Aberystwyth University

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Dong, Masni Mat; Midmore, Peter; Plotnikova, Maria

Understanding the experiences of Indigenous minorities through the lens of spatial justice: The case of Orang Asli in Peninsular Malaysia

Masni Mat Dong ⬤ | Peter Midmore | Maria Plotnikova

Aberystwyth University, UK

Correspondence
Masni Mat Dong, Aberystwyth University, Aberystwyth Business School, Hugh Owen Building, Penglais, Aberystwyth SY23 3FL, UK.
Email: mam120@aber.ac.uk

Abstract

Like many Indigenous people around the world, the original inhabitants of Peninsular Malaysia, the Orang Asli, live predominantly in marginal, remote areas, and have below-average levels of education, health and living standards. Their customary reliance on natural forest resources and assets to support their livelihood is threatened by modernization and conversion of land for commercial crops. The main challenge facing the Orang Asli communities has been maintaining this livelihood against encroaching land conversion projects. The weakness of land rights, remoteness and limited access to public services and economic opportunities appear to be major contributors to deprivation. The perspective of spatial justice provides an important conceptual tool to explore spatial and territorial problems facing the Orang Asli. The objective of our study is to document and analyse the life experiences of the Orang Asli, interpreting it through the lens of spatial justice to inform policymaking. A participatory approach using focus groups and participant observation reveals the lived experience of Orang Asli in two villages in Pahang State of Malaysia. The findings of Interpretative Phenomenological Analysis (IPA) reveal the multiple

dimensions of deprivation of Orang Asli: income, education, health, nutrition and housing, among others, and underscore the importance the Orang Asli place on education for their individual and community future. The results provide useful insights for policymakers aiming to improve the welfare of Indigenous peoples consistent with preserving their identities and way of life.

1 | INTRODUCTION

While there is no agreed definition of Indigenous people, Cunningham and Stanley (2003) suggest a broad understanding based on the experience and worldview of minorities who live in an area or region with more recent inhabitants. Indigenous cultures are grounded in close relations to nature, common ownership of land and water resources, mutual interdependence and strong kinship structures. However, the combination of both state interventions and disruption from wider economic changes have contributed to a general association of Indigenous minorities with low socio-economic status, especially in terms of income and education (Beaiiderk et al., 1988). According to Hall and Patrinos (2012), 5% of the world's population and 10% of the world's poorest people are Indigenous peoples. Compared with the general population, Indigenous groups are, and through time have remained, significantly poorer, less well-educated and in worse health.

Erosion of populations has led to their concentration in remoter areas, adding spatial marginalization to cultural, social and economic disadvantages. Insufficient access to basic education and employment accentuates their poor economic status. Moreover, the Indigenous community located in remote areas face difficulties in securing basic needs such as housing, infrastructure, schooling and economic security. In remote areas, Indigenous populations are less likely to have access to good health care and education, with Indigenous women particularly limited in terms of their access to education (Lewis & Lockheed, 2006).

This article applies the concept of spatial justice to the range of disadvantages experienced by Indigenous people and explores the issues that arise by examining some experiences of the Orang Asli, the Indigenous population of Peninsular Malaysia. The questions that this research attempts to answer are what have been the life experiences of the Orang Asli community, and what issues do they consider important to maintain and develop their community?

The aims are twofold, to extend and deepen comprehension of their circumstances, and to assist in the formulation of policies that have better chances of effectively and efficiently tackling their deprivation and its resulting social problems. We commence with a discussion of the conceptual framework, linking ideas of justice to the spatial domain and their relevance to Indigenous people. Then we consider the history of the Orang Asli, the policies developed for them by the contemporary Malaysian state, and the problems that they continue to experience. Subsequently, the investigative method is outlined, the main results are presented and analysed, and we conclude with a discussion of the implications for understanding the effects and future direction of policies and the people they impact.

2 | REVIEW OF LITERATURE

2.1 | The Concept of Spatial Justice and Its Relevance to Indigenous Peoples

In line with the social contract tradition, a society can be regarded as just if all its citizens are treated equally. However, unequal shares of resources can be justified only where the distribution makes everyone better off than when shared equally (Rawls, 1971). While inequality is an ever-present feature of market economies, it is inequality of opportunities rather than of outcomes that conflicts with the Rawlsian notion of justice. Rawls distinguished between 'a fair contest', 'a formal equality of opportunity in that all have at least the same legal rights of access to all advantaged social position' (Rawls, 1971, p. 72, cited in Mason, 2018) and a 'fair equality of opportunity' that is needed to develop one's talents. For that, it is important for all members of society to have the same opportunities to access education, health care and other public goods, as well as economic opportunities such as employment and access to finance. It follows that the differences in outcomes that are due to unequal opportunities or circumstances do not constitute a fair allocation (Fleurbaey, 2008). Further, Sen's capability approach and his conception of justice emphasize the ability of individuals to make use of, and actualize, available opportunities (Sen, 1992). As Smith (2000, p. 1153) notes, alongside basic human physical needs, individuals also need 'personal autonomy or ability to make informed choices about what to do and how to do it in a given societal context'.

In the framework of Sen's capability approach, location should not decrease one's capability. In this vein, Rauhut (2019), provides an operational definition of spatial justice: 'Spatial justice is considered as a provision of services, infrastructure and other social overhead capital or services of general interest proportional to the needs of the population regardless of the territory they live in' (Rauhut, 2019, p. 111). This is consistent with the Rawlsian notion that the state should correct for inequalities connected to the 'lottery' of birth, implying that the state should interfere to redress spatial injustice.

