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Education Policies in Overcoming Barriers Faced by Orang Asli Children: Education for all

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EXECUTIVE SUMMARY

Malaysia has achieved significant progress in terms of education for the people since the country's independence. The Ministry of Education has implemented various education policies and programmes, including those for the Orang Asli communities. Specially targeted for the Orang Asli children were education policies and programmes, such as Pensiangan-Salinatan and Orang Asli Transformation Plan, which have been implemented since 1995. Despite continuous efforts and investments over the years, education gaps continue to persist between Orang Asli children and non-indigenous children till the present day.

This policy paper aims to understand the challenges faced by Orang Asli children in accessing education and to analyze if their unique needs and challenges have been met through education policies and programmes designed for them. Based on the findings, recommendations and proposals have been made to strengthen existing policies and programmes.

In accessing education, Orang Asli children face many challenges, including socio-economic factors and geographical barriers due to poverty and the location they live in. After overcoming these challenges, they also face a different set of challenges in school due to language and cultural differences that lead to difficulties in interacting in school, causing them to be left behind in their studies.

The key takeaways of this policy paper are:

- There needs to be a shift of focus of the educational policies and programmes to address the underlying causes rather than the symptoms. The underlying causes of dropouts and low academic performance are due to the many challenges faced by the Orang Asli students. The focus of the existing programmes, such as K9 school model and PIKAP, need to be sharpened in order to address the challenges and provide effective solutions for the students.
- Impact analysis and adjustment of specific policies and programmes are needed to ensure that they address the challenges and new issues that arise. The Ministry of Education has implemented policies and programmes to help reduce dropouts and low proficiency in basic literacy and numeracy skills since 1995. However, current programmes, which are the extension of the previous programmes, have not taken into account the weaknesses of previous programmes due to the lack of impact analysis and evaluation. Evaluation needs to be done periodically, and adjustment must be made to learn from the past and improve on these programmes.
- Monitoring and evaluation must be strengthened by having a clear target and consistent comprehensive monitoring. The education indicators selected have to reflect an accurate and complete picture of the situation on the ground. Although there is consistent tracking of indicators, such as transition and attendance rates, there are some other important indicators, including enrolment and completion rates, which are not tracked consistently in the MEB Annual Reports. The focus on certain indicators diverts the effort on other aspects that are equally important to address the challenges.
- There are gaps between the policies and programmes with the implementation on the ground. In order for a policy or programme to reach its objectives successfully, the implementation gaps need to be bridged. Some of the recommendations to bridge these gaps include pre-posting

teachers to undergo appropriate training so that they will understand the culture of the Orang Asli; incorporating indigenous pedagogy in the teaching and learning; continuous training and support network for teachers; and sustainable funding for the programmes.

- The Orang Asli children who have never been to school are not given sufficient attention in the policies and programmes. The major policies and programmes focus on two main objectives: reduce dropouts and improve proficiency of basic literacy and numeracy skills. These are important in the efforts to enhance the Orang Asli students' access to quality education, but the initiatives neglect the most vulnerable group, which are Orang Asli children who have never enrolled in a school. The reasons why they are not in school needs urgent attention and policies must be formulated to address this issue. The enrolment rates will be an important indicator to keep track of the progress.
- Voice of the Orang Asli communities and their right to self-determination must be respected and included in the formulation of policies and programmes. Consultation from and participation by the Orang Asli in these policies and programmes need to be increased at all levels: national, state, district, school and community. Feedback and consultation are important to evaluate the policies and programmes that will support and localize the indigenous context.
- The mismatch of the Orang Asli values and culture with mainstream education might suggest a re-examination of the current education system of competition and competency. It leads us to reflect on the broader society – do the non-indigenous students face the same challenges as the Orang Asli students? Are our students, who are more physically active, face the same challenges as the Orang Asli students, where long hours of sitting in classes and rote-learning are hindering their learning? Skills, such as creativity and critical thinking, are cultivated through exploration and experimentation. An education system that is fixated on examinations would crowd out the space to explore and experiment.

It is hoped that the observations and recommendations made in this paper will lead to more extensive mapping, as well as effective implementation and monitoring of future policies and programmes for the benefit of the Orang Asli communities in general and the Orang Asli children in particular.

INTRODUCTION

Malaysia's achievements in education since independence have been significant. The country achieved a near-universal enrolment rate of 97.88% in 2017 at the primary school level, 96.57% at the lower secondary level and 84.07% at the upper secondary level (Educational Planning and Research Division 2018a). The literacy rate for youths¹ was 96.9% in 2018 (UIS 2020). The percentage since 2000 has remained at around 97%. Public expenditure on education in 2016 were 1.63% and 1.90% of the country's GDP for primary and secondary education, respectively (Educational Planning and Research Division 2018a). The level of public investment in education in 2016 is comparable to other developed countries, such as Finland, Japan, Australia, USA and Germany (Educational Planning and Research Division 2018a).

Despite the near-universal enrolment rates and high literacy rates, education gaps persist between the indigenous children, especially the Orang Asli children, and non-indigenous children. Although the specific enrolment rates for Orang Asli children are unknown, the other indicators of access to education, such as transition rates and completion rates, are still lagging far behind the national average. In stark contrast, the average national secondary school completion rate in 2008 was 72% as compared to only 30% of Orang Asli students (MOE 2016). Although this number has improved in recent years, it is still significantly lower than the national average. In 2014, it was reported that 59% of Orang Asli students completed secondary education (MOE 2015). In 2018, the transition rate for Orang Asli students from primary to secondary education was only 76.7% as compared to the national transition rate of 96.8% (MOE 2019).

This education gap has spurred the government to launch initiatives, such as Pensiangan-Salinatan Programme and the Orang Asli Transformation Plan 2013-2018 under the Malaysian Education Blueprint (MEB) 2013-2025. Therefore, this paper seeks to review systematically the challenges faced by the Orang Asli children in accessing education and map out the education policies and programmes for the Orang Asli children, as well as to understand and examine to what extent these policies and programmes address the underlying challenges and barriers, which these children face. This paper, which draws its data from government statistics, policy documents, education blueprint, as well as secondary quantitative and qualitative data from previous studies, has six sections, as follows:

Section 1: Presents the background and profile of the Orang Asli.

Section 2: Investigates the current state of education access and indicators of the Orang Asli children.

Section 3: Reviews the challenges faced by Orang Asli children in accessing education based on literature reviews and previous studies.

Section 4: Maps out the major educational policies and programmes explicitly targeting Orang Asli students.

Section 5: Discusses and analyses how the policies and programmes address or do not sufficiently address the underlying challenges and needs of the Orang Asli children.

Section 6: Proposes policy recommendations based on the discussion and analysis that could be considered to strengthen the existing policies and programmes.

The term 'Orang Asli children' in this paper refers to all Orang Asli children, including those who are not in school, while the term 'Orang Asli students' refers to the Orang Asli who are in school.

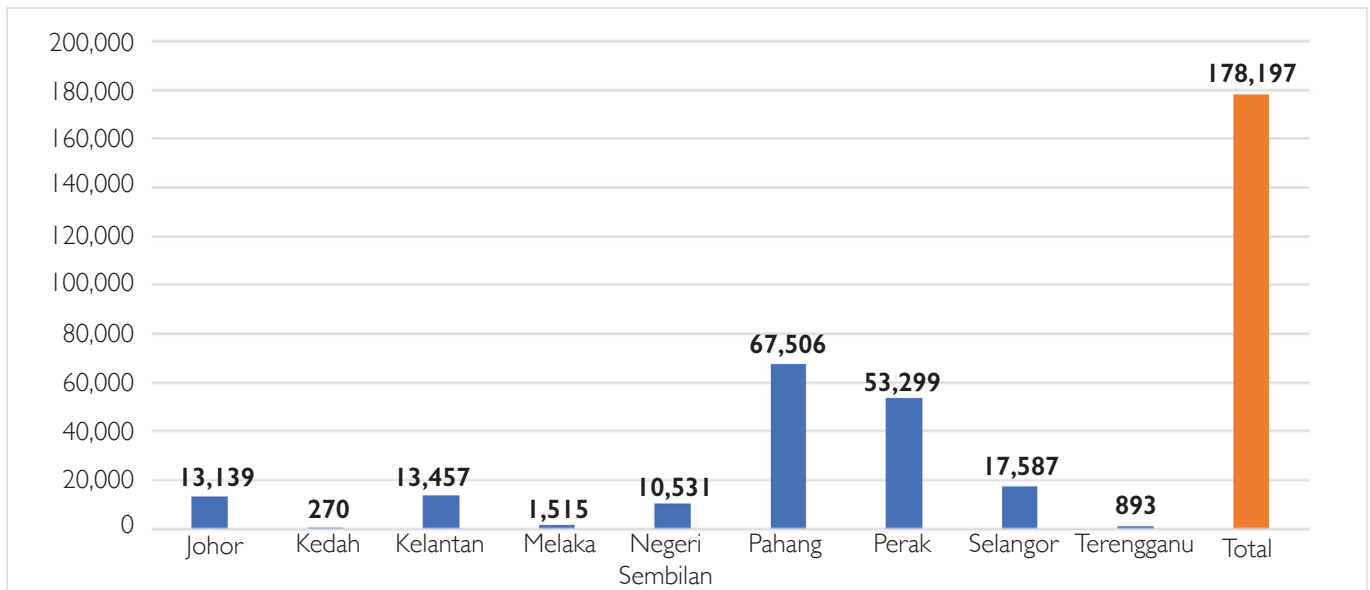
¹ Aged between 15 and 24

SECTION I: BACKGROUND AND PROFILE OF THE ORANG ASLI

Who are the Orang Asli?

The Orang Asli are the indigenous people of Peninsular Malaysia. 'Orang Asli' means original people in the Malay language. In 2018, as shown in Figure 1, there were 178,197 Orang Asli located in Peninsular Malaysia, and they comprised of around 0.55%² of the population of Malaysia (JAKOA 2018b; DOSM 2019). The majority of the Orang Asli lives in Pahang (37.9%), Perak (29.9%) and Selangor (9.9%). There are 853 Orang Asli villages across Peninsular Malaysia (JAKOA 2018b).

Figure 1: Population of Orang Asli



Source: JAKOA 2018b.

Although they are a minority of the Malaysian population, Orang Asli is not a homogenous group. There are 18 sub-ethnic groups, classified as Senoi, Negrito and Proto Malay, as shown in Table 1 (JAKOA 2018a). Among the three main ethnic groups, Senoi is the largest with 54.9%, followed by Proto Malay with 42.3%, and the minority is Negrito at 2.8% (Figure 2). They are located in different states of Peninsular Malaysia (Figure 3). Orang Asli was formally categorised as an ethnic group when the Aboriginal Act was enacted in 1954.

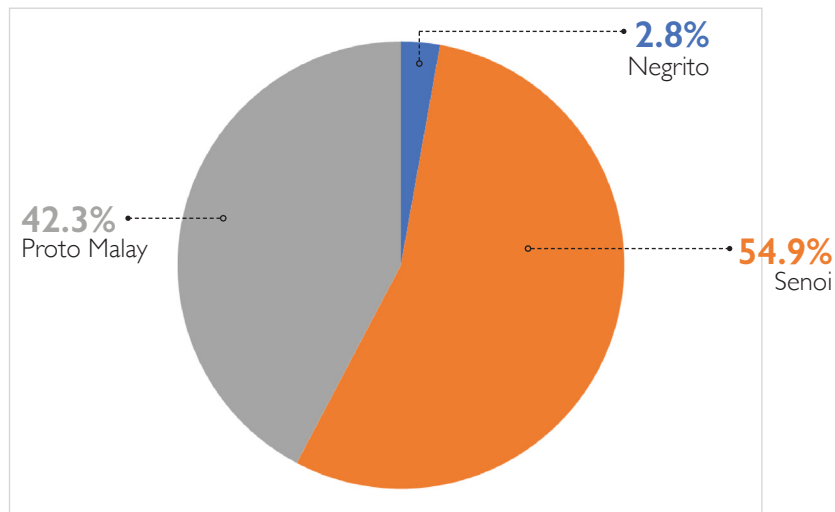
Table 1: Sub-ethnic Groups of Orang Asli in Malaysia

Proto Malay	Negrito	Senoi
Temuan	Kensiu	Temiar
Semelai	Kintak	Semai
Jakun	Lanoh	Semoq Beri
Orang Kanaq	Jahai	Che Wong
Orang Kuala	Mendriq	Jah Hut
Orang Seletar	Bateq	Mah Meri

Source: JAKOA 2018a.

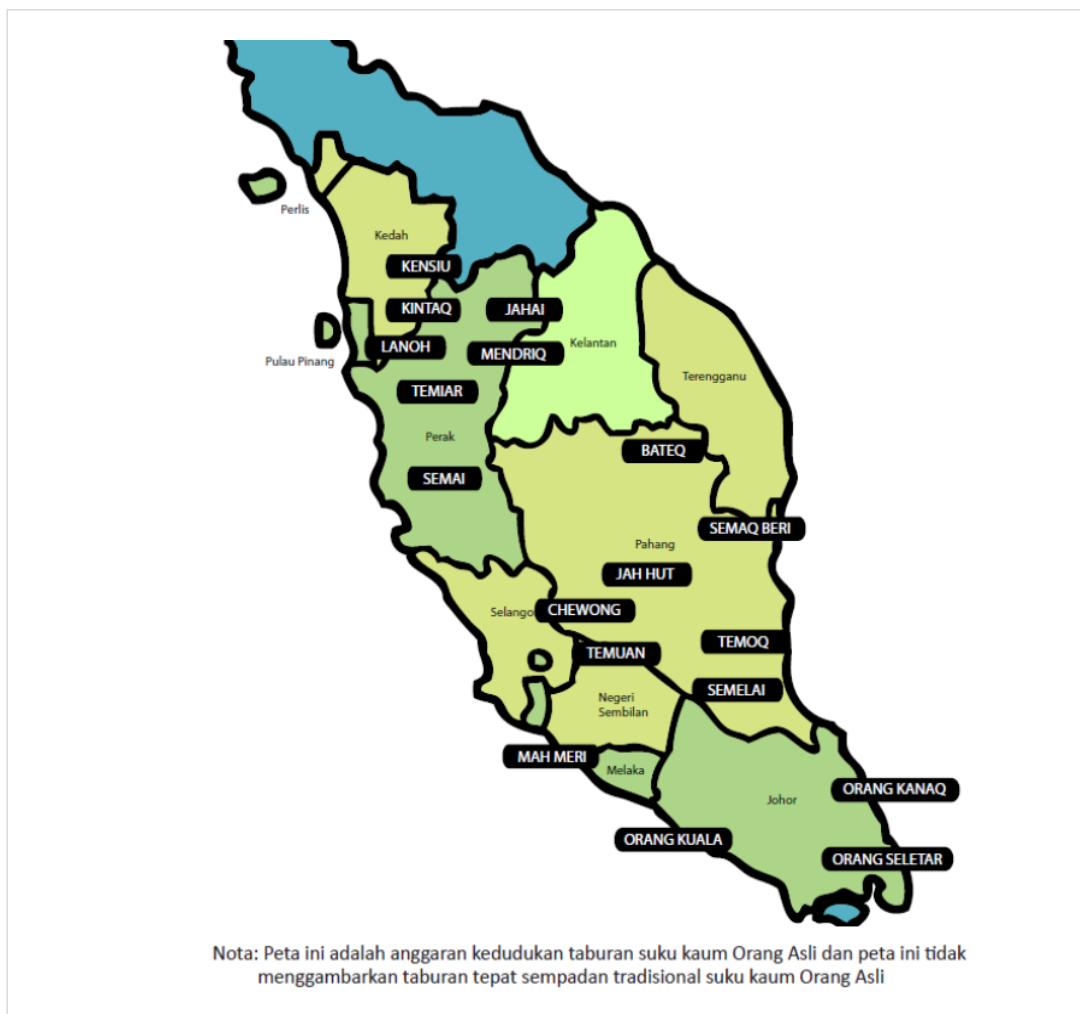
² Author's calculation is based on the population of Orang Asli and Malaysia's total population of 32,382,300. Malaysia's population is according to the Current Population Estimates of 2018 released by the Department of Statistics Malaysia.

