The Effect of Displacement on Indigenous Tribes’ Socio-Culture and Food Practices

M. Salehuddin Mohd Zahari, N. Mohd Shahril Nik Mohd Nor, H. Abdul Hadi, M. Zulhilmi Suhaimi

Abstract—This paper reports the empirical investigation on the effect of involuntary displacement of indigenous tribes on their socio-cultural and food practices. A descriptive research design using the quantitative approach was applied and individual of indigenous tribes as unit of analysis. Through a self-administered survey among two selected Malaysia indigenous tribes, one hundred fifty questionnaires were successfully collected. With the application of descriptive and inferential statistic some useful insights pertaining to the issue investigated was significantly obtained. Findings revealed that improvement on the socio-culture, economy and knowledge is apparent on the indigenous groups’ resulted from displacement processes. Displacement also has a slight impact on indigenous groups’ food practices. These positive indications provide significant implications, not only for the indigenous groups themselves, but also for the responsible authorities.

Keywords—Displacement, indigenous tribes, Socio-culture, Food, Practices.

I. INTRODUCTION

Displacement or resettlement refers to a movement of large numbers of people from the original settlement to a new settlement [3] or when people leave their original place to resettle in a new foreign place where they can begin a new life and adapt to the new biophysical, social and administrative systems of the new environment [30], [37]. Displacement happens either through their own free will or voluntary and exogenous factors, or is involuntary [22]. Voluntary displacement is due to the natural nomadic behaviour of the indigenous peoples while involuntary displacement is due to a planned displacement scheme by the government for development [11]. Voluntary displacement or spontaneous movement allows tribes to decide whether they want to stay behind or move to other new places [36]. Socio-political upheavals like wars, civil or religious unrest or natural disasters such as droughts, famines, and floods might cause the movement.

Although voluntary displacement is common among indigenous tribes, involuntary displacement on the other hand is introduced and enforced by the authorities for the benefit of the tribes, community and society [22]. The displaced peoples are usually resettled close to civilization. Involuntary movement or forced displacement involves policies or the effect of compelling people to leave their home and place of habitual residence, or relocating them to another area which is sometimes against their will or consent [1]. It is an act of planned movement of people from their original places to new determined places [37]. Factors such as planned agriculture or government projects, such as dam construction which require massive land requisition are causes [9], [32]. Involuntary displacement is also introduced by the government to prevent deforestation by indigenous peoples [31]. Both displacements commonly involve the indigenous peoples or tribes and these are to curb the nomadic behaviour of tribes, including shifting cultivation or swidden farming [16]. Despite their being two displacement processes, this study only focuses on the involuntary displacement of the indigenous peoples.

In Peninsular Malaysia, the Orang Asli are the indigenous tribes which comprise approximately nineteen culturally and linguistically distinct groups representing 0.6% of the total national population. Among them, Semai, Temiar, Jakun (Orang Hulu), and Temuan are the largest groups of Orang Asli scattered throughout the Peninsula [2]. For a long period before Independence, the Orang Asli were nomads living in remote forest areas isolated from civilization and development processes. However, to ensure that they were not left behind from the benefits of the modern development process, together with other ethnic groups, a displacement scheme was introduced by the government in the late sixties [31]. Displacements of Orang Asli tribes in Peninsular Malaysia have occurred since 1948 for three major reasons [2]. The first reason was to curb the spread of communist ideology. Orang Asli were displaced to a newly designated place by the British. Pengkalan Hulu in Perak and Gua Musang in Kelantan are the examples of the earliest resettlement areas established during that pre-Independence period. The second reason was to control the deforestation caused by the nomadic swidden farming of the Orang Asli [31]. Swidden farming is an unplanned process whereby the Orang Asli open and close forest areas for agricultural purposes, thereby destroying forest areas’ flora and fauna. The third reason was related to the planned infrastructure development projects such as electric hydro and dam construction (Kenyr Dam in Terengganu), highways (North and South highway PLUS) and land acquisition projects (FELDA and FELCRA) [16].