Spatial justice upholds a non-discriminatory and equitable resource allocation across geographical space (Soja, 2013). It is especially relevant where Indigenous people have become marginalized to the fringes of mainstream society, and where traditional and customary rights in land have become difficult to exercise. As Abel and Frohlich (2012, p. 239) note, 'Individuals' effective opportunities to undertake the actions and activities that they want to engage in are what matter'. Injustice results when individuals and groups of individuals are not able to exercise a range of options and self-actualization with respect to education, employment, fertility or social standing. These arguments can be extended to disadvantages originating from spatial inequalities (Rauhut, 2019). To the extent that inequalities of opportunities are connected to space, such as rural versus urban access to hospitals, access to markets for remote villages, or air quality in large city centres, spatial injustice exists. Spatial injustice is hence a source of Sen's capability deprivation. By analogy with individual's capabilities, territory may also be deprived of capabilities (Israel & Frenkel, 2018).

Indigenous peoples the world over share a close relationship with the natural environment: land, waterbodies and natural capital (Lorenzo, 2017). They continue, where they can, to utilize natural resources and ecosystem services for their livelihood. This intimate attachment has been central to cultural and community ties to a specific territory (Lorenzo, 2017). The Orang Asli share this type of similar understanding of land with other Indigenous communities worldwide, which is reflected in their cultural practices. Land, in addition to its material value, has significant religious and cultural significance. It determines social interactions, and it is through the bond of shared ownership of land that the bonds of social identity form. Thus, land is intimately linked to notions of territory, history and, most importantly, cultural and personal identity. In this way, it is a legacy, which can be represented symbolically by the expression 'it is from the land that we come, and it is to the land that we shall eventually go'. To the Orang Asli, land represents their way of life and how they grow culturally and generationally (Williams-Hunt, 1995, cited in Subramaniam, 2016). Indigenous peoples also share a history of having suffered through colonization, dispossession of land, sometimes physical extermination, discrimination and stigmatization (Browne et al., 2016).

Indigenous peoples have had to cope with societal arrangements, an economic system and institutions imposed on them from outside 'with which they have an unequal, colonial-type, power relationship' (Hirt & Collignon, 2017, p. 5). More recently, they have been targeted by assimilation policies that lead 'to forms of enforced social invisibility', (Bellier, 2006, p. 105 cited in Hirt & Collignon, 2017). Comparative study of Indigenous politics and the representation of minorities in legislative and administrative fields has been widespread in relation to Hispanic and English-speaking majorities (e.g. respectively, Holzinger et al., 2019; Worthen, 2015). In contrast, relatively little has focused on Southeast Asia (noted by Templeman, 2014, in relation to Taiwanese Indigenous minorities). The difference in the latter region, and particularly Malaysia, is the existence and importance of a multi-ethnic politics (Segawa, 2017), which indigenous minorities, themselves fragmented by geographical dispersion, find difficult to negotiate.

The literature on Indigenous people and spatial justice points out that the notion of justice for Indigenous people is strongly connected to space or territory and distinguishes the themes of restoration of justice and redistributive justice. The issue of restoration of justice involves the recognition of community and cultural 'group' rights. In an editorial article on spatial justice for indigenous people, Hirt and Collignon (2017) identify three ways in which space is a means of attaining justice: space as an object, mediator or subject of justice. In the first case, Indigenous people seek to correct past wrongdoing by the state that has dispossessed them of land by obtaining rights to land through owning, managing or otherwise being custodians of the land. In the second case of space as a mediator of justice, justice is sought or attained through recognition and autonomy that extends to a particular territory, autonomy over land use, management of natural resources, decision-making power with respect to development policy as well as political representation tied to their identity. Justice is to do with getting some degree of self-determination for the Indigenous community. The third category, land as a subject of justice, involves Indigenous people claiming rights on behalf of the territory or place that has sacred, spiritual or environmental value and is threatened with intrusion by third parties (Lorenzo, 2017). In this study, we suggest that the Orang Asli case fits the category of securing territory as a mediator of justice, which entails obtaining or securing the right to continue to maintain a way of life that they have practised for millennia, on their customary land where their communities have lived for a long time. In the absence of legal ownership, they are subject to removal from the customary land they work and use for agriculture (Means, 1985).

The other dimension of spatial justice for Indigenous people is redistributive justice. Redistributive justice aims to address unfair allocation of resources and uneven development, inequality, deprivation and marginalization of the Indigenous people and communities. Marcuse (2009) identified two sources of spatial injustice: 'involuntary confinement and unequal allocation of resources across space'. The unequal allocation of resources across space has been emphasized in the literature on spatial justice and its relation to spatial injustice (Van Vulpen & Bock, 2020).

In addition, spatial justice would necessarily involve Indigenous peoples' recognition and representation in regional and national authorities and in politics. This enables raising claims of injustice and communicating their point of view to legislators and regulators. The outcomes are more likely to be just when the decision-making includes the input of the marginalized and hence allow to move closer to the ideal of 'government by discussion' (Sen, 2009). Spatial justice requires more effective representation in legislative, executive branches of government to formulate policy approaches that affect the Indigenous people and monitor policy delivery. Contribution to public discourse and representation of Orang Asli in the institutions of power would ultimately lead to their more equal participation in wider society.