Figure 2: Sub-ethnic Groups (%)



Source: JAKOA 2018a.

Figure 3: Location of Orang Asli by Sub-ethnic Groups



Source: Center for Orang Asli Concern (COAC) adapted from SUHAKAM 2010.

The Orang Asli of different ethnic groups have different lifestyles and economic activities. Orang Kuala or Orang Laut, Orang Seletar and Mah Meri are coastal communities who are predominantly fishermen, whereas Temuan, Jakun and Semai communities practise agriculture and manage their own rubber, oil palm and cocoa farms (Masron et al. 2013, 77). Semai, Temiar, Che Wong, Jahut, Semelai and Semoq Beri are hunting and gathering communities as well as practise rice hill cultivation (Masron et al. 2013). Negrito groups are still semi-nomadic groups (Masron et al. 2013).

The Orang Asli sub-ethnic groups speak different languages and have different cultural practices. The Senoi speaks Austro-Asiatic languages, the Proto Malay speaks an archaic variant of Malay language, and the Negrito speaks the Northern Aslian division (Reganathan and Kral 2018, 142). However, the languages that the Orang Asli speaks do not neatly correlate with the three official categories (Endicott, 2016). The Orang Asli as an ethnic category did not exist before 1960; therefore, they do not see themselves as homogenous, and their differences are relative only to the other Orang Asli communities (Masron et al. 2013).

Although the Orang Asli is classified as 'Bumiputera' in official documents and most ethnic-based statistics, they are not covered under the Article 153 in the Federal Constitution, which provides 'special rights' to the Malays, and natives of Sarawak and Sabah (UNDP 2014). The Orang Asli are covered under the Article 8(5) c of the Federal Constitution, which states: "Any provision for the protection, well-being or advancement of the aboriginal peoples of the Malay Peninsula (including the reservation of land)...". They are also protected under the Aboriginal Peoples Act 1954 (Revised 1974), which was enacted during the Malayan Emergency to prevent the insurgence of the communists into the Orang Asli communities. The Department of Orang Asli Affairs (JHEOA) was established to govern all matters relating to the Orang Asli. JHEOA is now known as the Department of Orang Asli Development (JAKOA). The Aboriginal Peoples Act grants the Federal and State governments to govern the Orang Asli.

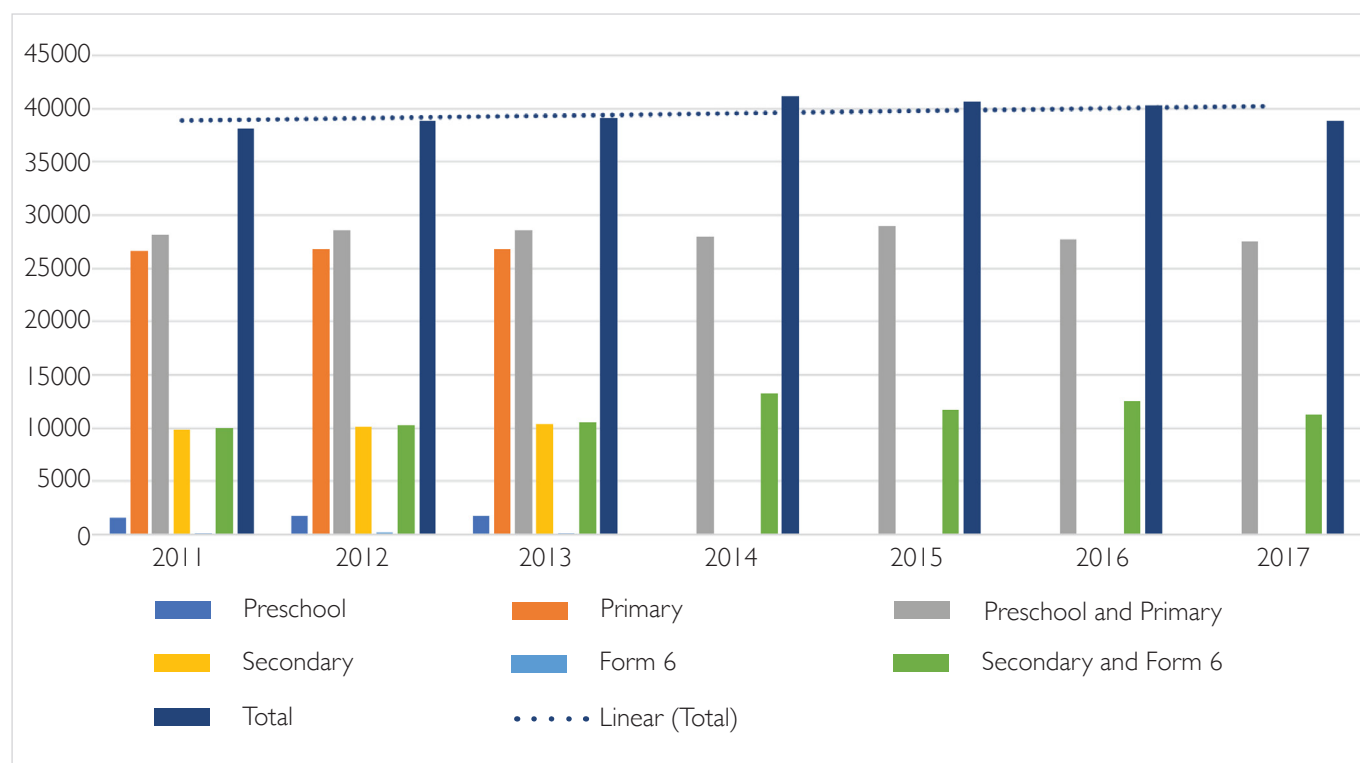
The rights of Orang Asli children to education are protected under the Education Act 1996 Section 29(A), which states that primary education is made compulsory. The Orang Asli's right to education is also guaranteed by the Federal Constitution and the Aboriginal Peoples Act 1954. The UNDRIP covers a range of rights of the indigenous peoples, including the rights to education and self-determination.

SECTION 2: CURRENT STATE OF EDUCATION ACCESS AND INDICATORS OF THE ORANG ASLI

Education for Orang Asli Children

The Orang Asli students comprised 4% of the national student population in 2015 (MOE 2016). The enrolment numbers of Orang Asli students have hovered around 38,000 to 41,000 since 2011 till 2017, as shown in Figure 4. However, the enrolment rates are not reported in the Malaysia Education Blueprint (MEB) Annual Reports, therefore the percentage of the Orang Asli children, who are not attending school, could not be ascertained. If population rate has been growing throughout these years, then the enrolment rates would have been declining, especially when there was a slight decline in the enrolment numbers from 2015 to 2017.

Figure 4: Number of Orang Asli Students Enrolled in National Schools, 2011-2017

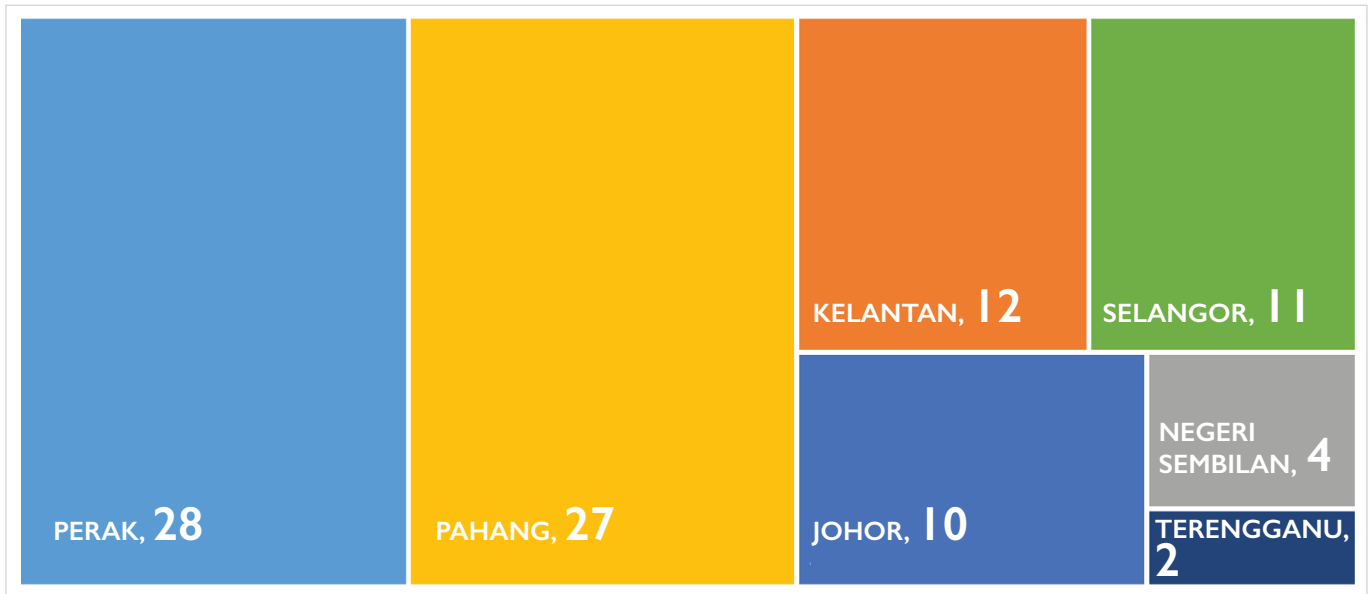


Source: MOE, 2013 and 2017.

As at 2018, the total of Orang Asli primary schools in Malaysia stood at 94, as shown in Figure 5. Out of these schools, most are located in Perak, Pahang, Kelantan, Selangor and Johor, which are also the states with a larger Orang Asli population. There are five Special Model K9 schools³, which are residential schools with primary and lower secondary level for the Orang Asli students (MOE 2015). In 2018, 2,074 students and 1,083 students enrolled at the primary level and lower secondary level in the K9 schools, respectively (Educational Planning and Research Division 2018a).

³ Refers as K9 school in the following sections of the paper

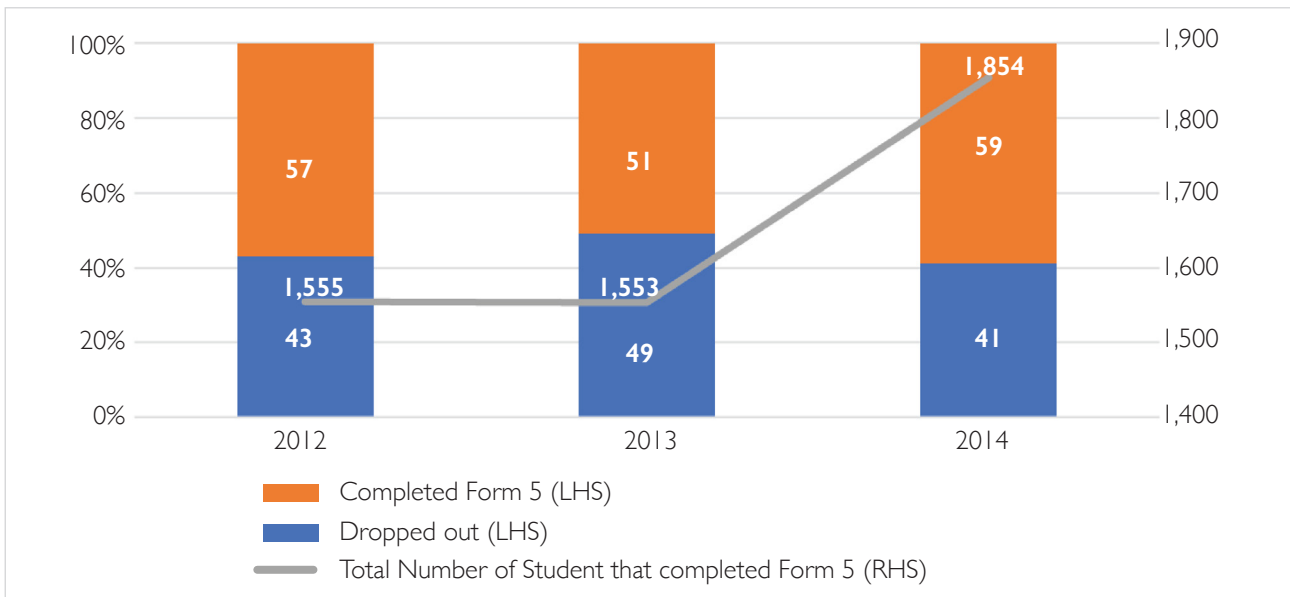
Figure 5: Number of Orang Asli Schools by States, 2018



Source: MOE 2018b.

There was a sign of improvement in the completion rate of secondary school for Orang Asli children in 2014. However, the completion was not reported in the following annual reports of the Malaysia Education Blueprint. In 2014, the completion rate of secondary school Orang Asli students increased by eight percentage points, an increase of 301 Orang Asli students who completed Form 5 (Figure 6).

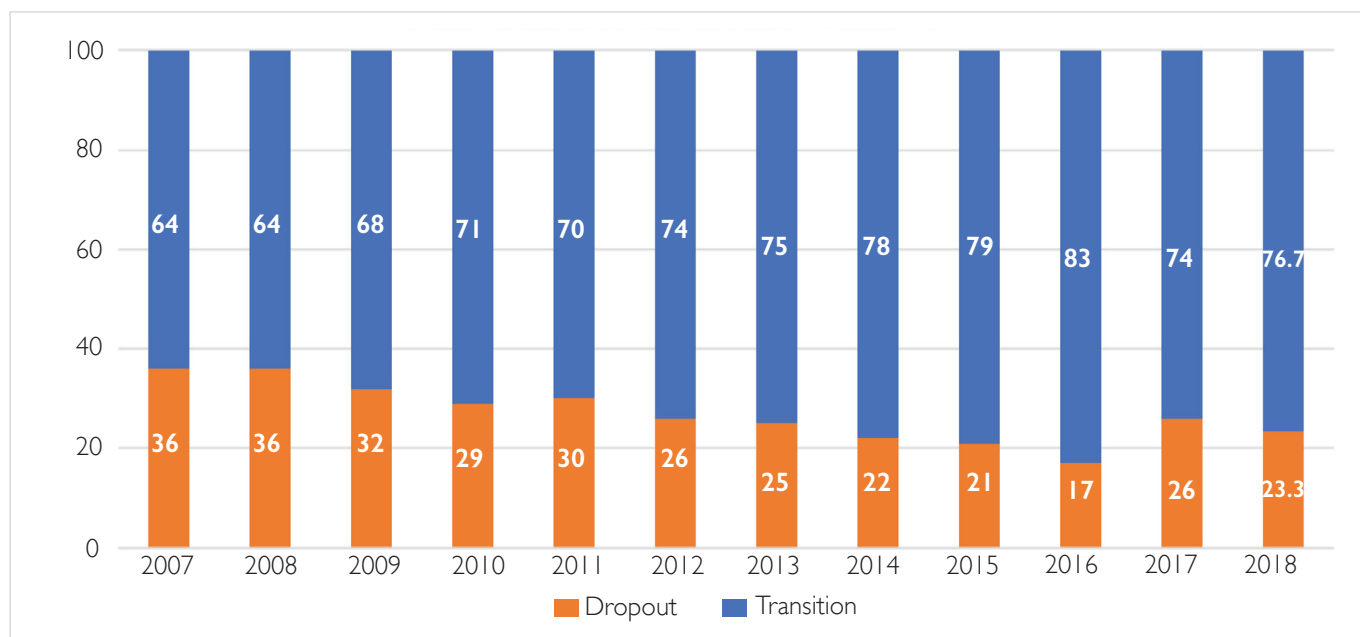
Figure 6: Form 5 Completion rate among Orang Asli students, 2012-2014



Source: MOE 2015.