Reference [3] argues that displacement inevitably causes social cultural changes to the indigenous peoples or tribes. In the new places or settlements, tribes without doubt encounter
and adjust to many facets in their life, including the economy, education, lifestyles, beliefs, religion and many others [38]. The indigenous tribes have to adapt to and to blend in with the locality or new peoples surrounding those [12]. With this, it is argued that the Orang Asli through displacement programs, are believed to have altered their socio-cultural elements such as domestic economy, household income, education, religious beliefs and cultural practices including food practices. However, the available studies on the Orang Asli have mostly focused on the socio-economic, such as household income and the compensation value paid after the acquisition of the land by the authority [16], [3]. It is no exaggeration to say that there are no available studies specifically looking at the impact of displacement on Orang Asli traditional food practices. In other words, to what extent the displacement programs, besides the economy, lifestyle and others, have altered or influenced the Orang Asli traditional food practices has not yet been discovered. This also relates to the type of food prepared, the method of cooking, utensils, ingredients and eating decorum. This study therefore aims to reveal such issues and hypothesizes that;

H1. There is a relationship between displacement and socio-culture attributes

H2. There is a relationship between socio-culture attributes and food practices

H3. There is a mediating effect of socio-culture from displacement toward food practices

II. LITERATURE REVIEW

A. Elements of Displacements

There are three basic elements in the displacement process: type, form or shape, and patterns [38]. Type explains the formal and functional relationship of the resettlement site; for example, house-to-house, house-to-street and street-to-street relationships. Form refers to the geometrical shape of the aggregate of buildings and streets. The shapes of farms, buildings and streets such as square, circular or rectangular are explicitly indicated. A displacement form can be described as scattered or dispersed in which families form a village or urban community. The design of a dispersed settlement can be made through understanding the microenvironment that includes the fertility of the soil and moisture supply, health advantages and physical distance [38]. With respect to the physical and cultural landscape there is another form of settlement, namely in a row or linear. This type of settlement can be formed through kinship affiliation and mutual responsibility. Pattern describes the geometrical arrangement of a large number of urban and rural settlements that fit into natural and cultural features to determine whether a pattern is clustered, dispersed, linear, in a row, and random, and the degree of each. Morphological change can also be explained by land-use changes which in turn lead to social and political conflicts, strengthening or weakening of rural institutions and deterioration of the ecological systems. On the other hand, a marginal landscape can be converted into a mosaic and beautiful cultural landscape [38].

B. Displacement and Socio-Culture Dynamics

Displacement happens in real life situations commonly and, without hesitation, it can be said to cause major cultural disruption and losses [13]. However, the magnitude of displacement varies according to population density and ecological conditions [10]. As reported, the socio-culture implications of displacement have happened in both developed and developing countries [22], [32], [24]. Resettling in a new country involves establishing economic and social independence, creating capacities to build a future, establishing family and community networks, and developing tools such as language that enable participation in the larger society [5]. Based on behavioral science theory, people who retain their own cultural identity and incorporate elements of the new society are more likely to be successful. This is different from people who choose to assimilate completely to the new or who retreat to the familiar while rejecting the new, or who abandon the old and, at the same time, reject the new. Reference [5] named four socio culture dynamics of displacement; integration, heritage language retention, adherence to traditional practices, retention of traditional beliefs, and incorporation of majority culture behaviors.

C. The Diffusion Theory

The diffusion theory is concerned with the spread of innovation, ideas, and technology through a culture or cultures. This theory states there are many qualities in different people that cause them to accept or not accept an innovation. The diffusion theory is widely practised or applied by sociologists, psychologists, and anthropologists. References [17], [19] interpreted the diffusion theory and applied it to the location of resettlements and focused on the interaction, spread, contact, change and growth of resettlement patterns, the physical distances separating the original settlements from the new resettlements, the local economic resource sites and central settlement places. The reasons a new area or innovation is rapidly or slowly adopted have to do with the characteristics of geographical barriers such as mountains, rivers, lakes and deserts, or languages, cultures, ethnicity, income and bureaucracy [18]. According to [17] and [18] the population movements of a certain area manifest four stages: (a) the physical transfer of resettlers to the new settlement sites; (b) the adaptation process to the biophysical and human environments; (c) the achievement of socio-economic development by the resettlers; and (d) the resettlers ability to manage the biophysical and human environments.

D. Displacement and Food Practices

Owing to the lack of available literature or studies looking at the relationship between displacement and food practices, this section is therefore reviewing the indigenous food practices and the changes in food practices in general. Indigenous peoples’ food practices contain treasures of knowledge from long-evolved cultures and patterns of living in local ecosystems [26]. The dimensions of nature and culture
that define the food practices of an indigenous culture contribute to the whole health picture of the individual and the community, not only their physical health, but also the emotional, mental and spiritual aspects of health, healing and protection from disease [26], [14], [35]. Indigenous people are those who retain knowledge of the land and food resources rooted in historical continuity within their region of residence. The local food practices are defined as “traditional food practices” which invariably include some foods that may be used by many outside the indigenous culture [26]. Other scholars state that the indigenous peoples’ “traditional foods” refer to food that can be accessed locally, without having to be purchased, and are within traditional knowledge and the natural environment from farming or wild harvesting [14], [36].

