 - \mu h}\right) - \ln\left(\frac{\mu l}{1 - \mu l}\right)} \quad (3)$$

The slope  $a$  represents the extent of vagueness and  $b$  may be viewed as the identification threshold. The parameter  $b$  ‘represents the point at which the tendency of the subject’s attitude changes from rather positive into rather negative’ (Zimmermann, 1987).

### 3. Findings of the research

Table 1 shows the computation of  $\mu h$  and  $\mu l$ , and also parameters  $a$  and  $b$ . The highest achievement are showed by  $\mu h$  (an ideal goal) and  $\mu l$  showed the lowest achievement. The value of the highest and lowest achievement are obtained from the highest value in the Likert scale that been used in the questionnaire. When we obtain the values for  $a$  and  $b$ , we can get the values for the degree of membership for all the five less developed states in Peninsular Malaysia (Table 2).

Table 1. Parameters for computing degrees of membership.

Construct	$\mu h$	$\mu l$	$a$	$b$
Spirit of nationalism and unity	0.45	0.09	0.2854	5.3798
Democratic and liberal	0.4	0.08	0.2835	5.7962
Moral and ethical	0.2	0.04	0.3079	8.0948
Scientific and progressive society	0.35	0.07	0.2848	6.2584
Integrity of caring society	0.35	0.07	0.2848	6.2584
Sharing nation’s wealth	0.2	0.04	0.3079	8.0948

The model developed in the previous section can be used to derive an index of Malaysian nationalism (Equation 1). Table 2 shows the nationalism indexes for five less developed states in Peninsular Malaysia. From the table we can see that Perlis residents shows the high level of nationalism index more than other states residents in spirit of nationalism and unity.

Table 2. Fuzzy sets nationalism indexes in five less developed states in Peninsular Malaysia.

Construct	Pahang	Kelantan	Terengganu	Kedah	Perlis
Spirit of nationalism and unity	0.1945	0.1941	0.1936	0.1943	0.1946
Democratic and liberal	0.1746	0.1739	0.1739	0.1750	0.1746
Moral and ethical	0.0801	0.0801	0.0801	0.0801	0.0801
Scientific and progressive society	0.1554	0.1551	0.1551	0.1554	0.1554
Integrity of caring society	0.1554	0.1553	0.1554	0.1555	0.1552
Sharing nation’s wealth	0.0801	0.0799	0.0799	0.0800	0.0802

From the results also we can see that the spirit of nationalism and unity are the most important challenge in creation the ‘*Bangsa Malaysia*’ towards achieving Vision 2020, followed by democratic and liberal society, integrity of caring society, scientific and progressive society, moral and ethical society and lastly sharing nation’s wealth.

#### 4. Conclusion

Since Malaysia consists of multiracial, establishing a united Malaysian nation was not easy to implement. Furthermore, the economic situation is viewed uncertain at present affects all, especially those with low income. It is also one of the question of whether Malaysia could achieve as a high income developed nation by 2020. The spirit of nationalism and unity of a country can become outdated if the national economy is unstable and burden the society. It should be remembered that nationalism and national identity not only related to economic aspects but also include family relations and in a strong sense of shared culture.

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