Dropout rates for Orang Asli students after Year 6 was also on a declining trend but backtracked in recent years. There was a significant improvement in declining dropout rates from 2008 to 2016 (Figure 7). However, the improvement in the dropout rates backtracked in 2017 and 2018. There was an increase of nine percentage points in 2017. Although the dropout rates declined to 23% in 2018, it was still much higher than the previous years.

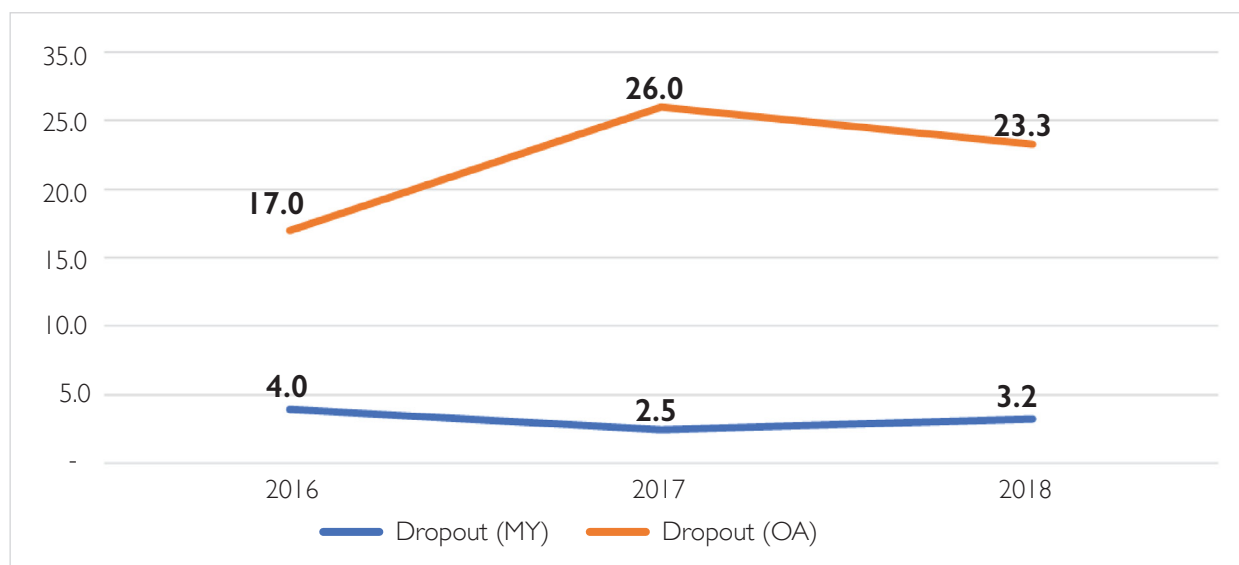
Figure 7: Transition and dropout rates of Orang Asli students after Year 6



Source: MOE 2019.

Despite the declining dropout rates of Orang Asli students after Year 6, their dropout rates were high in comparison to the national rates. Figure 8 shows that from 2016 to 2018, the national dropout rates were consistently below 4%, while the Orang Asli students' dropout rates were above 17% and it increased significantly to 26% in 2017.

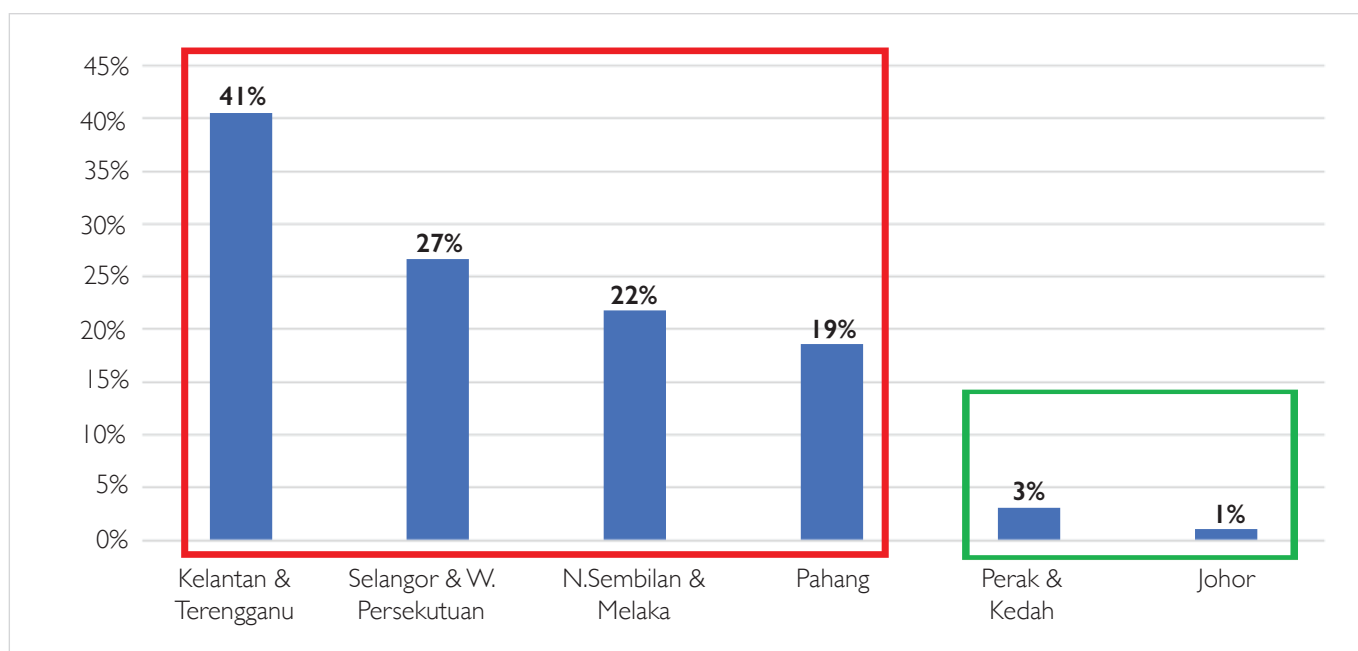
Figure 8: Dropout rates from primary to secondary school, Orang Asli students vs national



Source: MOE 2019.

The dropout rates of the Orang Asli students by states revealed that the incidence of dropout was more prevalent in Kelantan and Terengganu and less prevalent in Perak, Kedah and Johor. In 2018, the dropout rates after Year 6 were highest in Kelantan and Terengganu, with a percentage of 41% (Figure 9). The three states that performed well were Johor, with only 1% of dropouts, followed by Perak and Kedah, with 3% of dropouts. There was a disparity in terms of completion of education among the states. The disparities could be due to state-level governance of schools, in which guidance and support provided at state and district level varies among the states. It could also be that the different level of involvement of the civil society and NGOs in supporting the educational programmes at community level.

Figure 9: Dropout rates after Year 6 for Orang Asli students, by States, 2018 (%)



Source: JAKOA 2018c.

SECTION 3: BARRIERS AND CHALLENGES IN ACCESSING EDUCATION AND LEARNING

I. Socio-economic background

a) Poverty

Education can help to enhance social mobility and enable children from low-income families to come out of poverty. However, poverty is also one of the main barriers to accessing education. The critical element for education to function as an enabler to empower children from low-income families is the provision of quality education that can level the playing field for children of all socio-economic backgrounds. Failure to do so will result in a vicious cycle of inter-generational poverty.

Many of the Orang Asli children are among those caught in such a vicious cycle of poverty. In 2009, when the poverty rate of the Orang Asli was at 49.0%, the national poverty rate was only at 3.8% (Table 2) (EPU 2016). This showed that in 2009, half the population of the Orang Asli were poor. Despite a significant reduction in 2010, the poverty rates were still at 31.16% (Table 2). A study by Wong and Abdillah (2018) in Pos Sinderut, an Orang Asli community in Pahang, found that the monthly income of their research interviewees was less than RM300, with most of them not having permanent jobs and were classified as hardcore poor. The publicly available national statistics on poverty, which group Orang Asli together with the other Bumiputeras, could not provide a clear picture of poverty among the Orang Asli. Disaggregated statistics for Orang Asli are needed to understand the state of poverty among them.

Table 2: Poverty among Orang Asli in Malaysia

Year	Total Head of Household (HoH)	Poverty					
		Poor		Hard Core Poor		Total	
		%	HoH	%	HoH	%	HoH
2000	25,337	39.80	10,085	43.60	11,046	83.40	21,131
2001	26,198	39.80	10,428	41.03	10,749	80.83	21,177
2002	28,476	41.20	11,732	37.88	10,788	79.08	22,520
2003	29,873	41.63	12,435	35.26	10,532	76.88	22,967
2007	27,841	18.00	5,011	32.00	8,909	50.00	13,920
2008	27,841	17.75	4,942	32.34	9,004	50.09	13,946
2009	27,841	33.53	9,335	15.47	4,307	49.00	13,642
2010	36,658	11.19	4,102	19.97	7,321	31.16	11,243

Source: JAKOA 2011 adapted from Abdullah et al. 2019.

One of the factors highlighted by scholars that leads to the issue of poverty is the rights to the traditional land of the Orang Asli. The lack of rights to their traditional land not only deprives them of the ownership of the land as capital, but also discourages them from working on the land as the harvest might be taken by others (Nicholas 2010). This has also caused social stress to them (Nicholas 2010). Besides that, logging activities have also caused loss of resources and environment degradation (Nicholas 2010). Although this is not a direct obstacle to the access to education, it has contributed to the issue of poverty and marginalization, which increases the challenge of accessing education.

Orang Asli children face more challenges and barriers to access education and learning as compared to their more privileged peers. Firstly, going to school requires financial resources. Although public schools in Malaysia are free for primary and secondary levels, there are other miscellaneous costs, such as transportation, uniform, food and other expenses for school activities. The school year starts in January; therefore, parents need to prepare money for school expenses in November and December. According to Nicholas (2010), November and December are the wettest months when the collection of forest produce is dangerous, and rubber production is low. Therefore, it is harder for parents to prepare sufficient money for school expenses during this period of the year. In addition, if they have several children – Orang Asli usually have larger families – the situation can become very challenging for the parents to prepare sufficient finances for their children's education.

Secondly, going to school means a trade-off of their time to earn a livelihood with their parents. The time spent in school could be used to help their parents gather resources from the jungle or work in the plantations. A study by Aziz (2010) revealed that teachers with Orang Asli students stated that the attendance of these students was lower during the fruit season as they would help their parents to harvest fruits.

Thirdly, coming from a low-income family means that they have limited or no access to supplementary classes, hence they could not cope with their schoolwork; or they do not have access to infrastructures, such as the Internet to support their learning. They have limited or no access to educational programmes on television, educational toys, reading and studying materials, as well as private tutoring as compared to the other children in Malaysia (Wong and Abdillah 2018). Therefore, school is the only source of structured learning that these Orang Asli children have access to.

Fourthly, poverty also limits their access to pre-school, which puts them at a disadvantaged position at the beginning of their primary education. Most of the Orang Asli children do not have the opportunity to attend a pre-school before going into primary school. This has resulted in slower ability to read, write and speak, compared to the general Malaysian primary one students, most of whom have the basic ability of reading, writing and speaking when they enter primary school (Nicholas 2010; and Wong and Abdillah 2018). Malaysia achieved a relatively high pre-school enrolment rate of 85.4% in 2018 (MOE 2019). Moreover, Malay and English are not the Orang Asli's mother tongue, and this exacerbates their disadvantage.

b) Parents' educational level and awareness of the importance of education

Parents' educational level determines the ability of parents to be involved in their child's education. The Orang Asli literacy rate was only 51% in 2008 in stark contrast with the national literacy rate⁴ of 93.1% in 2010 (Renganathan 2016; and UIS 2013). Parents who are not educated have less capacity to help their children in their academic work (Wong and Abdillah 2018).

In a study of a Semai community in the state of Perak by Renganathan (2016), it was found that the Orang Asli parents lacked basic literacy and numeracy skills to be able to help their children in their schoolwork. The study also showed that despite the awareness of the importance of education, the parents recognized that they were not aware of happenings in school. The parents also recognized that they were disadvantaged due to their lack of education and shared their experiences as a student, such as having difficulty in travelling to school, lack of basic amenities and poor academic performance. However, the parents opined that the current schooling experience at the time was easier for their children.

Results of available studies have shown that there was a lack of awareness on the importance of education among Orang Asli parents. A study in Batang Padang by Kamaruddin and Jusoh (2008) involved interviews with JHEOA and teachers, who cited that the reason for many of the Orang Asli children not getting enrolled in schools was due to a lack of awareness and apathy towards education among the parents.

There is diversity in terms of awareness of the importance of education in different communities and families among the Orang Asli. The awareness could be influenced by factors, such as personal education experiences and background of the parents, the perception among their community, and experiences with the local school and the communities beyond their own.

c) Birth Registration

Birth registration is essential to protect the rights of children as citizens and to have access to education, healthcare and other social services and welfare. The Child Rights Status Report 2013 highlighted that children from indigenous families and other vulnerable children still face challenges in birth registration. The main reasons for not registering the birth of a child are the cost of travelling to a National Registration Department, lack of documentation and lack of awareness of the importance of birth registrations (Child Rights Coalition 2012). The lack of documentation, such as marriage and birth certifications of parents, as well as the long and complicated process of registration, discourages marginalized groups from registering the birth of their children (Child Rights Coalition 2013). The report also highlighted that this would lead to an inter-generational cycle where parents' lack of documentation would be passed down to their children. Md Nor et al. (2011) recorded an incident involving Orang Asli students' failure to apply for aid because they did not possess the required documents.

⁴The definition for literacy used in the 2010 Census refers to persons aged 10 years and over, who have ever been to school, that is, those currently schooling and completed schooling.

II. Geographical Barriers

a) *Living in remote areas*

The majority of the Orang Asli live in rural and remote areas, which are far from towns and cities. Due to the remoteness of their villages, most Orang Asli children have to travel far to go to school. There are also some schools, which are near or in their villages. However, there are some villages where the nearest school is still a distance away, causing the children to stay in a hostel.

One of the highlighted incidents was the case in Pos Tohoi, Gua Musang, where the children staying in a hostel went missing because they feared the punishment from their teachers. As a result, four drowned, one still missing, and only two survived. It was a traumatic incident, not just for the children who survived but also their community (Zainal 2016). This incident reveals that children as young as seven have to leave their families and stay in a hostel because there is no school near their village. Many parents who are unwilling to let their children stay in a hostel at a young age or even later in their schooling life opt for their children to drop out of school (Zainal 2016). They are worried about their children's safety and well-being. These are valid worries, as it is very challenging and emotionally difficult for children at that young age to stay in a hostel, far away from their family.