This study's methodological approach draws on Sen's concept of individual's capabilities (Sen, 1985), suggesting that individual wellbeing and opportunity for success are dependent on the availability of resources that originate in the near environment. Spatial justice, in turn, means that the near environment and the location should not contribute to one's capability deprivation. Our methodological approach is also aligned to the concept of multi-dimensional poverty which amalgamates several dimensions of disadvantage such as material deprivation, poor health, limited financial and other resources, and social isolation to name a few (Alkire et al., 2015). This concept also draws on Sen's (1985), capability approach where poverty is defined as lacking capabilities to avoid the aforementioned

conditions. Alkire and Foster (2011), devised a multidimensional poverty index which is used as an official measurement by the United Nations Development Programme, and later become known as the Global Multidimensional Poverty Index. These concepts guide our descriptive analysis to depict socio-economic structures and personal characteristics that may restrict people's capabilities in the Orang Asli case.

2.2 | Indigenous Population in Peninsular Malaysia and Development Policies

The Orang Asli[1] are the earliest Indigenous people to have lived in Malaysia, having settled in the dense rain forests of the peninsular some 5,000 years ago. They now account for a very small share (estimated as 0.7%) of the current Malaysian population of over 33 million people (International Work Group for Indigenous Affairs (IWGIA), 2019). This Indigenous population is not homogeneous. There are 18 tribes, in which there are three main sub-groups, mainly Aboriginal-Malay, Negrito and Senoi (IWGIA, 2019). According to a 2011 report by Department of Orang Asli Development (JAKOA[2]), the population of Orang Asli in Malaysia increased five-fold from 34,747 in 1947 to 178,197 in 2010.[3] Orang Asli mainly live in rural areas for access to the natural resources that had traditionally provided their basic livelihood (JAKOA, 2011). Their foraging activities are now often supplemented from other activities, such as working on fruit and rubber plantations, mixed horticulture (Dentan et al., 1997) or incomes generated from trading (Masron et al., 2013).

Since Malaysian independence in 1957, the Orang Asli population has been granted protected status by the central government, with the goal of achieving greater integration of the Indigenous population into mainstream society. Through establishment of a single agency in 1950 (later to become JAKOA), integration with wider Malaysian society has been fostered alongside maintenance of Indigenous culture and traditions (Kari et al., 2016). As Kamal and Lim (2019), note, the 1950s and 1960s intervention programmes for Orang Asli were mainly in response to the Communist-led pro-independence insurgency (the Malayan Emergency of 1948–1960). Since then, a major priority became improving Orang Asli welfare through provision of public services, since most Indigenous people lived in remote areas far from the reach of local government agencies, medical treatment and education facilities. Since the 1970s, there has been significant investment in infrastructure, medical facilities and agriculture, as well as efforts to raise the standard of education for Orang Asli community. The 1990s development plans delivered commercial training and education as part of the social development initiative. This was followed with entrepreneurship development and training alongside community development programmes in the new millennium. Several recent poverty reduction programmes, including the *Basic Education for All* Initiative, were included in the *Education Plan* for the outlying areas, along with further measures such as the Information Village, implementing ecotourism in the Orang Asli villages and improving land ownership in the Orang Asli community (Hussain et al., 2017).

Orang Asli resettlement programmes have been implemented since the emergency (1946–1960), originally to curtail the communist influence (Hussain et al., 2017). While a significant population of Orang Asli remain in remote locations, many have since been transferred to newer resettlement areas, villages and townships situated outside of existing rural settlements. The intent behind the resettlement programme has been to improve both the socio-economic and health situation of the Orang Asli.

However, despite central government's commitment to development efforts over several decades, the Orang Asli remain living in poor conditions and as vulnerable communities (Aziz et al., 2016). Orang Asli settlements located in rural and remote areas on the peninsular are recognized as the most deprived communities. Rural poverty remains high on the agenda in poverty alleviation efforts. Despite the programmes and policy interventions, the income level of most of the Orang Asli population is low compared with the majority population. For example, most have incomes in the bottom 40% of the income distribution (JAKOA, 2011). Official statistics from 2010 report also indicate that 76.9% of the Indigenous population in Malaysia have incomes below the official poverty line (Department of Statistics Malaysia, 2010). When compared with other ethnic groups, they are far poorer and less engaged in mainstream economic activity. One of the challenges faced by Orang Asli is an inability to increase their income and improve

their living standards (JAKOA, 2011), precisely because the traditional source of income for these Indigenous people has been the now-dwindling forest resource.

Education attainment levels also compare unfavourably with other ethnic groups. Orang Asli students continue to have a high drop-out rate at school, and the majority of Orang Asli children do not continue into secondary education (Khor & Zalilah, 2008). One of the causes of this high dropout rate is access to education, with some Orang Asli students in rural area unable to attend school due to inadequate transportation infrastructure and insufficient funding for transport provision. Such low academic achievement directly affects their employment opportunities (Md Nor et al., 2011).

It has been difficult to find official statistics that enable comparison between Orang Asli and the rest of the Malaysian population with respect to accessibility. To provide a comparison, the authors located 10 out of 262 Orang Asli villages in Pahang state on Google Maps (the remaining 252 were not visible on Google Maps). Route planning from the former reveals that while 4 out of 10 Orang Asli villages have a primary school on site, the average travel distance for the 6 villages that do not have a primary school is 12 km. This compares unfavourably with Malaysia Department of Statistics reporting only 2.6% of poor rural households located more than 9 km away from a primary school in 2014 (see Table 1 in the Appendix).

Moreover, the health status of the Orang Asli population is lower than that of the non-Indigenous groups in Malaysia (Aziz et al., 2016). Indigenous people have poor nutritional status (Khor & Zalilah, 2008). Low incomes are insufficient to provide adequate nutrition from shops and supermarkets (that are often located not within reach) and the Orang Asli are fast losing access to food gathered from traditional natural sources (Saibul et al., 2009).