As with living things that are sensitive to changes [27] and modernization, urbanization is found to have a major impact on food, and is strongly linked to social change [12], [20]. Some behavioral shifts are occurring in the preparation and consumption of food, including the traditional food and this is largely associated with modernization [21]. Modernization in fact not only affects daily food practices but also traditional events and celebrations as well as ceremonies [15]. Modernization is also a structural change that involves technology development and adoption representing materials [25]. The production, processing and distribution of food have been extensively shaped by modernization [34], [33]. Modernization of food production and distribution, as well as consumption, is encouraged by business and policy makers [22]. Food changes are also influenced by the new trends in consumption which the researcher [28] describes as the emergence of a post-modern circuit of food and the rise of a new culture of consumption among the consumers. The convenience concept of food which comprises the three components of time, physical energy and mental energy significantly contributes to the alteration or changes [7].

As the world moves on, a slight change occurs in food ingredients, methods of preparation, cooking and eating decorum [6]. The same applies to the cooking equipment and methods of cooking. If in medieval days, people used equipment made of clay, metals and ceramics in the preparation of festival customary foods, however, they were gradually modified along with human civilization. A range of stoves, ovens with gas burners and electric coils and equipment made from stainless steel used to roast, bake, poach, simmer and fry are among the examples [4]. In sum, the changes in food practices are intricately related to the complexities of social and economic circumstances through the forces of globalization. References [26] have postulated that with increasing use of produced processed food and marketing on a global scale, a decline in the practice of local food traditions among the urban society and the indigenous is apparent.

E. Displacement of the Orang Asli in Malaysia

The indigenous communities, peoples and nations are those who have a historical continuity with pre-invasion and pre-colonial societies that developed on their territories and consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them [31]. The indigenous peoples are normally involved in non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories and their ethnic identity as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system [2].

The Orang Asli are the indigenous minority in Peninsular Malaysia. As the collective term introduced by the anthropologists and administrators, Orang Asli means the original person or first people in Malaysia [2]. The Orang Asli comprise at least nineteen culturally and linguistically distinct groups and the largest are among the Semai, Temiar, Jakun (Orang Hulu) and Temuan with the total number of 149,512 in 2004 representing only 0.6% of the total national population [23]. Scattered throughout Peninsular Malaysia the Orang Asli inhabit areas like mountains, remote valleys and thick tropical forest canopies. Because of their small numbers and not being homogeneous, each group has its own language and culture and most importantly perceives itself as different from the others [31].

Historically, before 1948 the Orang Asli mostly depended on various combinations of activities such as hunting, fishing, swidden farming, arboriculture and trading forest products [2]. They had different ways of life and livelihoods with some groups, such as the Orang Laut, Orang Seletar and Mah Meri, in particular, living close to the coast as fisher folk. The Temuan, Jakun and Semai adopted permanent agriculture, planting cash crops such as rubber, oil palm or cocoa, while many, around forty percent, including the Temiar, Che Wong, Jah Hut, Semelai and Semaq Beri continued to live close to or within forested areas and engage in swidden farming, hunting and gathering. Some other groups such as the Negritos (e.g. Jahai and Lanoh) are still semi-nomadic preferring to take advantage of the seasonal bounties of the forest [2].

Owing to the state of emergency, popularly known by the locals as “Darurat” between 1948 and 1960, which was declared by the British authorities, the process of resettlement of the Orang Asli to the new displacement camp was undertaken to curb or to avoid the communist guerillas spreading their ideology among these indigenous groups [2]. During that period, thousands of Orang Asli were brought out or transported from the forest by the British and the local authorities to the new resettlement sites [8]. With this, resettlement sites, to name a few like Pengkalan Hulu in Perak and Gua Musang in Kelantan, were apparent.