Even for those who have access to a school near their village, travelling to school is not an easy feat. According to the study done by Wong and Abdillah (2018) in Pos Sinderut, it takes two hours on a four-wheel drive to go from the farthest village to school on the dirt road. The children could not go to school if it rained. In another account by Renganathan (2016), the children would have to wake up and get themselves ready very early at dawn in order to catch their transport to school at 6.00 am. The school was 20km away, and the bus made two trips to carry all the children in time before school started. It would be around 3.30 pm by the time the children reached home after school. Md Nor et al. (2011) also recorded similar experiences, with villages lacking access to a paved road, expensive boat rides, and transportations not in good condition and unsafe.

Besides the logistics, transportation is also a cost, which some of the Orang Asli parents could not afford. Kamaruddin and Jusoh (2008) cited two cases in a Semai community in Pos Who, Batang Padang, and a Temuan community in Ulu Batu, Selangor, where the children could not go to school because of the cost of transportation. The parents reached out to JHEOA and asked for assistance. As a result, JHEOA helped to provide transportation for the children, and they started going to school. It is an example of the initiative of the parents in arranging and ensuring that their children could have access to education.

However, there were also situations where transporters complained that when they arrived in villages to pick up children to go to school, none was present (Wong and Abdillah 2018). Therefore, understanding the underlying reasons is important. It could be that as mentioned in the paragraph above, children find it hard to wake up in early dawn to go to school, or it could also be a lack of emphasis by the parents. Policies and assistances have to be in alignment with the needs and conditions on the ground.

b) Lack of infrastructure and utilities

Orang Asli communities have limited access to infrastructure and utilities. The section above highlights the lack of proper roads, which have increased the difficulty of Orang Asli children in accessing education. Besides that, they also have limited access to basic amenities, such as electricity, water and sanitation, and telecommunication infrastructures, including telephone, television and Internet connectivity.

Renganathan (2016) and Wong and Abdillah (2018) provided a picture of the provision of basic amenities in two Orang Asli villages. Renganathan (2016) depicted the condition of an Orang Asli village, which is accessible by a narrow road and has electricity and water supply. However, there is no landline telephone, but they have access to mobile phones. Some of the houses get their electricity from others, who have permitted access to electricity. The majority of the houses have minimal furniture, and some have televisions. Wong and Abdillah (2018) described a village with lesser infrastructure. Only a few houses have access to electricity, which is generated from personal generators. There is also no treated water. Their primary source of water is from mountains, rainfalls and rivers.

National statistics, such as Household Income and Basic Amenities Survey, are important to provide information on the income and basic amenities of households. However, Dr Kenneth Simler, the World Bank Senior Economist, highlighted that the National Household Income Survey 2016, which was a survey to capture the coverage of these amenities and measure poverty, did not include the Orang Asli communities (Sim et al. 2019). National surveys, such as the Household Income and Basic Amenities Survey, should include the Orang Asli and other indigenous communities so as to capture data on their income and access to basic amenities.

III. Language and Cultural Barriers

a) Orang Asli diversity of languages

As discussed in Section I, Orang Asli consist of 18 sub-ethnic groups and speak different languages. In the national education system, students are expected to master two languages: Malay and English. Malay is the primary medium of instruction, and English is taught as a second language. Therefore, Orang Asli students do face a language barrier when they enter primary one, as most of them speak their mother tongue and are less likely to have exposure to Malay (Wong and Abdillah 2018). Furthermore, they are less likely to attend pre-school, which further exacerbates their disadvantage as compared to their peers, who would have learnt Malay and English in pre-school.

In addition, the majority of the teachers teaching in Orang Asli schools are not Orang Asli and do not speak their mother tongue. A study by Wahab and Mustapha (2015) found that Orang Asli students have trouble understanding the lessons and instructions from their teachers. It has created the misconception among the teachers that the Orang Asli students are inherently weak academically (Renganathan 2016). Communication in class is important for students to be able to learn and express themselves with their peers and teachers. Failure to do so may result in them being left behind in their studies and affect their ability to have meaningful interactions in class.

b) Orang Asli's culture and way of life

The Orang Asli is a culturally diversified group, but there are also commonalities in the culture of their different sub-ethnic groups. Understanding of the Orang Asli's way of life is critical for teachers to be able to tailor their teaching to the needs of the Orang Asli students.

The Orang Asli is a communal society in which they uphold the responsibility of collective interest before individual interest (Nicholas 2010). The purpose of learning is to be a good Orang Asli, while the national education system of examinations with awards and competition is not one where they could be accustomed to (Nicholas 2010). They learn from their environment; songs and rituals; arts and crafts; and legends and folktales (Nicholas 2010; and Aziz 2010). The Orang Asli children learn their values from their elders, family and community. Therefore, teachers need to recognize that when the Orang Asli children enter primary school, it is a transition from an oral culture to a literate culture (Renganathan 2016, 276). The children need time to adjust and adapt to a different learning process.

Orang Asli parents teach their children in a gentle and polite manner, and they rarely use physical punishment (Md Nor et al. 2011; Nicholas 2010; and Renganathan 2016). In an interview done by Renganathan (2016), an Orang Asli mother said that parents stopped physically punishing their children at the age of 9 (Renganathan 2016, 280). Therefore, the children may stop going to school if teachers use physical punishment. The case in Pos Tohoi, Gua Musang is an example of how the Orang Asli children feared punishment from their teachers and ran away from their hostel (BBC 2015). This tragedy not only caused the loss of lives of five children and left the two survivors scarred for life, but also proved that the fear of punishment resulted in dropout from school.

The Orang Asli celebrate different festivities from the rest of the ethnic groups in the country. The harvest season and fruit season are important seasons in the life of the Orang Asli (Nicholas 2010). However, the school calendar does not follow the holidays of the Orang Asli. Absenteeism is prevalent among the Orang Asli students during these seasons (Nicholas 2010).

IV. Challenges in School

a) Misalignment of mainstream curriculum and pedagogy to their culture

Learning is a process of relating to the environment and the world around us. The national curriculum is based on the culture and environment of children of other majority ethnic groups. It has resulted in a misalignment of the curriculum to the environment that the Orang Asli children experience. For example, in the study by Wahab and Mustapha (2015), a teacher quoted the following:

"When I teach new things, such as related to the sea, for instance, waves, beach, boat... It is difficult for Orang Asli pupils to understand because they never see the sea (laughs) ... but when I asked about their experiences in the wild, they could tell non-stop..." (p. 446).

It is hard for the students to understand and remember something that they have not seen or is not part of their life, which is related to their culture in which they learn from their environment and things around them.

The classroom environment is a foreign setting for most Orang Asli children, as they are used to playing in the

jungle. They are very fond of music and physical sports, as these are elements of their way of life (Wong and Abdillah 2018). Therefore, the pedagogy that is used by teachers needs to adapt to the lifestyle and needs of the students.

In the paper by Md Nor et al. (2011), it was discussed that when the students could not retain what they have learnt, teachers would adopt rote-learning technique, which does not help the students to understand the subject matter or develop their thinking skills. A study by Abdullah et al. (2019) on creative and innovative indigenous pedagogy found that the existing mainstream syllabus needs to be modified and adapted to the environment of the Orang Asli students and be presented more creatively through games, interaction, activities and creative movement. The problem is not due to the lack of discipline of the Orang Asli students, but rather the education system is less sensitive to the needs of the Orang Asli students. There is therefore a need for an indigenous pedagogy; it does not mean a new syllabus but pedagogy that is suitable for indigenous children.

A study done by Wahab and Mustapha (2015) to investigate the pedagogical and curriculum implementation at Orang Asli schools in Pahang found that teachers who used fun-learning pedagogy; holistic and hands-on approach that helped the Orang Asli students to produce artwork or use materials from their surroundings; provided incentives and rewards; and practised adaptation of their culture and language in class would enhance the learning and improve the academic performance of Orang Asli children.

b) Poor working memory

Poor memory retention can result in a loss of learning due to many different causes. Working memory is described as the ability to remember and store information necessary for day-to-day activities, and children with poor working memory have difficulties in learning, which will affect their academic performance (Gathercole 2008).

Teachers often complain about the poor memory retention of the Orang Asli children (Md Nor et al. 2011). In the study by Renganathan (2016), the teacher who was interviewed expressed concerns on the memory capabilities of the children as they would forget the simple words the teacher had taught in the previous class.

One of the reasons why the Orang Asli children could not retain what they have learnt is because they have never been exposed to the subject taught. As discussed above, the misalignment of the curriculum to their culture and environment, as well as the mismatch of pedagogy used by teachers in the classroom are factors that contribute to the poor memory retention of the words or knowledge learned. It is hard for the Orang Asli children to relate to a curriculum that is based on an environment and culture that is foreign to them. Besides that, their poor working memory can also be due to the overload of memory demands of structured learning (Gathercole and Alloway 2008). As the Orang Asli children are more active and physically agile, classroom setting and rote-learning with an overload of structured learning may overwhelm them.

The literature on the academic performance of indigenous students in Malaysia often focused on the impact of classroom teaching and learning processes. However, the health and nutritional conditions of the students were often overlooked. A study done by Al-Mekhlafi et al. (2011), one of the first studies to understand the nutritional and socio-economic determinants of cognitive function and educational achievement of the aboriginal children in Malaysia, found three crucial determinants of the cognitive function and educational attainment of indigenous children, namely income, maternal education and Fe-deficiency anaemia (IDA).

IDA was found to be the significant determinant of educational achievement, in which test scores were the indicator in this study. The findings of this study are similar to studies from other countries that poverty, low education of parents and malnutrition are risk factors to cognitive development and educational performance (Al-Mekhlafi et al. 2011, 1104).

c) Social interaction in schools

There are complaints by Orang Asli children that they face bullying in schools. When facing such situations, most of these children would choose to leave school rather than to confront the situation. In the study by Renganathan (2016), the interviewees informed that sometimes the Orang Asli children would be discriminated against and considered dirty and were called names by their non-Orang Asli peers. They were ridiculed as dirty because they eat non-halal food and were called names, such as Sakai, which means slave.

There are also other reasons for isolating themselves from the rest of the ethnic groups. One reason is low self-esteem. It was recorded in the same study by Renganathan (2016) that the Orang Asli children felt that it would be better to stick together among themselves, as they felt that they were backward as compared to the others. Even if other non-Orang Asli friends invited them to their house, they would refuse as they felt that it would be awkward.

d) Teachers' training and challenges faced by teachers

Teachers of the Orang Asli children do face much more challenges in delivering good quality education to them. One of the many challenges that they face is stigmatization. In the past, it was considered as a punishment to teachers to be transferred to an Orang Asli school; therefore they were viewed as inferior to their peers teaching in mainstream schools (Renganathan, 2016). Although this was in the past, the stigmatization still persists.

Teachers need to have training in indigenous pedagogy and develop a good understanding of the Orang Asli culture to provide quality education to them. However, most of the teachers lack training in both indigenous pedagogy and understanding of their culture. The study in Pos Sinderut by Wong and Abdillah (2018) found that although teachers were trained in training institutions, most of the teachers posted there were fresh graduates. The study by Mohamed et al. (2019) showed that out of the 29 respondents, 20 of them have less than five years of teaching experience. Furthermore, only one teacher has been trained to teach Orang Asli children. Although there are courses related to indigenous pedagogy and culture, six teachers have never attended any courses. Wahab and Mustapha (2015) recorded similar findings and suggested that there was an urgent need to provide indigenous pedagogy training for teachers teaching in Orang Asli schools. Furthermore, they also recommended that continuous professional training be provided for teachers teaching in Orang Asli schools to support them to enhance the effectiveness of their teaching.

V. Conclusion

This section presents some of the major challenges identified by previous studies. They are not stand-alone challenges; many of these challenges are intertwined and affect one another. For example, language and cultural barriers create social interaction barriers between Orang Asli students and their non-indigenous teachers and peers. Even in interactions with indigenous teachers or students from a different sub-ethnic group, there could still be language and cultural barriers. Another example is poverty, which can lead to malnutrition and poor working memory. Therefore, there needs to be a multi-dimensional perspective when designing policies and programmes to address the complexities of the challenges and issues faced by the Orang Asli children in accessing education.

SECTION 4: EVOLUTION OF POLICIES AND PROGRAMMES FOR ORANG ASLI CHILDREN

The government has implemented many policies and programmes to address the many challenges faced by the Orang Asli children. A discussion on the evolution of the policies and programmes for Orang Asli children can provide a picture of the policy development, as well as the changes and impact of the policies and programmes in addressing the challenges.

Prior to 1995, JHEOA was responsible for the education of the Orang Asli children (Md Nor et al. 2011). JHEOA ran a three-tier educational programme aimed at preparing and facilitating the Orang Asli children into mainstream national education systems (Kamaruddin and Jusoh 2008). The first tier involved the village schools operated and taught by the field staff of JHEOA or teachers, who were not formally trained, and these village schools provided education from Primary One to Three (Kamaruddin and Jusoh 2008; Md Nor et al. 2011). Then the Orang Asli children would move on to central primary school through Primary Six and those who passed their Primary Six examination would continue their education at a national secondary school in a nearby rural or urban area (Kamaruddin and Jusoh 2008).

However, the educational programmes run by JHEOA were deemed a failure, and MOE took over the administration of the Orang Asli schools and the responsibility to provide education for these children (Mohd Noor 2012). Since 1995, MOE has implemented many educational programmes and policies to improve the access of Orang Asli children to quality education. Table 3 below features the major programmes implemented by MOE, specifically for the Orang Asli communities.

Table 3: Educational Policies and Programmes for Orang Asli Communities

Year	Programme/Policies
1995	Ministry of Education took over the responsibility of providing education for Orang Asli children from JHEOA
1999	Special Programme for Orang Asli Students ⁵ (PKMOA)
2003	Pensiangan-Salinatan Programme
2006	KIA2M reading and writing intervention class
2007	The Integrated Curriculum for Orang Asli and Penan Schools ⁶ (KAP)
2007	Special Model K9 Schools
2008	The Orang Asli and Indigenous Adult Classes ⁷ (KEDAP)
2009	The National Indigenous Pedagogy Centre of Excellence – Tengku Ampuan Afzan Institute of Teacher Education
2013	Orang Asli Transformation Plan, 2013-2018 (Malaysia Education Blueprint 2013-2025)
2018	Special Intervention Programme for the Orang Asli and Indigenous Community Students ⁸ (PIKAP)

⁵ Program Khas Murid Orang Asli

⁶ Kurikulum Standard Sekolah Rendah Orang Asli dan Penan

⁷ Kelas Dewasa Orang Asli dan Peribumi

⁸ Program Intervensi Khas Murid Orang Asli dan Pribumi

I. Special Programme for Orang Asli Students (PKMOA)

This special remedial class for Orang Asli students was started in 1999 by MOE together with UNICEF to tackle the problem of the lack of mastery of the 3M (reading, writing and arithmetic) skills among the Orang Asli children (Dewan Negara 2004). Students in Primary One who did not achieve more than 30% in their *Bahasa Melayu* and Mathematics tests would be admitted to the special remedial class. The remedial class would be an additional year in primary school; the students would have a primary education of 7 years instead of 6 years (SUHAKAM 2010). This programme has a set of learning materials, such as activity books for *Bahasa Melayu* and Mathematics, motivational storybooks and self-learning cards (Dewan Negara 2004).