Most of the Orang Asli villages are in rural areas, meaning that the terrain and remote location become a barrier to access modern medical facilities. According to the Department of Statistics Malaysia, in 2014 only 26.1% of poor rural households were located more than 9 km away from a public health centre and 63% were located less than 5 km away (see Table 2 in the Appendix). Authors' calculations using the 10 Orang Asli villages identified above reveal that only one settlement is located within 9 km of a public hospital (8.8 km), with the average distance for the 10 settlements being 24.6 km, while 4 out of these 10 settlements are located more than 9 km away from a health clinic (see Table 3 in the Appendix). Thus, accessibility to health facilities for these 10 settlements is significantly

TABLE 1 Percentage of poor households by distance from living quarters to the nearest government primary and secondary school

	Government primary schools			Government secondary schools		
	Less than 5 km	5–9 km	More than 9 km	Less than 5 km	5–9 km	More than 9 km
Malaysia	94.4	4.0	1.6	68.7	11.0	20.3
Urban	97.3	2.4	0.3	92.4	5.5	2.1
Rural	92.3	5.2	2.5	52.3	14.8	32.9

Source: Department of Statistics Malaysia 2014, Statistical Report, Table 4.7.

TABLE 2 Percentage of poor households by distance from living quarters to the nearest public and private health centres

	Public health centres			Private health centres		
	Less than 5 km	5–9 km	More than 9 km	Less than 5 km	5–9 km	More than 9 km
Malaysia	73.1	10.3	16.6	47.1	12.4	40.5
Urban	86.9	10.4	2.7	84.2	12.8	3.0
Rural	63.6	10.3	26.1	21.5	12.1	66.4

Source: Department of Statistics Malaysia 2014, Statistical Report, Table 4.6.

worse than for the rural poor in Malaysia. The fact that majority of the settlements do not appear on Google Maps implies that services accessibility for these other settlements is no better and, more likely, worse than for those that can be identified.

Alongside this, the Orang Asli practise their own beliefs, such as animism, and there are still several groups of Orang Asli who refuse modern health services. Their poverty and health deprivation leaves them vulnerable to environmental shocks, exemplified by a 2019 case of 15 fatalities in the Batek tribes of Kelantan State attributed to environmental pollution caused by mining and plantation (Peterson, 2019).

Furthermore, the issue of land rights remains acute. A policy statement in 1961 (Department of Information, 1961), which proposed socio-economic development programmes for the Orang Asli, asserted that the land rights of Indigenous peoples will be respected and that they would not be removed from their traditional areas without their full consent. More recently, Malaysia voted in favour of the UN Declaration on the Rights of Indigenous people in the 2007 General Assembly, which calls on countries to provide 'just and fair procedures for the resolution of conflicts and disputes with States or other parties, as well as to effective remedies for all infringements of their individual and collective rights' (UN General Assembly, 2007, p.26).

However, despite these long-standing policies, the Orang Asli continue to have difficulties in maintaining customary rights to use land (Kamal & Lim, 2019). The 'Torrens' system, adopted in Malaysia as in other former British colonies (Ibrahim & Sihombing, 1987), presumes all unregistered land to be state property. Orang Asli communities need to apply to the State Executive Committee for customary land to be registered and hence to become its legal custodians. Legal guidance is provided to the Indigenous people by JAKOA, including dedicated land ownership surveyors so they can apply for the customary land (Nicholas et al., 2010). This allows the community to decide on land use and to protect it from logging or conversion into palm oil plantations. Even so, media reports identify illegal logging activities of private companies operating on the customary lands that belong to Orang Asli (Dentan et al., 1997). These led to conflicts between locals and loggers, for example the conflict which occurred in Kampung Sungai Papan in 2019, where roadblocks were built by local Orang Asli to prevent loggers from accessing the village (Tan, 2019).

The strategic plan for Orang Asli (JAKOA, 2011) has three foci of development: resettlement, infrastructure and human capital. The first involves gathering populations from dispersed areas into larger villages with modern amenities. The second supports existing villages with improved public infrastructures including basic services and health clinics. The third focuses on education (especially in the primary stage) and social development. Plans include increasing students' motivation and parents' awareness of the importance of education, as well as efforts to decrease the dropout rate in secondary stage of education. An overall emphasis is the objective to change the mindset of Orang

TABLE 3 Author's Google maps calculation of distance to health facilities and primary school for Orang Asli villages in Pahang State

Villages	Primary School	Hospital	Clinic
Kampung Orang Asli Pos Terisu	Within the village	25.7 km	11.9 km
Kampung Orang Asli Sg Kiol	Within the village	10.6 km	3.4 km
Kampung Orang Asli Kedaik	Within the village	27.5 km by car	Within the village
Kampung Orang Asli Gandak	7–8 km	8.8 km	Around 9 km
Kampung Orang Asli Sembayan, Kuala Rompin, Pahang	14.6 km	21 km	19.3 km
Kampung Orang Asli Gedung Siam	11.5 km	47.7 km	11.7 km
Kampung Orang Asli Bukit Bangkong	24.1 km	24.2 km	7.4 km
Kampung Orang Asli Soi	3.9 km	14.8 km	4 km
Kampung Orang Asli Batu 14	10.2 km	23.7 km	12 km
RPS Bukit Serok	Within the village	41.9 km	Within the village

Source: Own calculation from Google maps.

Asli in favour of integration and taking advantage of economic opportunities. Despite this effort by the government to integrate the Orang Asli minorities into mainstream society, most are still unable to catch up with current development levels. Assimilation and group resettlement aim to integrate them into society. Indigenous people that live in vulnerable and environmentally sensitive areas are more likely to be poor when compared with the population that has experienced resettlement programmes (Kari et al., 2016).