Displacement also occurs due to the pressure of development and rapid economic growth [13] and because of these, the Orang Asli were reallocated to a new resettlement area provided to make way for the development process [2]. The infrastructure development projects such as dam construction, highways, land acquisition for agriculture projects and mining activity are the obvious examples [16], [13]. Lastly, the resettlement process was introduced by the
A descriptive research design using a quantitative approach through a cross sectional study was applied with a self-reported and self-administered questionnaire. As this study will establish a fundamental basis for other similar future studies, two tribes of Malaysia’s Orang Asli (Kensui and Kintaq) in the Hulu Perak resettlement area were chosen as the sample population. The reason for choosing these two particular tribes is due to the experience of the researchers interacting with both tribes during community service. Based on the data from the Department of Orang Asli Affairs (JHEOA), there are around 200 families in the population of 600 Orang Asli of both tribes resettled in two displacement areas.

The survey instrument comprised four major sections. Section A contained ten questions using nominal scales and focused on respondents’ demographic profiles. Items in Section B were used in measuring the displacement (location and proximity) effect on the Orang Asli’s socio-culture, such as lifestyle, economy, religion and belief. Fourteen items were used in Section C in measuring displacement effects on Orang Asli food practices which related to food knowledge, ingredients and utensils used. Section D (seven items) was designed to investigate the moderating effect of displacement on Orang Asli food practices. Respondents were required to translate their view on a five type Likert scale ranging from 1 with “strongly disagree” to 5 “strongly agree.” As the majority of the Orang Asli did not understand English well, the original questionnaire (English version) was translated into Bahasa Malaysia (target language). Despite most questions being adopted from previous researchers [38], [29], [5] a pilot study was also initially conducted to verify and confirm the reliability and validity of the items used. All comments and recommendations were considered and some further changes were made before arriving at a final description of the survey instrument.

B. Data Collection

Before the actual survey, permission from the Department of Orang Asli Affairs (JHEOA), Hulu Perak and the tribe leaders was first obtained. Details about the researchers, the aim and purpose of the study and how to fill the questionnaire were briefly informed in the subsequent meeting with the officers from JHEOA and tribe leaders. In addition, the aim and purpose of the study were stated on the cover page of the questionnaire. The information sheet also stated that participation was voluntary, information would be kept confidential and anonymity preserved.

With five research assistants, the survey was conducted on 4 weekends (8 days). Given the fact that the researcher and research assistants had direct access to the respondents after a series of community programs and with the help of the tribe leaders and officer from JHEOA, the survey was successfully conducted. In light of the positive feedback and the absence of any obvious problems with either the instrument or the process, good responses with a total of hundred fifty (150) questionnaires were collected. The reliability test was then undertaken for Sections B, C and D separately. The result showed that the instrument and items used were reliable with a coefficient alpha value at 0.81 for Section B, 0.87 for Section C and 0.89 for Section D.

IV. Analysis and Results

Based on frequency tests, 80 percent (n=120) of respondents were males compared to 20 percent (n=30) females. 20.0 percent (n=30) were above 60 years old while 53.3 percent (n = 80) were in the range of 40-59 years (n = 20) and 26.6 percent were between 30-39 years of age. 60 percent (n = 90) were farmers or self employed working the vegetable farms, fruit orchards or selling forestry products such as traditional herbs and rattan and 40 percent (n=60) were working in mining and refinery factory. 54.7 percent (n = 82) of them were displaced since 1990 and 45.3 percent (n = 68) since 1992.

A. Displacement Effects on Orang Asli Socio-Culture

Looking at the displacement effect on the Orang Asli socio-culture descriptive statistic (Table 1) it is revealed that the majority of respondents agreed that displacement had changed their lifestyle, educational level and standard of living. Displacement much improved their economy by providing many economic activities, creating job opportunities and generating more income. On top of that, displacement provided better religious practices and did not ruin their inherited customs and traditional ritual practices. It is interesting to note that displacement has given them a good environment for living and a healthy lifestyle with a better planned residential layout. Proximity, which refers to distance between resettlement areas and other places, also contributed to changes in socio-culture. In this sense, they believe that a close distance between displacement area and town promotes better economic activities and offers vast job opportunities. Close distances between housing in the neighborhood has encouraged the social and religious activities.