II. Pensiangan-Salinatan Programme

In 2003, the Teachers Education Division and Institute of Teacher Education (ITE) of MOE collaborated to launch the Pensiangan-Salinatan programme, aimed at improving the academic achievement of the indigenous students in the interior areas (Lau 2007). The programme was implemented in the interiors of Peninsular Malaysia for the Orang Asli students, as well as Orang Asal students in Sabah and Sarawak. It was designed to support and train teachers teaching in the interior areas, and to enhance their knowledge and skill on indigenous pedagogy, local context and work ethics (Lau 2007). The programme focused on four key subjects, namely *Bahasa Melayu*, English, Science and Mathematics (Aziz 2010).

Aziz (2010) studied the English literacy programme in two primary schools in Bera district, Pahang, and investigated the outcomes of the programme. Under the English literacy programme, which is part of the Pensiangan-Salinatan programme, each teacher training college must adopt two indigenous schools and develop modules to improve the achievement of students in *Bahasa Melayu*, English, Science and Mathematics. The programme is carried out in stages and the teacher trainer must visit the school two to three times a year to carry out the module and monitor the progress. The English literacy programme consists of a workshop for English teachers and enrichment workshop for students. The workshop for students aims to help them improve their English literacy through songs, drama, play and poetry. However, through the observation of the researcher, the study found that although the efforts were commendable, the results showed that goals were not achieved. The English literacy programme faced similar problem, which the schools experienced initially. The teaching method under this programme is based on the view that literacy is a uniform, technical skill, and it does not consider the social practice and local context of students.

Another study by Lau (2007), in Julau District, Sarawak, found that the Pensiangan-Salinatan Programme has been effective in helping teachers develop their planning and implementation skills in teaching and learning. It has also improved the teachers' classroom management skills and evaluation and assessment skills (Lau 2007, 10). This study suggests the continued investment in this programme and continuous evaluation of the impact of the programme on the achievement of the students. However, this study is based on the perceptions of the teachers on the programme and does not examine the impact of the programme on the students.

III. KIA2M

MOE realized that there was still a significant proportion of students in lower primary school, who have not mastered the basic literacy skills and this problem could not be solved with only the remedial class, therefore the KIA2M programme was introduced nationwide in National Primary Schools and National-type Primary Schools⁹ (Chew 2018). Launched in 2006, this programme was designed as an intervention programme to develop basic reading and writing skills of Primary One students, who have failed the screening test (Mahyuddin et al. 2009). The KIA2M programme for Orang Asli students was implemented with the support of ITE (Md Nor et al. 2011). Each ITE would form a committee to co-ordinate the programme and JHEOA and District Education Department would extend their assistance when needed (Md Nor et al. 2011). KIA2M for the Orang Asli focused on the basic literacy in *Bahasa Melayu* by incorporating cross subjects of Music, Visual Arts and Physical Education in the learning of the language and adopting the indigenous pedagogy in teaching and learning (Md Nor et al. 2011). This programme was replaced by the Literacy and Numeracy Screening Programme (LINUS) in 2010 (Chew 2018). The LINUS programme was discontinued in 2018.

The paper by Md Nor et al. (2011) stated that there was some success in increasing the number of Orang Asli students in reading and writing but there were still many schools, which recorded a high failure rate of about 50%. Some of the challenges of this programme were large class size, long travelling time for the lecturers from ITE to visit the schools and extra workload for the lecturers, as facilitating and training the teachers were not part of their responsibilities (Md Nor et al. 2011; Ismail 2006).

A report by Tengku Ampuan Afzan ITE in 2006 on the programme in two Orang Asli schools in Pahang also highlighted similar challenges as above. The students had a very low passing rate for test one and two, but there were improvements in the scores obtained. Besides the challenges highlighted above, the report also highlighted that the programme was implemented in a rushed manner because of the late delivery of the details of the concept and direction of the programme to the lecturers in the ITE. The contents and materials suggested in the teaching and learning process were also not suitable for the Orang Asli children, as the words and objects taught were not things that they were exposed to. The training and background of the teachers were also a problem whereby the teachers assigned to the programme were not trained to teach *Bahasa Melayu*. There was also a lack of support in the form of mentor-mentee relation or from other teachers towards this programme.

These challenges and results were similar to the findings of other studies on the programme. According to Chew (2018), the programme was not a successful intervention programme whereby only 53.8% mastered basic literacy and arithmetic skills in 2001, and the students' achievement declined to 23% in 2008. The study by Mahyuddin et al. (2009) found that the programme was not quite successful, as some schools reported that as many as 50% of the students were still unable to read and write. This study highlighted the issues, such as large class size; lack of training for teachers teaching the programme; teaching was not based on creating literacy and meaningful reading and writing; lack of interest from parents; lack of support system for teachers; and lack of monitoring of students' performance after the programme (Mahyuddin et al. 2009, 173).

The KIA2M programme was designed with a similar approach to the Pensiangan-Salinatan programme. The ITEs play an important role, in both programmes, in training the teachers and providing the support and knowledge needed by the teachers to execute and design the teaching and learning in a creative and fun manner. However, the frequency of training depends on the district education department, which organises

⁹The medium of instruction in National schools is *Bahasa Melayu*, while in the National-type school, it is in Mandarin or Tamil.

the training (Mahyuddin et al. 2009). The lack of training for teachers could be due to many factors. Firstly, the background of teachers assigned to teach the programme is not compatible, as they are not Bahasa Melayu teachers. Secondly, the long and arduous travelling to the schools in the interior, as well as the additional workload have discouraged the lecturers from making more frequent trips to the schools. This significantly reduces the support for these teachers to improve their teaching. As a result, teachers who are not trained sufficiently will not be equipped to carry out the lessons in a manner that will be more fun and creative. They will probably adopt methods that they are more familiar with, such as repetitive and rote-learning approaches.

The Pensiangan-Salinatan programme also reported challenges of a similar nature. The study by Lau (2007) showed that teachers perceived that they have learnt and improved because of the training. However, the study by Aziz (2010) found that there was a lack of incorporating the language, in this case, English, in the social practice and local context. Both programmes for the Orang Asli students were intended to be more interactive and fun so as to enable the students to learn in the environment that they were familiar with. Both programmes had clear objectives, but there were gaps between the objective and the planning and implementation. The design of the specific content of teaching and learning depended on the training and capabilities of the teachers. Therefore, the results fell short of what it intended to achieve. Besides that, the co-ordination between the different agencies depended on the initiatives and motivation of each agency involved, namely ITE, district education department, JHEOA, schools and teachers.

IV. The Integrated Curriculum for Orang Asli and Penan Schools (KAP)

In 2007, MOE launched a contextualised curriculum for the Orang Asli and the Penan in Sarawak (MOE 2014). This curriculum aims to improve the literacy and proficiency of students in the 3M skills and increase the attendance rate (Md Nor et al. 2011). The KAP was initially based on the KBSR¹⁰. In 2013, it was reviewed based on the KSSR¹¹, which was according to the change in the national primary curriculum. However, the modules were designed according to the Minimum Adequate Syllabus approach, in which the scope and depth of content was lower than the mainstream syllabus (MOE 2014).

There are two levels in KAP, level 1 is from Primary One to three, and level 2 is from Primary Four to Six. In level one, the modules include “Come to School” and “Come and Learn”, which help students to adapt to the schooling environment and teach them the basic literacy skills (Wong and Abdillah 2018; Md Nor et al. 2011). In level two, the modules are designed to extend to other subjects, such as English, Mathematics, Science, Visual Arts, Moral Education, Culture and Heritage and others using the indigenous pedagogy (Bahagian Pembangunan Kurikulum 2015, cited in Wong and Abdillah, 2018, 7).

The curriculum has contributed to improvements in school performance and attendance rate. It was reported in the Malaysian Education Blueprint 2013 Annual Report that after six years of implementing KAP in six Orang Asli schools, three have improved by one band (MOE 2014, 78). According to Md Nor et al. (2011), the ITEs who evaluated the programme found that there was a general improvement in the basic literacy 3M skills and an increase in attendance rate among the students. The study also found that teaching and learning were only effective if the teachers customized the modules according to the students’ needs. This KAP module was based on the KBSR syllabus.

¹⁰ Kurikulum Bersepadu Sekolah Rendah.

¹¹ Kurikulum Standard Sekolah Rendah.

In a later study by Mihat (2015) on the English module in KAP, it was found that the language level in the module was not compatible with the language skills of the Orang Asli students. The Orang Asli students lacked basic literacy skills when they began school because Malay and English were not their mother tongue. Besides that, the syllabus was not suitable for the Orang Asli students and needed to be adapted to their culture and environment. There was also a lack of guidance and support to the teachers. The guide book did not provide enough recommendations to cater to the Orang Asli students' needs, and teachers faced limitations, such as lack of materials and limited access to the internet. Nevertheless, the respondents felt that an alternative syllabus would put the Orang Asli students at a disadvantage and segregate them from the rest of the mainstream students. It is still a dilemma that policymakers and educators face when tailoring a suitable syllabus for the Orang Asli children.

V. Special Model K9 Schools

Piloted in 2007, this programme was intended to serve as a model to provide indigenous students, Orang Asli and the indigenous in Sabah and Sarawak, with schools that have residential facilities from Primary One to Form Three (MOE 2013). Initially, an Orang Asli K9 school, SK Bandar 2, was set up in Paloh Hinai, Pekan, Pahang (SUHAKAM 2010). Currently, there are five K9 schools, two in Perak, two in Pahang and one in Selangor (MOE 2015). This programme was implemented to reduce the dropout rate, from Primary Six to Form One, among the indigenous students (SUHAKAM 2010).

VI. Orang Asli and Indigenous Parents Adult Class Programme (KEDAP)

The KEDAP programme was implemented in 2008 to improve the basic literacy skills among the indigenous parents in order for them to guide and assist their children in their studies (MOE 2014). The programme consists of 100 sessions per year with two hours per session, and the sessions are conducted by school teachers who are trained by the ITEs (Md Nor et al. 2011). The participants are provided with allowances to attend the classes. The allowances cover transportation, food and other needs (Md Nor et al. 2011). In five years, 15,315 parents have attended KEDAP (Table 4).

Table 4: Number of Orang Asli parents who have attended KEDAP (2008-2013)

Year	2008 Phase 1	2008 Phase 2	2009 Phase 3	2010 Phase 4	2011 Phase 5	2012 Phase 6	2012 Phase 7	Total
Peninsular Malaysia (Orang Asli)	425	1,650	2,200	1,590	4,110	2,550	2,790	15,315

Source: MOE 2014.

The paper by Md Nor et al. (2011) evaluated the KEDAP programme and found that there were positive feedback about the programme from the teachers. The teachers had expressed that parents, who attended the programme, showed more confidence in their interaction with the teachers and participation in the classes. The parents appreciated the opportunity to learn and their children were more motivated towards their studies as a result of seeing their parents' motivation.

However, there were challenges to the programme highlighted in the same study. Firstly, the programme needed sufficient funding annually to ensure its continuity. The study highlighted that the allocation for KEDAP was reduced significantly to RM2,635 in 2010 as compared to a total allocation of RM12,187 for 2008-2009 session. Although it was the total allocation for two years, on average the allocation per year was RM6,090, which was almost 2.5 times higher than the allocation for 2010. The paper highlighted that this has resulted in a reduction in the number of participants in the programme. From Table 4, we can see that the number of participants for 2008 and 2009 was above 2,000 per year; and in 2010 the number of participants reduced to 1,590.

Secondly, the evaluation also showed that the teachers faced challenges in teaching and approaches used to conduct the classes (Md Nor et al. 2011). One reason was that the parents were shy, and teachers would have to design their classes to help them communicate and participate in the lessons. ITEs have also commented that the teaching modules and approaches of the teachers have to be improved to tailor the classes to the needs of the participants.

Thirdly, the 100 sessions could only cover the basic reading, writing and counting skills. Hence, the participants have given their feedback to extend the duration of the programme to go beyond the basics (Md Nor et al. 2011).

VII. The National Indigenous Pedagogy Centre of Excellence

In 2009, the Tengku Ampuan Afzan ITE, in Pahang, was selected to be the National Indigenous Pedagogy Centre of Excellence that would implement the Education Development Programme for Orang Asli and indigenous students¹² (PKPPK n.d.). Its selection was in recognition of its role in the implementation of the education programmes for Orang Asli students since the initial programmes, such as Pensiangan-Salinatan and KIA2M, to the later programmes, such as KAP and KEDAP (PKPPK n.d.). Moreover, many lecturers who specialised in the education for Orang Asli children were located in Pahang, which is one of the states with the largest population of Orang Asli (Md. Nor et al. 2011; PKPPK n.d.).

The centre has three main objectives: to generate knowledge to enhance the education for Orang Asli students; to train teachers who are to teach in Orang Asli schools and provide on-going professional development for teachers in Orang Asli schools; and to document and preserve the Orang Asli's culture. The centre aims to achieve these objectives through its collaboration with other ITEs, which are part of the *Rangkaian Gerbang Titiwangsa*; and the establishment of an incubator centre, which will provide the facilities and infrastructure, as well as a gallery to showcase the culture of Orang Asli.

VIII. Orang Asli (OA) Transformation Plan

In 2013, the government launched the Malaysia Education Blueprint (MEB) 2013-2025. The rationale and motivation of developing the blueprint was due to the following:

“The decision was made in the context of rising international education standards, the Government’s aspiration of better preparing Malaysia’s children for the needs of the 21st century, and increased public and parental expectations of education policy.”

¹². Program Pembangunan Pendidikan Orang Asli dan Pribumi

The Blueprint states the vision to achieve five systems and six student aspirations through 11 shifts of transformation, with implementation timeline divided into three waves. The first wave spans the period from 2013 to 2015, aimed at turning around the system by supporting teachers and focusing on core skills; the second wave from 2016 to 2020 will accelerate system improvement; and the third wave from 2021 to 2025 will mobilise the move towards excellence with increased operational flexibility (MOE 2013, E-25).

The OA Transformation Plan is part of the MEB 2013-2025, in which the government recognized that the educational outcomes of the Orang Asli are far behind the national average. Therefore, in July 2012, MOE launched a five-year transformation plan (2013 to 2018) for Orang Asli education (MOE 2013, 4-21). The initiatives, such as KAP; K9 schools; KEDAP; and the inclusion of Semai, an Orang Asli's language, in the elective language choices in the KSSR curriculum, would be continued under this plan

The roadmap of the Orang Asli Transformation Plan was laid out in the MEB 2013-2025. The first wave of the plan focuses on efforts to improve the enrolment and attendance rate of the Orang Asli students in primary and secondary schools. The Blueprint states four major initiatives:

1. Increase the number of K9 schools from two to six schools; upgrade the infrastructure of existing schools and hostels; and construct new residential schools.
2. Enhance the curriculum, which includes updating KAP, broadening Basic Vocational Education¹³ (PAV) and KEDAP (MOE 2013, 4-21).
3. Improve teacher recruitment, support and training by increasing the number of Orang Asli candidates in teacher training programmes; strengthening resources for indigenous education research through the National Centres of Excellence for Indigenous Pedagogy; increasing the number of teacher assistants from Orang Asli communities; and providing parents engagement toolkit for teachers (MOE 2013, 4-21).
4. Establish a baseline and goals to measure the education performance of Orang Asli students, which include refining the data collection.