Modernization, in the form of assimilation policy, mostly includes classical regional development measures, refreshed in the present century to include emphases on cultural tourism, information technology and entrepreneurship training (OECD, 2009). However, they have failed to recognize the heterogeneity of circumstances of the Orang Asli, leading, in most cases, to making the situation of Orang Asli worse rather than achieving the desired improvements. Recognizing this, Nicholas (2000) argues that current efforts by the government should give more emphatic recognition of the unique identity of Orang Asli and provide opportunities to these communities to engage in their life and decision making. The notion of spatial justice, especially as applied to the marginalisation of Indigenous minorities (Hirt & Collignon, 2017), thus becomes a useful framework to analyse the shortcomings of the paternalistic approach and a signpost for policy reform.

3 | METHODOLOGY AND ANALYSIS

An enhanced understanding of Indigenous communities and their development trajectories can be acquired if their individual lived experiences are considered (Bockstael & Watene, 2016). This qualitative investigation applies the experiential approach of interpretative phenomenological analysis (IPA), where the emphasis is on persons-in-context, focusing on people's background, experiences and significant meanings they attach to them (Larkin et al., 2006).

We gather and analyse life experiences of the Orang Asli, interpreting them through the lens of spatial justice to inform the policy-making context. It is clear, from the preceding section, that the orthodox poverty abatement policies applied over several decades have not addressed the difficulties experienced by the Orang Asli. Hence, we have chosen an exploratory approach and used focus group discussions in a small number of locations, with minimal prompting, as the principal data gathering tool. While such approaches are widely used to inform policy such as 'health and behavioral research, evaluation of social programs, shaping of public policy, developing health promotion strategies, conducting needs assessments' (Hennink, 2013, p. 8); our aim has been to open and explore questions about why and how policies might need to change.

The three questions used to uncover the lived experiences of focus groups participants were:

- What are the main differences in your life compared with the past?
- What are the hardest things that you have had to face and what do you think should be done to improve?
- What kind of programmes you think should be implemented by the government in order to improve Orang Asli socio-economic conditions?

3.1 | Data Collection and Description of Participants

The population of interest in this study is the Indigenous population living in the East Coast of Peninsular Malaysia. The case study area is Pahang State, the state with the highest concentration of Orang Asli population.

A list of Orang Asli villages was obtained from JAKOA, and written permission was sought and obtained for the investigation from that department and the Economic Planning Unit of Malaysia. Given the limited time and resources available for fieldwork, a purposive sampling approach was chosen to obtain information from a specific target group to accomplish the objectives of the study. Pahang State was selected as the location since it is the state that has the highest density and absolute number of Orang Asli in Peninsular Malaysia (see Table 4 in the Appendix).

Three villages were selected initially, and the headman of each village was contacted prior to data collection to give a full explanation of the study and to gain permission to enter the village. One headman refused to allow permission to conduct research. The other two village heads of Kampung Orang Asli Kedaik, Rompin District and Kampung Orang Asli Sungai Kiol, Jerantut District, were content for data collection to go ahead. Ethics review was obtained for the study protocols, procedures and consent forms. Fieldwork began in January 2019 and was completed in May 2019. In addition to the focus group discussions (FGD) conducted, socio-economic and demographic information was collected Table 5.

Study participants were selected if their average monthly household income level was less than RM 1000 (about US$250). This sum is roughly equivalent to the poverty line income of RM 990 in 2019. Income level was the only criterion for selection in the focus group. While the study did not aim to focus specifically on women, it is traditional for women to remain in the village whereas men work outside, and thus only Orang Asli women were recruited for participation. There were 29 participants, and their ages ranged from 18 to 63 years. This age range allowed a wide variety of life experiences to be captured in the composition of the focus groups.

TABLE 4 Number of villages and Orang Asli population by state, 2014

State	Number of villages	Residents			Tribes			
		Male	Female	Total	Senoi	Malay Proto	Negrito	Total
Pahang	262	35,323	32,183	67,506	29,439	37,140	925	67,504
Perak	255	27,716	25,583	53,299	50,281	605	2,413	53,299
Selangor	74	9,254	8,333	17,587	5,073	12,512	3	17,588
Kelantan	118	7,140	6,317	13,457	12,047	29	1,381	13,457
Johor	58	6,702	6,437	13,139	55	13,084	1	13,140
Negeri Sembilan	68	5,461	5,070	10,531	96	10,435	0	10,531
Melaka	14	778	737	1,515	28	1,486	1	1,515
Terengganu	3	474	419	893	818	41	34	893
Kedah	1	155	115	270	19	0	251	270
Total	853	93,003	85,194	178,197	97,856	75,332	5,009	178,197

Source: JAKOA, 2011.

TABLE 5 Results of analysis

Main themes	Sub-themes
1.The spatial injustice experience	1.1 Land rights issue
	1.2 Natural resources distribution
	1.3 Deforestation
	1.4 Pollution
2. Accessibility and remoteness	2.1 Education level
	2.2 High dropout rate
	2.3 Poor health
	2.5 Poverty
3. Marginalization and social problems	3.1 Unemployment
	3.2 Alcoholism

Source: Author's own interpretation.