B. Displacement Effects on Orang Asli Food Practices

The magnitude of mean scores between 3.33 and 4.02 indicates that the majority of respondents agreed with most items. As such the improvement of lifestyles has slightly altered the Kintaq and Kensui tribes’ knowledge and food practices. They believed that new lifestyles and educational levels improved their food knowledge and cooking practices. The majority of the Orang Asli believed that displacement not only transformed their religious beliefs, but taught them a new understanding of permissible food knowledge and ways of preparing food, especially among the Muslims. The improvement in the knowledge of food also introduced them to a new variety of food ingredients and understanding of the usage of ingredients and of modern utensils.
The Relationship between Displacement and Socio-Cultural Dimensions

D. The Relationship between Socio-Culture and Food Practices

Single-step multiple regressions were also conducted to test the predictors comprising socio-cultural dimensions against the criterion variable relating to food practices. Looking at the table, the socio-culture factors manage to explain only 12 percent ($R^2 = .12, F$-change = 19.499, $p < .001$) of the variance in the Orang Asli food practices dimension. The socio-culture was found to significantly and positively influence the food practices. The value of $\beta = .34$, $p < .000$ demonstrates that elements of displacement have given a slight impact to the food practices among the Orang Asli. In actual fact, this holds true from the researcher’s observation that a slight change occurs in the Orang Asli socio culture and food practices owing to the advancement of the lifestyle, education and economy. In sum this second hypothesis is supported.

E. Mediating Effect of Socio-Culture from Displacement on Food Practices

The third hypothesis looks at how significantly the socio-cultural dimension mediates the relationship between displacement and food practices. In other words, the predictors comprise the elements of displacement as the independent variable and the socio-culture as mediator, while the criterion...
refers to the food practices. The result of Step 1 reveals that the elements of displacement are only able to explain the 11 percent ($R^2 = .11$, F-change = 18.531, p<.001) of the variation in the food practices. The value of $\beta = .33$, p < .000 demonstrates that elements of displacement have had a slight impact on the food practices among the Orang Asli.

In the second step of hierarchical multiple regression, the socio-culture as the mediator was entered as another independent variable to influence the dependent variable. Although significant, the beta value ($\beta = .22$, p < .05) of socio-culture moderates mediates the relationship between elements of displacement and food practices ($\beta = .21$, p < .05). Therefore, there is a partial mediation of socio-culture dimensions on elements of displacement and food practices. In other words, socio culture through displacement slightly influences Orang Asli food practices.

### TABLE V

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Std. $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Model Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elements of displacement</td>
<td>.33***</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>$R^2$ Change</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>F-Change</td>
<td>18.531***</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, **p < 0.01, ***p <0.001

### TABLE VI

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Std. $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Model Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Elements of displacement</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td>- Socio-culture dimensions (Mediator)</td>
<td>.22*</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>$R^2$ Change</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>F-Change</td>
<td>5.784*</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < 0.05, **p < 0.01, ***p <0.001

### V. IMPLICATIONS AND CONCLUSION

This study finding clearly revealed displacement undertaken by the government has provided significant benefits to the Orang Asli. Displacement is positively improving their socio-cultural economy, knowledge and understanding through education. In addition, displacement is promoting a healthy and a more organized lifestyle and proper religious practices for this indigenous group. It is not harsh to say that displacement is bringing the Orang Asli into the mainstream and has not left them behind the development. These positive indications have significant implications not only for the Orang Asli themselves, but also for the responsible authorities.

The government authorities, the Jabatan Hal Ehwal Orang Asli (JHEOA), who are responsible for the development of the Orang Asli in Malaysia, should continually improve the economy, education and lifestyle of this indigenous group. This can be done by upgrading basic infrastructure such as water, electricity, schools and creating more job opportunities for this group. This agency should play an important role by ensuring all Orang Asli children are not left behind in education therefore and get equal opportunities with other ethnic groups in Malaysia.

In addition to the above changes, slight changes are occurring, particularly in their traditional food practices. Despite practising their traditional food ways, new knowledge gained through displacement has improved their usage of modern utensils, ingredients and methods of cooking. In other words displacement, through the economy, lifestyle and education, has not only increased the Orang Asli’s food knowledge but at the same time has taught them healthy food practices. This is not to say that their traditional food practices were not healthy but improving their style of cooking using modern techniques has enhanced their food potpourri. This clearly indicates that the Orang Asli have not totally rejected other food but are willing to accept it and therefore the authority and other government and non government bodies should continually educate this indigenous group with proper and acceptable food knowledge without neglecting their traditional food practices.

### REFERENCES


[34] Spigelski, D. (2009). Indigenous Peoples’ food systems : the many dimensions of culture, diversity and environment for nutrition and health, Quebec, Canada: FAO Publishing