The second wave is crucial as it focuses on raising learning outcomes using customized interventions (MOE 2013). The State Education Department (JPN) and District Education Office (PPD) with the support of the MOE will assist and customize interventions for indigenous communities, including Orang Asli. The plan is to improve the quality of Orang Asli schools and eradicate the number of Orang Asli schools in Band 6 and 7. MOE will create Information and Communication Technology (ICT) education programmes with culturally-relevant contents for indigenous students and improve access to learning materials for indigenous students in remote areas (MOE 2013, 4-22). Lastly, MOE will review the KAP curriculum.

During the second wave, a laboratory was organised in 2016 to evaluate and develop a comprehensive plan to transform education for Orang Asli students. Among the suggestions made is to rebrand KAP into Indigenous Pedagogy Intervention Module¹⁴, which includes an additional pull-out of the existing textbook for contextual teaching and learning (MOE 2017, 8-10). Hence at the end of 2017, MOE started updating the KAP and in 2018 KAP was revised as Special Intervention Programme for the Orang Asli and Indigenous Community

¹³ *Pendidikan Asas Vokasional.*

¹⁴ *Modul Intervensi Pedagogi Pribumi.*

Students¹⁵ (PIKAP) (MOE 2018). It was also during this laboratory that 11 initiatives were proposed to raise the performance of the Orang Asli students. The 11 initiatives include strengthening the indigenous pedagogy programme; expanding K9 schools; establishing community learning centres from pre-school to Year 2; and providing conditional scholarships for Orang Asli to return and serve their community (MOE 2017, 3-23).

a) *The continuation of KAP to PIKAP, Special Model K9 Schools and KEDAP*

In 2016, KAP expanded to 30 Orang Asli schools. Then in 2018, PIKAP was launched as a new version of KAP. The objective remains the same, which is to improve the 3M skills of the Orang Asli students. The modules are additional modules for three subjects, namely Bahasa Melayu, English and Mathematics, which teachers can use for teaching students.

Four new K9 schools were set up in Perak, Pahang and Selangor during the OA Transformation Plan period (Table 5). Currently, there are five K9 schools in the country.

Table 5: K9 Schools

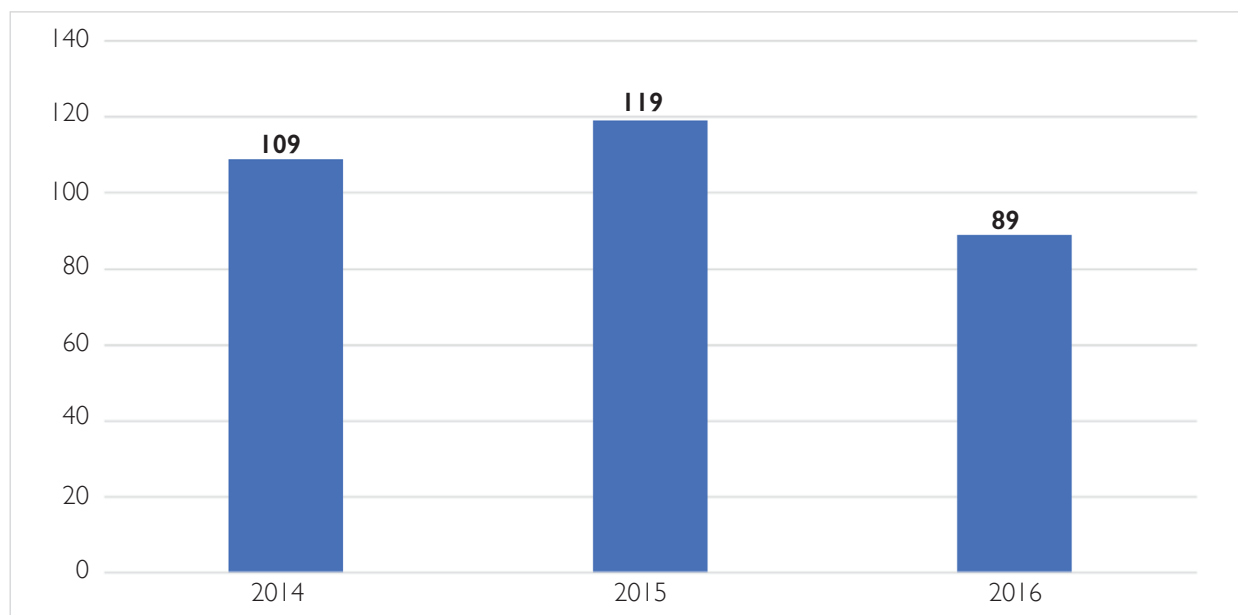
Year	K9 Schools	District/State
2008	SK Bandar 2	Pekan, Pahang
2013	SK RPS Pos Kemar	Hulu Perak, Perak
	SK RPS Banun	Hulu Perak, Perak
	SK RPS Batau	Lipis, Pahang
2014	SK (Asli) Bukit Kemandol	Kuala Langat, Selangor

Source: MOE 2015.

After the implementation of the OA Transformation Plan, the tracking of the progress of KEDAP was on the number of classes conducted. Figure 10 shows that the number of classes in 2016 has reduced. The 2016 Annual Report stated that the number of classes conducted would depend on the allocation provided for that particular year. It is a similar problem highlighted in the paper by Md Nor et al. (2011) that the number of participants depended on the allocation for the programme.

¹⁵ Program Intervensi Khas Murid Orang Asli dan Pribumi.

Figure 10: Number of KEDAP Classes



Source: MOE 2016; and MOE 2017.

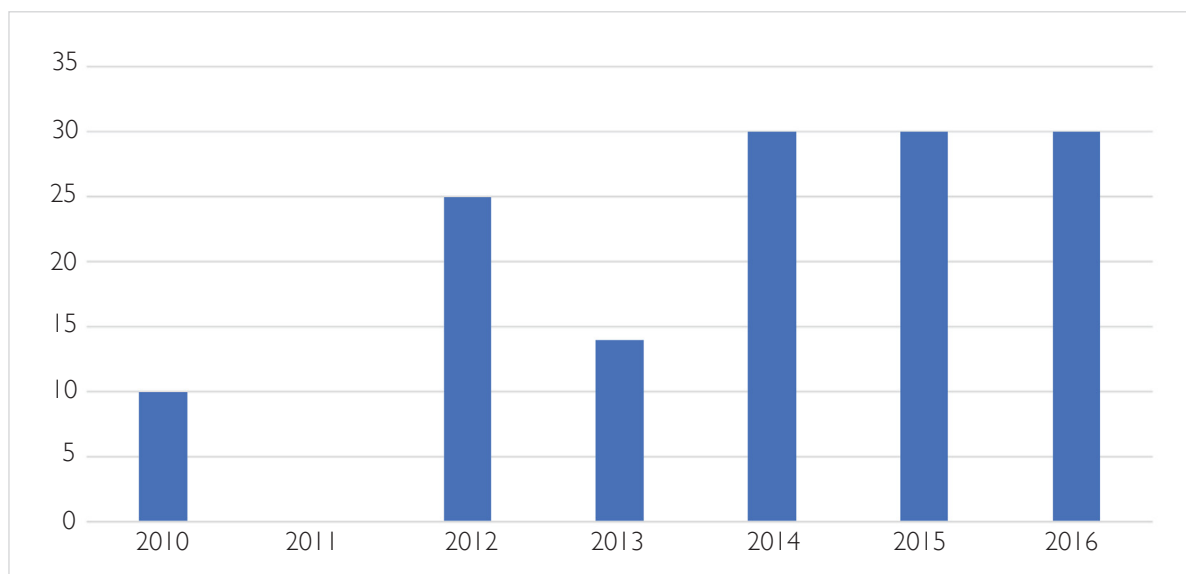
b) Teacher training, support and school leadership

MOE has implemented several programmes to support teachers who teach in Orang Asli schools. In 2015, MOE developed four teaching and learning modules to support these teachers (MOE 2016). In 2017, MOE developed a Remodelling Toolkit as a guide to school management in implementing learning strategies for the Orang Asli communities. MOE also developed a Teacher Training Model Framework (MOE 2018, 3-29).

Besides developing the teacher training programme to enhance the capability and pedagogy of teachers, MOE also provided opportunities for Orang Asli who aspire to join the teaching profession through the Bachelor of Education programme¹⁶ (PISMP) by the ITEs (MOE 2017). This special consideration is made to ensure that there are Orang Asli teachers, who understand the local context and could serve the Orang Asli communities (MOE 2017). Figure 11 shows the number of Orang Asli enrolled in the PISMP, which has 30 new students annually from 2014 to 2016. The PISMP was implemented in 2012 at the Tengku Ampuan Afzan ITE, Kuala Lipis, Pahang and the programme was extended to other ITEs (MOE 2016).

¹⁶ Program Ijazah Sarjana Muda Pendidikan.

Figure 11: Number of Orang Asli Enrolled in PISMP, 2010-2016

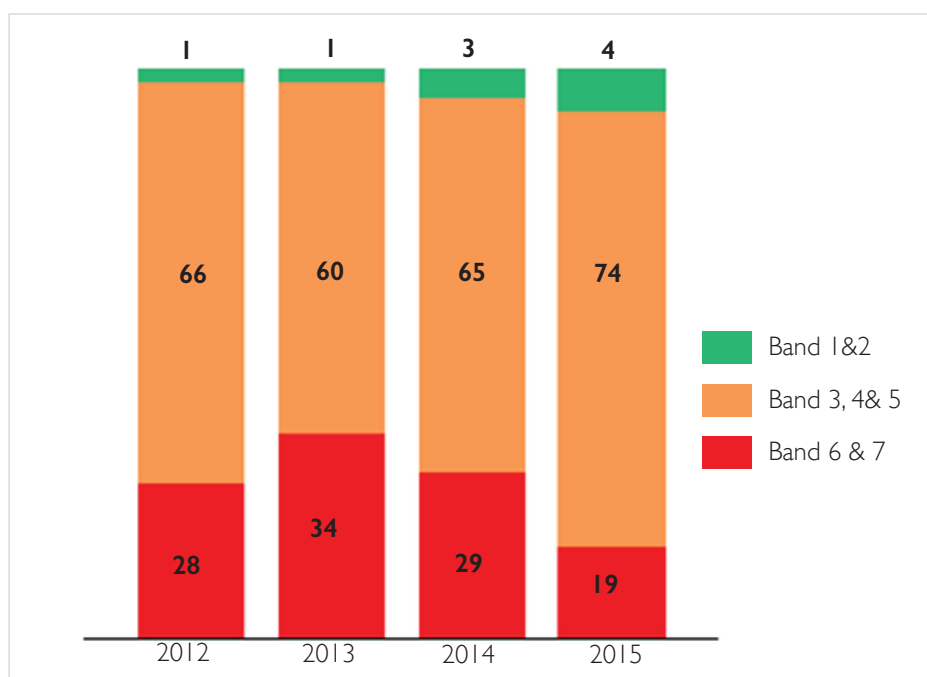


Source: MOE 2017.

In the MEB Annual Report 2015, it was reported that only 80% of the school leaders in Orang Asli and K9 schools had passed the minimum standard in leadership aspects (MOE 2016, 106). The MOE and PPDs would support those school leaders who have not passed the minimum standard.

The Orang Asli and K9 schools have improved by school bands. In 2015, there were four schools in Band 1 and 2 and 19 schools in Band 6 and 7, which meant an improvement throughout the years (Figure 12).

Figure 12: Number of Orang Asli/K9 Schools by School Band, 2012-2015



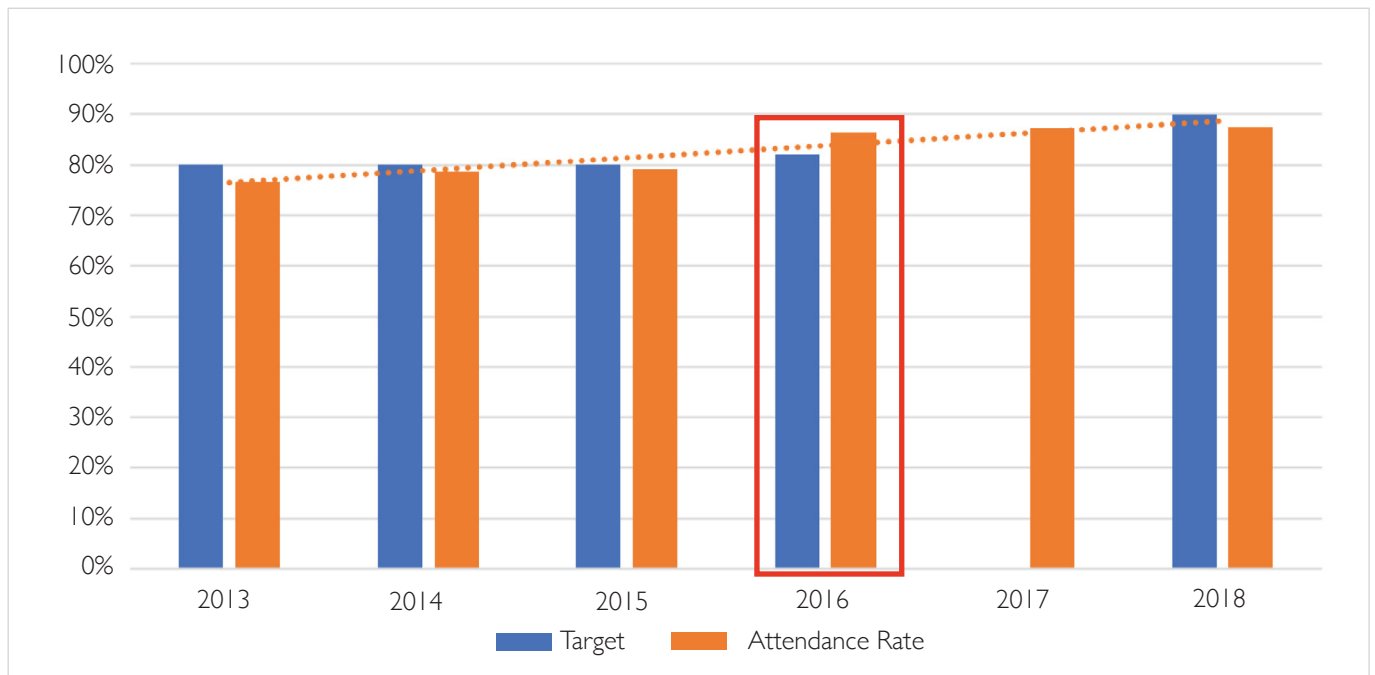
Source: Adapted from MOE 2016.

c) Educational performance during the OA Transformation Plan

Since the implementation of the Orang Asli Transformation Plan 2013 to 2018 under the MEB, MOE has been tracking and monitoring the progress of specific educational indicators for the Orang Asli students. Although the annual reports do not track the same indicators every year, there are some indicators, which are tracked consistently, such as the number of enrolments; transition and dropout rates from Primary Six to Form One; and attendance rates. In wave one of the transformation plan, the tracking focussed on access to education and programmes, such as KEDAP. In wave two, the focus has expanded to include learning outcomes, such as UPSR passing rates and grades distribution. According to the statistics reported in the MEB Annual Reports, since the start of the OA Transformation Plan, there have been some improvements in terms of retaining the Orang Asli students in school with the increase of attendance rates and transition rates. However, other indicators have been relatively stagnant with slight improvement or decline, such as UPSR passing rates and grades; and enrolment at the primary and secondary level.