Because the focus group was composed entirely of women, we missed the perspective of men who could have offered different viewpoints given their engagement outside of the community. On the other hand, the absence of men allowed women to speak more freely in expressing their viewpoints. Arguably, this was an advantage given that our aim was to learn about life experience inside the community where women spend most of their time. Informed consent was sought from all participants prior to the data collection. Focus group discussions lasted between 30 and 60 minutes. Six focus groups were formed for the discussion, typically including five participants in each group. Discussions were conducted in Malay by one of the authors of the study and were audio recorded with the permission of the participants.

3.2 | Data Analysis

The objective of data analysis was to elicit the lived experience and the significance of real-life meanings participants attached to them. The data analysed consisted of transcribed audio recordings of the focus group discussions, supplemented with field notes from participant observation. Coding was developed and applied using MAXQDA software (Kuckartz & Rädiker, 2019).

IPA coding takes place on three primary levels: descriptive comments that emphasize the participants' lived worlds and meanings, linguistic comments that concentrate on the language that participants use and the way they communicate their experiences, and abstract or conceptual comments that, while remaining focused on the participant's experience, explain it through the lens of the researcher. This involves multiple readings of each transcript in turn to recognize and analyse themes and patterns.

As recommended by Eatough and Smith (2008), the first step involves listing all words, phrases, ideas and convergent patterns. From these, the focus is on eliciting emergent themes, clustered to avoid redundancy and repetition, and illustration using verbatim comments to typify the meaning of the theme. Then, across thematic clusters, still with the lived experience of participants at the forefront of analysis, connections between themes are identified and grouped into superordinate (critical) and subordinate (less critical) themes. Repeating and comparing across all transcripts, superordinate and subordinate themes and their meanings can be elicited from the entire dataset (Braun & Clarke, 2013).

4 | RESULTS

4.1 | Main themes of the life experiences of Orang Asli

Three main themes and 11 subthemes reflecting the participants' experiences of development and spatial justice issue emerged from the interpretative phenomenological analysis of the transcribed data.

4.2 | Spatial Injustice Experiences

The issue of land rights poses one of the major problems for Orang Asli communities. Not only do they face difficulties in defending their rights to customary land, but the depth of their cultural attachment compounds the difficulties. For them, land is not only the place for them to live but plays an important part in sustaining their livelihood. As well as providing space to grow their own food and generate income from farming, they enter the forest to collect natural resources both for their own use and for trade. Examples of forest resources collected include Borneo kauri, a resin producing and valuable timber tree that is included in the International Union for Conservation of Nature red list of endangered species (Farjon, 2013), rattan, derived from a wide variety of palm species used in construction,

handicrafts and furniture, as well as a range of other plants used for traditional medication purposes. However, deforestation, private logging and mining have diminished these sources of support and revenue for Orang Asli.

Focus group participants raised their concern of the exploitation of the land and forest in their villages, consistently mentioning the importance of the land in their life. They expressed their deep concern for the future generation if their current available land is taken over by other interests. The feelings of worry, frustration and the sense of loss were reflected in all the discussions.

> 'We rely on the land so much, we grow food from it. However, the land is not our land anymore, we Orang Asli have no rights to our land. I am worried that, if this situation will continue, what we going to do with our future generation?' (Participant 11, Focus group 3)

> 'When logging activity happens in our land, our natural resources supply like Borneo kauri and rattan will decrease.' (Participant 8, Focus Group 2)

The statement of participant 8 represents the frustrations experienced by the participants. The area surrounding her village has been used for private logging, mining and palm oil plantation. The consequences for villagers from the illegal logging activity have been destruction of the ecosystem in the forest, and river pollution that directly affects water quality and local fishing. Opportunities for fishing and foraging activities in the forest, which contribute substantially to their food supply, are gradually diminishing as a result. Their living costs have increased, making their way of life more difficult to support within traditional communities and structures.

> 'The supply of natural resources is decreased, we used to go to forest and collect the natural resources. The living cost increases, we can't use the same amount of money to buy the same product anymore.' (Participant 6, Focus Group 2)

> 'Around November and December, we rely on river a lot. We can go for fishing, but now due to logging all the river was highly polluted. There is no more fish or prawn.' (Participant 7, Focus Group 2)

> 'Previously we can rely on forest resources that have everything that we need. We can find the food from forest and river. Parents have had no problem in sustaining living cost but now due to the price increased we can't support the family living cost. Example like RM 100 can support 3 to 4 months of living cost but now RM 100 gone in 5 minutes.' (Participant 11, Focus Group 3)

Accessibility and remoteness

The locations of the Orang Asli villages limit local accessibility to services and products. Due to the remoteness, they confirm the difficulties in accessing education, health services and employment. The distance from the villages to the nearest town restricts opportunities for employment. Those who do not have a motorbike cannot go out to work but must rely solely on natural resources to sustain their livelihoods. Some of the focus group participants engage in small-scale farming activities for trade and their own food supply. In addition, these women go to the forest and look for herbs, fruits or vegetables that can be eaten or sold. Others do some rubber tapping. However, gathering forest food and rubber tapping is limited by the weather. Malaysia experiences two monsoon seasons. The Southwest monsoon usually occurs between May and October, but the Northeast Monsoon from around mid-October and the end of March is more severe, especially on the eastern side of the peninsular. During this period, unpaved roads are impassable and access to the forest is not possible.

> 'I work in my parents' rubber farm, but it also depends on weather. If the weather is bad, I could not do the rubber tapping.' (Participant 29, Focus Group 6)

'I have transportation issue, when I want to apply for a job, I have to ask my father that stay at Terengganu state. At the end, I could not go for the job interview because of the transportation.' (Participant 27, Focus Group 6)

In some cases, family circumstances do not allow them to gain employment outside the home. One of the concerns raised by the participants is that there is no one to take care of their children if they go out for work. For single mothers, caring for their children and working to sustain the family is especially difficult, severely limiting available job options. They find it much more difficult to combine long-distance journeys to work and childcare, and so prefer to work in the villages.

4.3 | Education

Education is an important determinant of wellbeing, job opportunities and income for the Orang Asli communities (Kamaruddin & Jusoh, 2008). Data in Figure 1 indicate that less than half of Orang Asli primary school students continue with secondary education. Furthermore, Khor and Shariff (2008) report a large gap in educational achievement of Orang Asli children in rural versus urban areas, with students in urban areas being more aware of the importance of education for a better life and more job opportunities. Education arose frequently as the main point of discussion in the focus groups. Most participants were concerned about the current education level of their own children. Most of their older children did not finish formal education. In one of the group discussions, participants raised concerns about education awareness among Orang Asli. According to participants, it is still only a minority of people who realize the importance of education for their children. A view expressed in this group was that that every child should complete at least 11 years of formal education. The discussion is in line with the findings of Khor and Shariff (2008), suggesting that, in the case of Orang Asli that live in remotes areas, there is yet little awareness of the importance of education compared with those that live in urban areas.

In an early study, Khor (1985) suggested several factors contributing to the high school dropout rate of Orang Asli children: parents do not allow their children to stay in boarding schools; children need to stay home to help their parents; the costs associated with school parents are too high; and the children dislike the school environment. The
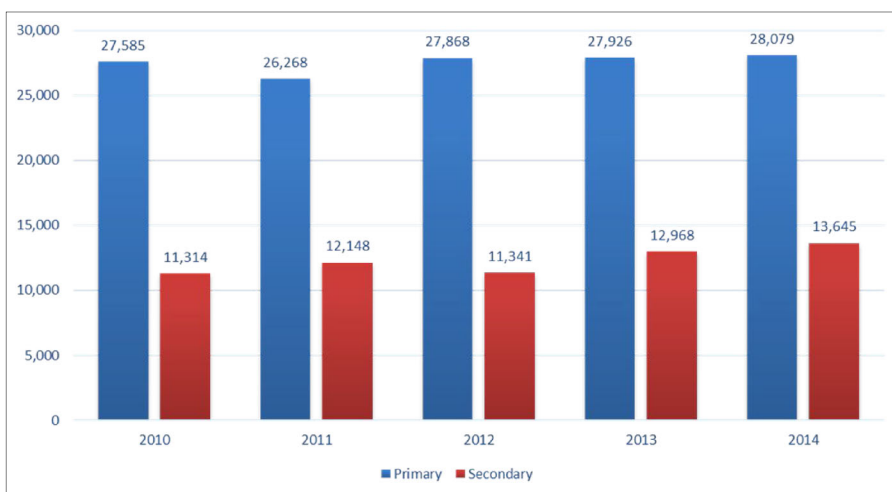

FIGURE 1 Enrolment of Orang Asli Students in primary and secondary Schools, 2010–2014. *Source*: JAKOA, 2011

awareness of parents of the importance of education is an important key in building interest and encouraging children to go to school. Support from parents can gradually lower the dropout rate of Orang Asli children. In addition, motivation for studying was another issue shared in the discussion. Some participants suggested that schoolteachers can play a key role in motivating students as well.

Focus group participants themselves had either little or no formal education at all, so for them school is the only way to teach their children to read and write. Their suggestions included providing a relaxed and stimulating environment to the children that promotes their interest in study. Some schools are located far from the villages, so that distance is also a key issue for parents to encourage their children attend school.

> 'Education is important, whenever we go, we need education to get a job. If compare with last time, is hard even to go out from the villages because of the remoteness. Now everything is getting easier. I used to walk from villages to go to school. But not in the case with current children anymore. However, they still choose not to go to school.' (Participant 2, Focus Group 1)

> 'I agreed with the statement that importance of education among Orang Asli children. I never had formal education in my entire life. I am originally from other villages that far more remote. The school was located very far from the villages. Like my case, my parents not allowing me to attend school because they don't want us to stay far away from them.' (Participant 3, Focus Group 1)

Marginalization and Social Problems

Because most of the Orang Asli have not completed their formal education, their low academic achievements steer them towards unskilled jobs that have low pay.

> 'I know that I can't apply for certain jobs because I don't have qualification.' (Participant 25, Focus Group 5)

> 'When it comes to job vacancy, when we Orang Asli go to apply, is hard for them to accept the application. Maybe there is discrimination from that.' (Participant 26, Focus Group 6)

In addition to marginalization in employment, the main social problem is alcoholism. Most participants raised concerns about prevalent youth involvement with alcohol in the villages. Alcoholism further limits employment opportunities and exacerbates health problems. Participants feared that addiction to alcohol would lead to serious social problems and damage the community reputation.