The attendance rates of Orang Asli students have been steadily increasing since 2013, from a percentage of 76.7% to 87.4%, which has improved by 10.7 percentage points (Figure 13). When compared to the target set by MOE, it was only in 2016 that the attendance rate target was achieved. Nevertheless, the actual attendance rate is quite close to the target during the OA Transformation Plan period.

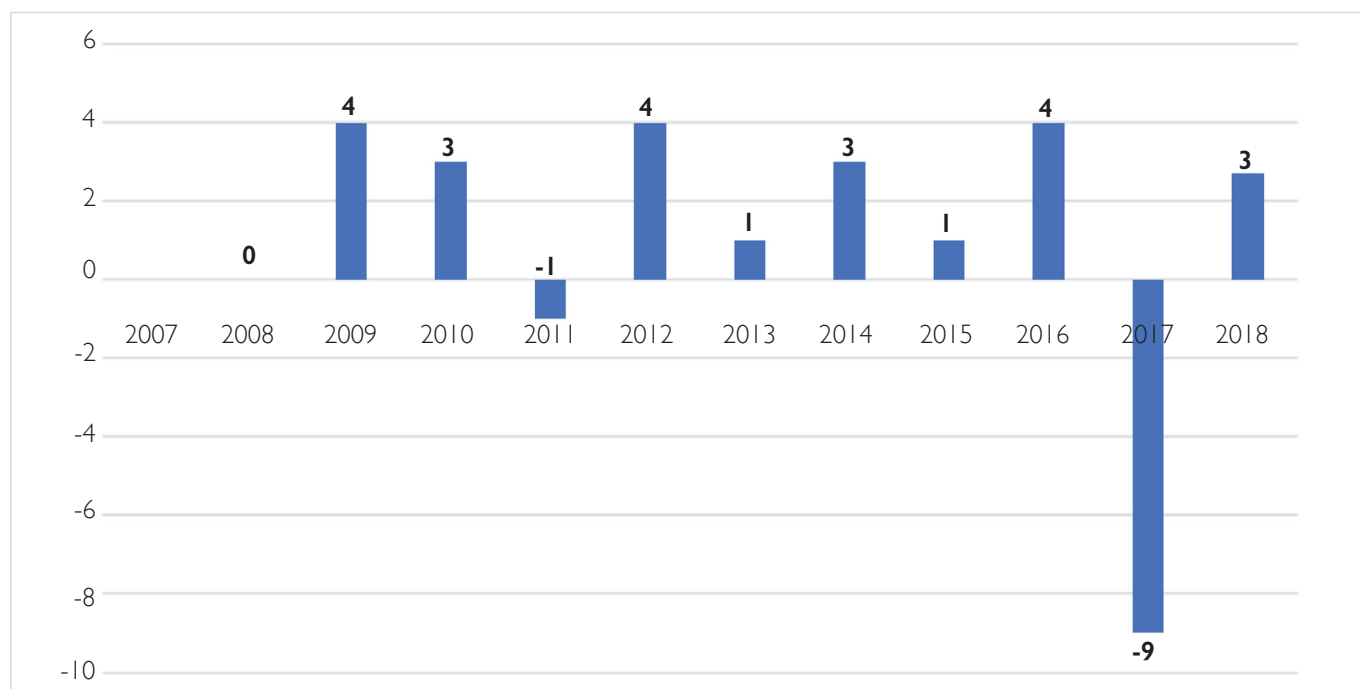
Figure 13: Attendance Rate and Target (%)



Source: MOE 2015; MOE 2016; MOE 2017; MOE 2018; and MOE 2019.

The transition rate for Orang Asli students from Primary Six to Form One has been improving since 2009, but the rates declined significantly in 2017. Figure 14 shows that there has been consistent improvement in the transition rates between 1% and 4% from 2009 to 2018, but the transition rate dropped by 9% in 2017. The major Orang Asli educational programmes, such as KAP, K9 schools and KEDAP, were started between 2007 and 2008 and followed by the OA Transformation Plan from 2013 to 2018. There has been a significant improvement in terms of transition and attendance rate during the implementation of these policies and programmes.

Figure 14: Changes of Transition Rates (%)



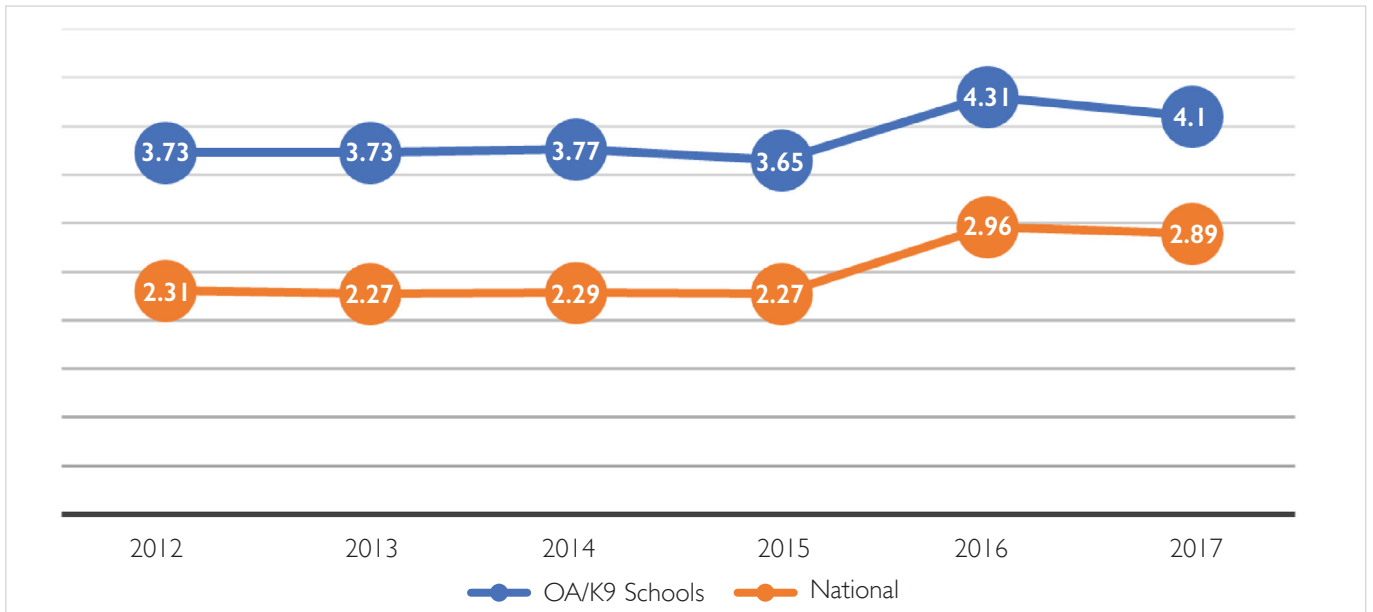
Source: MOE 2019 and author's own calculations.

Transition rate from Primary Six to Form One gives a picture of the percentage of students transitioning to secondary school, but it does not indicate the percentage of students completing primary or secondary education. In the MEB Annual Report 2013 and 2014, only the number of students, who completed Primary Six, was reported. However, the completion rates for primary education were not reported in the annual reports.

As highlighted in Figure 7, the completion rate of secondary Orang Asli students has increased by 8% and the number of Orang Asli students who completed Form Five increased in 2014 as compared to 2013. However, similar to the completion rate for primary level, these numbers were not reported in subsequent MEB Annual Reports.

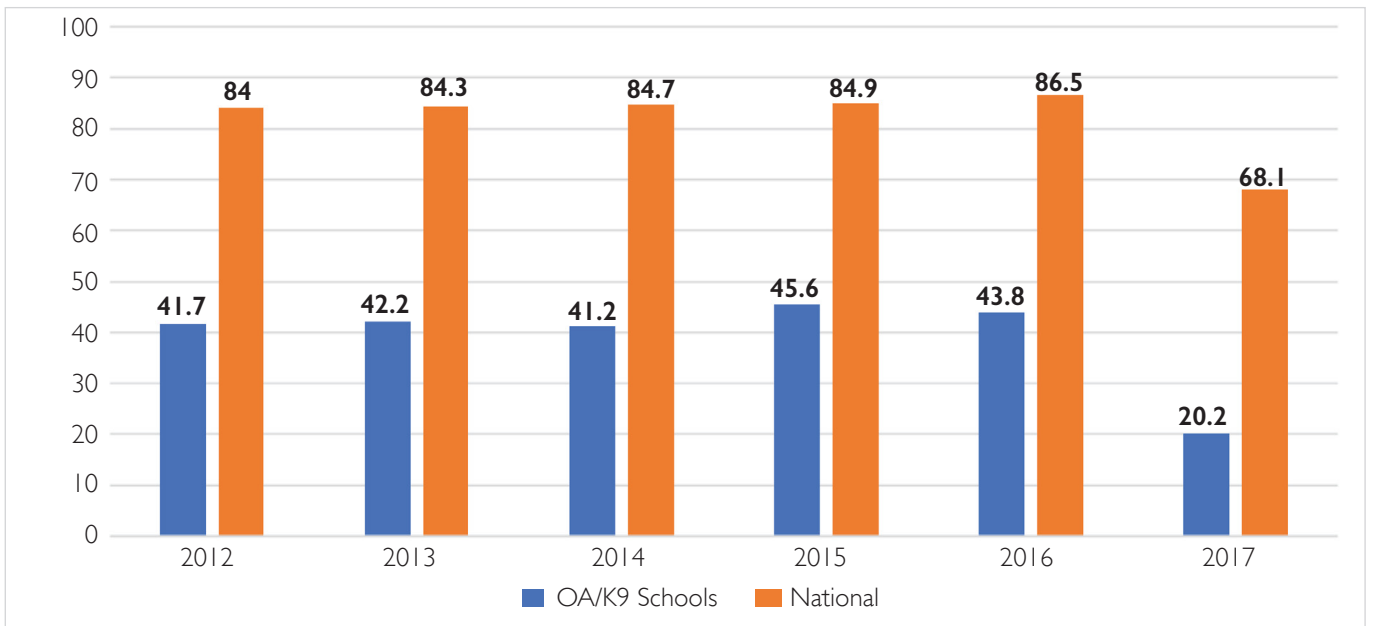
Although the access to education for Orang Asli students has shown improvements during the OA Transformation Plan period, the statistics on achievement and learning outcomes have been stagnant and declined in tandem with the national average decline in 2016 and 2017, as shown in Figure 15. Despite the reduction in the gap between Orang Asli students and the national average, the performance of Orang Asli students in UPSR has declined in terms of average grade point and passing rate. In 2017, the passing rate of Orang Asli students in UPSR was only 20.2% (Figure 16).

Figure 15: UPSR Average Grade Point



Source: MOE 2018

Figure 16: UPSR Passing Rate (%)



Source: MOE 2018.

IX. Conclusion

This section has discussed the intervention policies and programmes, which MOE has implemented to improve the education access and learning outcomes of the Orang Asli students. Despite the many efforts and investment in these programmes, the outcomes and results do not seem to commensurate with the resources put into these policies and programmes. The next section will review the policies and programmes in addressing the challenges of the Orang Asli children in accessing education.

SECTION 5: MAJOR EDUCATION POLICIES AND PROGRAMMES IN ADDRESSING CHALLENGES

I. The Direction of Policies and Programmes for Orang Asli Children

The policies and programmes for Orang Asli students have evolved from integration to mainstream education to a more indigenous-focused education. The three main clusters are the early-days programmes, namely PKMOA; programmes under Pensiangan-Salinatan, such as KIA2M, KAP, K9 and KEDAP; and the OA Transformation Plan, consisting of the continuation of K9 schools, KEDAP, KAP, which was revised to PIKAP in 2018. There are two Education Plans during this period: The Malaysia Education Development Master Plan from 2006 to 2010 and the Malaysian Education Blueprint from 2013 to 2025. The summary of the objectives, nature and structure of the programmes are listed in Table 6.

Table 6: The Objective, Nature and Structure of the Programmes

Year	Programmes	Aim/Objectives	Nature	Structure
1999	Special Programme for Orang Asli Students ¹⁷ (PKMOA)	Improve mastery of 3M skills	Integration into mainstream	Remedial class in Year 2
2003	Pensiangan-Salinatan Programme	Improve the academic achievement of students in the interior areas	Remote areas, Indigenous pedagogy	Modules on BM, English, Science and Mathematics
2006	KIA2M Reading and writing intervention class	Intervention to develop basic reading and writing skills	Nation-wide, the programme for Orang Asli focused on indigenous pedagogy	The programme for Orang Asli students focused on the basic literacy in <i>Bahasa Melayu</i> by incorporating cross-curricular learning of using Music, Visual Arts and Physical Education in the learning of the language and adopting the indigenous pedagogy
2007	The Integrated Curriculum for Orang Asli and Penan Schools ¹⁸ (KAP)	Improve literacy and proficiency in 3M skills	Focus on indigenous pedagogy	Modules are developed based on the national primary curriculum, KBSR then KSSR and adopted the Minimum Adequate Syllabus approach
2007	Special Model K9 Schools	Reduce dropout rates	School model	Schools with residential facilities from Primary One to Form Three

¹⁷. Program Khas Murid Orang Asli

¹⁸. Kurikulum Standard Sekolah Rendah Orang Asli dan Penan.

2008	The Orang Asli and Indigenous Adult Classes ¹⁹ (KEDAP)	Reduce illiteracy among parents to enable the parents to guide and motivate their children to go to school	Emphasis on the importance of parental involvement	Basic literacy classes
2013	Orang Asli Transformation Plan, 2013-2018 (Malaysia Education Blueprint 2013-2025)	Improve enrolment and attendance, as well as learning outcomes	Policy plan with targets and monitoring of progress	KAP, K9 schools and KEDAP with the tracking of the progress of the educational outcomes
2018	Special Intervention Programme for the Orang Asli and Indigenous Community Students ²⁰ (PIKAP)	Improve literacy and proficiency in 3M skills	Indigenous Pedagogy	<i>Bahasa Melayu</i> , English and Mathematics modules for Orang Asli students

Source: Author's compilation

At the initial stage, after MOE took over from JHEOA the responsibility of providing education, the PKMOA seeks to integrate the Orang Asli children to the mainstream education by providing remedial classes for them to catch up with their peers.

The Pensiangan-Salinatan programme is the start of a shift and realization of the need for indigenous pedagogy and incorporating the culture and environment of the Orang Asli students in their education. The formulation of KAP seeks to address and provide an indigenous pedagogy to help improve literacy and proficiency in reading, writing and counting skills. K9 school is a new school model, which seeks to address the dropout of Orang Asli students once they transition from Year 6 to Form 1 by continuing their studies in the same school. KEDAP seeks to involve the parents in the education process by reducing illiteracy among the parents.

The Orang Asli Transformation Plan is an enhancement of the existing programmes, such as KAP, K9 and KEDAP. This plan has a clear goal, structure and timeline, as well as tracking of the educational outcomes to ensure that the progress is monitored. The incorporation of the Orang Asli Transformation Plan in the Malaysia Education Blueprint signifies a commitment to improving the educational access and outcomes of the Orang Asli students.

The following sub-sections will analyse to what extent the programmes, such as KAP, K9 schools, KEDAP and PISMP, under the Orang Asli Transformation Plan sufficiently address the challenges faced by Orang Asli children.