> 'We now exposed so much to the outside world, with the problem of alcoholism that bring into the villages. I am worried about the future of Orang Asli especially the youth.' (Participant 13, Focus Group 3)

> 'Sometimes salesman from outside bring the alcohol to sell in the villages. We don't even know where they come from. We really hope there is authority that can prevent this kind of things happen in our villages. Alcoholism is really bad and it happens in our villages'. (Participant 15, Focus Group 3)

5 | DISCUSSION

This exploratory study identifies sources of spatial injustice that diminish capabilities and perpetuate the disadvantage of Orang Asli vis-à-vis the rest of the population. In many ways, these reflect and restate issues that affect

spatial justice for Indigenous peoples globally, although with contextual differences that offer new perspectives. For most Indigenous peoples, limited capacity to exert their land rights and inadequate support from state authorities erode traditional lifestyles and livelihoods as developers appropriate biological and mineral resources, cause pollution and limit abilities to gain livelihoods in traditional ways. Past contractions of Indigenous populations, in the face of these pressures, resulted in uneven development and spatial inequalities, including remoteness and poor access to health and education services and employment. Despite its small scale and exploratory nature, it confirms and re-emphasizes concerns expressed throughout recent decades. It depicts inadequate provision and limited access to health, education, employment opportunities and, especially, weak enforcement of land rights. Concerns about the high dropout rate of Orang Asli children from school due to poor awareness of the significance and benefits of education have been previously documented (Aziz et al., 2016; Khor, 1985). This may reflect differences between urban and rural Orang Asli students (Khor & Shariff, 2008). The disadvantages of remoteness for social and economic welfare have also been explored (Ghani et al., 2020). Growing problems of non-communicable diseases among the Orang Asli as they become more exposed to mainstream Malaysia society have also been considered (Khor & Shariff, 2008).

The superordinate themes identified from transcripts thus bear out these findings (and others that exist in research literature) concerning the dimensions of disadvantage experienced by the Orang Asli in Peninsula Malaysia. However, none of these previous studies combine these complex and interdependent issues through the perspective of spatial justice. What is apparent, particularly, is that the separate components of disadvantage in combination add up to more than the sum of their parts, and that location and ethnicity produce a cumulative dynamic of disadvantage that has endured and intensified.

This qualitative study is neither exhaustive nor conclusive, but by examining the lived experience of Orang Asli, it draws attention to the compounding of an array of disadvantages. Not enough is known in form of quantitative data and, in particular, there is a dearth of spatial data that identifies precise geographical locations of the villages. In the absence of easily available quantitative data, this qualitative study brings to light the complexity of the issues involved and aims to motivate the effort of quantitative data collection to further document the dimensions of disadvantage.

6 | CONCLUSION

For the Orang Asli, contextual differences include the very small size of the population relative to the majority ethnic groups, and its further fragmentation across different locations, the paternalistic development policies and relations within a fast-growing and rapidly modernizing economy where resource-based export commodities remain important. Their specific needs for spatial justice arise because, based on this mix of global and contextual factors, individual and community capabilities compared with other locations are severely reduced (Sen, 1992).

The scattered nature and small size of the Orang Asli populations have made it very difficult for them to influence policymaking and administrative processes. The most prominent effects of this have been experienced in reconciling customary rights to manage and exploit forest resources with the formalities of Land Registration statutes. JAKOA, with support from central government, have been energetically promoting land registration as the appropriate legal tool. Yet progress has been slow and, even when rights have been obtained, they are often difficult to enforce.

As a result, sustaining a traditional livelihood from forest resources is increasingly difficult. Combined with remoteness, this explains much of the low income and poor living standards that cause so many difficulties for the Orang Asli. Focus groups directly connect the erosion of livelihood with loss of customary lands to logging and palm oil plantations in breach of potential, and even in some cases actual, land registration. Without the forest and river ecosystems which previously provided food and other nature-based sources of livelihood, they have little alternative to looking for outside employment, eroding their community structure and way of life.

In addition, as Masron, Masami and Ismail (2013) argue, erosion of their cultural identity is being exacerbated by an inappropriate education system which fails to accommodate their beliefs and practices. Integration and assimilation policies are also contributing factors. Different ethnicity, culture and traditions should not lead to economic disadvantage, and despite the good faith of the traditional development policies pursued by central government, existing frameworks reinforce the perception of backwardness and disadvantage of the Orang Asli and promote a culture of dependence on special privileges and welfare payments.

Based on the understandings revealed and outlined in this study, a more nuanced approach to poverty reduction policies, highlighting the root causes as well as the symptoms of poverty, is required. Economic improvement that allows a sustainable continuation of Orang Asli culture would require recognition of the power relationships and imbalances that exist (Lawson, 2014) and attempt to reduce their effects, in two main ways.

The first requires greater recognition of importance of the strong bond between Orang Asli and their customary lands and its vital role for their social, cultural, economic and spiritual survival and overall wellbeing. This bond is multi-faceted and cannot be understated. Indigenous people have the right to continue practising their traditions, retaining their knowledge and continuing to pass along their traditions and customs. Entitlements to land should be secured beyond the registration process embedded in the Torrens system, reversing the presumption in favour of exploitation by private development companies, and giving the Orang Asli meaningful participation in decision making involving natural resources (Kamal & Lim, 2019). This would require collaboration and better coordination between central and state governments.

The second is the need for improved accessibility to services, particularly education but also medical clinics, since with more comprehensive availability of primary education and healthcare even the vulnerable have a better chance of being less disadvantaged (Sen, 2001). This would involve extending more effective access to remoter Orang Asli communities, but further, adapting these services more closely to the needs and aspirations of the communities themselves. This restorative spatial justice requires greater recognition, real empowerment and a more genuine partnership between the Orang Asli and the majority ethnicities in Malaysia.

ORCID

Masni Mat Dong https://orcid.org/0000-0003-1395-8050

ENDNOTES

[1] Orang Asli means 'the original people of the land' in Malay.

[2] JAKOA, abbreviated from '**Jabatan Kemajuan Orang Asli**' in Malay, is a special department of the Malaysian government that manages the affairs and promotes the development of the Orang Asli in Peninsular Malaysia.

[3] This increase is comparable to but slightly below the 5.7 increase for the general population from 4.9 to 28 million for the same period.
note to TS: On how to cite, please update the author's name Mat Dong M.

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