¹⁹. *Kelas Dewasa Orang Asli dan Peribumi*

²⁰. *Program Intervensi Khas Murid Orang Asli dan Pribumi*

II. Orang Asli Transformation Plan in Addressing Challenges

a) *Alignment of programmes in addressing challenges*

Dropout and low performance in school are symptoms of the challenges that the Orang Asli students face in accessing education. The underlying causes of dropout and low performance are due to the many challenges that the Orang Asli students face, such as socio-economic barriers; geographical barriers; language and cultural barriers; and problems encountered in school. Policies and programmes that address the symptoms but not the underlying causes will not sufficiently solve the issue of educational access for the Orang Asli children.

Programmes, such as KEDAP and PISMP, address the underlying challenges faced by Orang Asli children; low literacy among the parents and lack of Orang Asli teachers, who understand the culture and languages of these communities. Studies on the impact of KEDAP have shown that parents who participated in the classes have increased the confidence and motivation of their children towards schooling. PISMP addresses the problem of language and cultural barriers where teachers assigned to Orang Asli schools do not speak their languages and lack understanding of their culture. PISMP aims to provide teacher training for Orang Asli, who are interested in teaching and contributing back to their community.

Therefore, KEDAP and PISMP could be expanded to see more significant results. As highlighted in the studies above, the continuity of KEDAP depends on the funding allocated to this programme, and this was acknowledged in the MEB Annual Report 2016. Moreover, the teachers need adequate training to conduct the classes and expansion of the course timeline should be considered to enable adequate time to cover the basic literacy skills. As for PISMP, it has a low number of trained teachers, with around 30 new trainees each year.

K9 schools and KAP were designed to address the problem of dropout and low proficiency in 3M skills. However, there are underlying causes to these problems, which could not be resolved sufficiently with these two programmes.

The K9 schools were established to reduce dropouts, particularly during the transition from primary to secondary school. One of the rationales of establishing the K9 schools is that the dropout rates have been high during the transition from Primary Six to Form One, as most Orang Asli students would need to be transferred to a secondary school, which is usually situated in nearby towns and far from their villages. Therefore, K9 schools would reduce this problem and ensure that these students would not have to move to another school.

Although the focus of dropout has been on the transition from Primary Six to Form One, there are also dropouts in primary and secondary school. According to the MEB Annual Report 2014, the statistics on completion rates of secondary school from 2012 to 2014 were low at between 41% and 49%. In other words, half of the Orang Asli students, who started secondary school, did not complete their studies. The publicly available educational statistics do not report on the completion rate of primary school for the Orang Asli students. Therefore we could not ascertain the dropout rate in primary school before the transition to secondary school.

The K9 schools provide infrastructure and residential facilities to students from remote villages. The plan was to help resolve the geographical barriers of travelling long hours to school due to the lack of infrastructure. However, many parents are reluctant to let their children stay in a hostel, especially younger children in primary

schools, and this is understandable as these children are still young and still need to be with their families. Some parents choose to stop their children from schooling, as they are worried about their safety and well-being.

KAP does seek to address the problem of misalignment of curriculum and pedagogy to the Orang Asli culture, but there are problems with the design of the programme. KAP is an indigenous module to the national curriculum, which seeks to customize the KSSR to the indigenous context and to use the indigenous pedagogy. There is some success in this as discussed above, where there is a general improvement in basic literacy and numeracy skills, but the programme has not achieved its objective. However, according to the study by Mihat (2015), despite using the Minimum Adequate Syllabus, the language level skills are still higher than the capabilities of the Orang Asli student, and the syllabus has failed to adapt to their culture and environment. Furthermore, the Minimum Adequate Syllabus would exacerbate their disadvantage and leave them behind as they would not be on the same par as their peers when taking the national examinations.

The underlying problem of low basic literacy and numeracy skills is because Orang Asli students do not start primary school at the same level as compared to their peers, who have attended two to three years of pre-school. Although KAP seeks to solve the low proficiency of basic literacy and numeracy skills, it does not sufficiently address the problem of inequalities that these children face due to poverty and lack of access to pre-school. Throughout their schooling years, they are grappling to catch up with their peers, who are two to three years ahead of them. The learning process is a building process that needs to have a foundation and building on top of that foundation. An Orang Asli child who has no prior foundation in a language, which is not his mother tongue, will then find it challenging to understand the teaching because of the medium of instruction, not because of his lack of understanding or intelligence. By the time the child has a basic understanding of the language, he would have missed months of learning, and then would need to catch up with his peers. Besides this, an Orang Asli child, who is new to school, would need to adapt to structured learning instead of the Orang Asli way of learning from their environment.

b) Evaluation and adjustment of programmes in addressing existing weaknesses

The primary objective of KAP and its predecessor programmes, KIA2M and Pensiangan-Salinatan, is to improve the proficiency of basic literacy and numeracy skills. Although there are some differences in terms of the focus or implementation, there are many commonalities in these programmes. Besides the objective, ITEs play an important role in training the teachers to develop the teaching and learning of these modules. All these programmes are additional modules for the Orang Asli children.

The studies on these programmes have revealed similar findings of challenges and implementation problems. There are some results and success, but still, a large proportion of the students have not mastered the basic literacy and numeracy skills (Table 7). Challenges reported highlights the prevalent issue of large class size; barriers for lecturers due to the remoteness of the schools and additional workload; problems with implementation and execution; lack of training and support for teachers; and misalignment of the module with their culture and environment. On the positive side, teachers have expressed that they have learnt and enhanced their teaching skills through these programmes.

Table 7: Summary of Impact and Challenges of Programmes

Programme	Study by	Challenges	Impact
Pensiangan-Salinatan	Lau (2007)		Effective in helping teachers develop their planning and implementation skills in teaching and learning
	Aziz (2010)	The teaching is based on the view that literacy is a uniform, technical skill, and it does not consider the social practice and local context of these students.	Efforts commendable but results have not achieved goals
KIA2M	Md Nor et al. (2011)	Large class size; long travelling time for lecturers to schools; extra workload for lecturers	There is some success in increasing the number of Orang Asli students in reading and writing but there are still many schools, which have a high failure rate of about 50%.
	Tengku Ampuan Afzan ITE (2006)	The programme was implemented in a rushed manner; teacher assigned is not trained in the subject	The students have a very low passing rate of test one and two. However, there is an increase in the scores obtained.
	Chew (2018)		The programme was not a successful intervention programme whereby only 53.8% mastered basic literacy and arithmetic skills in 2001, and the result declined to 23% in 2008.
	Mahyuddin et al. (2009)	Large class size; lack of training for teachers; teaching was not based on creating literacy and meaningful reading and writing; lack of interest from parents; lack of support system for teachers; and lack of monitoring of students' performance after the programme.	The programme was not quite successful as some schools reported that as many as 50% of the students were still unable to read and write.

KAP	Md Nor et al. (2011)		There is a general improvement in the basic literacy 3Rs skills and increase in attendance rate among the students. Teaching and learning are only effective if the teachers customize the modules according to the students' needs.
	Mihat (2015)	The syllabus is not suitable for the Orang Asli students and needs to be adapted to their culture and environment; lack of guidance and support to the teachers.	
	MEB Annual Reports		The statistics on achievement and learning outcomes have been stagnant and declined in tandem with the national average decline in 2016 and 2017. There is a slight reduction in the gap between Orang Asli students and the national average.

The two main issues highlighted in all these programmes are lack of local and indigenous context and inadequate training for teachers. Although all these programmes aimed to customize the syllabus of the modules to the local context, they have not been entirely successful due to the inadequate training and resources for the teachers. Teachers are the important enablers in these programmes, but many studies have highlighted that teachers do not receive the support and training needed to teach these modules. Moreover, some teachers assigned are not trained to teach these subjects, and this creates an additional challenge for them to provide quality teaching for Orang Asli students. It is based on the teachers' and lecturers' initiatives to improve on the learning of the Orang Asli students, as this is an additional responsibility that they take on.

The main issues of these programmes have not been addressed sufficiently in the revision of the programmes from Pensiangan-Salinatan to KIA2M to KAP. There is a lack of evaluation of the impact of the programmes when designing a new extension of programmes of similar nature. It has been 15 years since the Pensiangan-Salinatan programme was launched. However, the issue of low proficiency in basic literacy and numeracy skills persists. Monitoring and evaluation of the programmes are needed to ensure that future programmes will have considered the challenges and readjust to address these challenges.

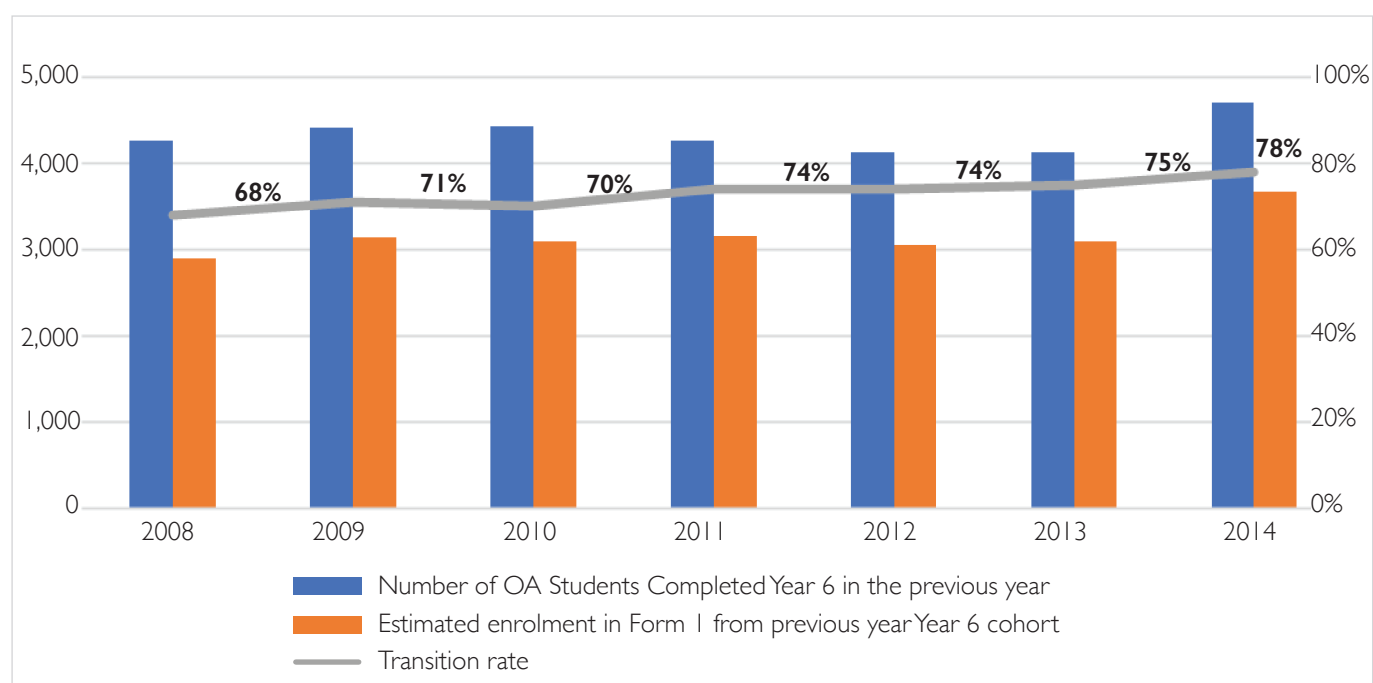
c) Progress monitoring to reflect an accurate and complete picture

Since the start of the Orang Asli Transformation Plan under the Malaysia Education Blueprint, there has been continuous annual reporting on the progress of education indicators for Orang Asli students. Progress monitoring, which is incorporated when designing policy, is a good practice as that will enable sound policy analysis of the progress and outcomes of the policy to improve future policies and programmes. However, the education indicators selected have to reflect an accurate and complete picture of the situation on the ground.

Dropout and transition rates from Primary Six to Form One have been consistently tracked in the MEB Annual reports, but these could not provide the whole picture of access to education for Orang Asli children. The focus on this indicator, or even combined with the attendance rate, do not show the entirety of the access story, as a dropout in primary school or secondary school is not reflected in this data.

Other education access indicators, such as enrolment numbers and rates, and completion numbers and rates for both primary and secondary schools are also important to provide a more comprehensive picture, and these statistics need to be reported consistently. Although there are years where these indicators are released, there is no consistency in reporting on these indicators. From Figure 17, based on the data on transition rates and the number of students who completed Year Six, an estimation of the enrolment at Form One is made. Figure 17 shows that despite an increase in the transition rates, the number of students enrolled in Form One hovered around 3,000 students from 2008 to 2013. Moreover, there is a smaller number of students who completed primary school. It does not mean that the indicator is flawed; it is an example that a single indicator could not inform the whole story.

Figure 17: Number vs Percentage



Source: MOE 2014; MOE 2015 and author's own calculations.

Clear target and progress monitoring is important to ensure continued effort and progress. Despite having different programmes under the Orang Asli Transformation Plan with different objectives and programme

contents, there is no clear target for the specific programmes. The two indicators with a clear target for the Plan are attendance rates and transition rates. However, only the attendance rate has a yearly target. It can be seen from the Annual Reports that attendance rate is the only indicator with clear progress from 76.7% in 2013 to 87.4% in 2018 (Figure 13). Although it did not achieve the 90% target in 2018, the progress has been significant. It shows that a clear target and progress monitoring reflects the commitment towards improvement. However, the focus on targets should be complemented with monitoring and evaluations in consultations and qualitative measures to avoid the problem of “hitting the target but missing the point” and being unaware of the unintended consequences.

d) *The forgotten children – out of sight, out of mind?*

The policies and programmes for Orang Asli students missed an important group of vulnerable children, which are those who have never enrolled in a school. The policies and programmes generally aimed to achieve two main objectives, namely reducing dropouts and improving basic literacy and numeracy skills, which are meant to support and ensure that the Orang Asli students continue schooling. However, these programmes have neglected the needs and challenges of Orang Asli children, who have never been to school. A particularly important education indicator of enrolment rate is missing from the statistics that are being monitored. Enrolment rate is an indicator of the proportion of the population of children of school-going age, who are enrolled in primary or secondary school. This group of Orang Asli children, who have never been to school, is the most vulnerable.

Another problem highlighted earlier is the problem of birth registration, which hinders undocumented Orang Asli children from enrolling in a school. It is a fundamental problem that needs to be urgently resolved to ensure that these undocumented children can exercise their rights to citizenship and have access to basic services, such as education and health. In December 2018, MOE announced that undocumented children with one Malaysian parent would be able to register for the following academic year (Ibrahim 2018). Solving this issue needs the commitment and co-ordination from all relevant ministries.

e) *Unaddressed challenges*

Low academic performance is often deemed as a result of laziness and low capability to learn instead of malnutrition. There needs to be further research into how malnutrition affects the academic performance of Orang Asli and indigenous students. School feeding programmes, such as Rancangan Makanan Tambahan could identify the nutrients lacked by the Orang Asli students and provide food that could supplement their nutrition. A critical assessment of the school feeding programmes could help to improve and expand the programme (Khalidi and Tan 2020). School feeding programmes are not educational programmes, therefore they would need the co-ordination of different ministries and stakeholders to work together to improve this programme.

Bullying is an increasing problem in schools. It could be a result of stigmatization of the lifestyle, religion and socio-economic status of the Orang Asli students. Bullying has created low self-esteem among the Orang Asli students and led to the segregation of students of different ethnicity in schools. Stigmatization could be due to a lack of awareness and understanding of the culture of the Orang Asli as well as a dominating negative narrative of who they are. As argued by Jegatesen (2018), literature and studies have portrayed the Orang Asli as victims and marginalized community, which does not recognize the resiliency and adaptability of this community. It has also resulted in portraying them as victims and therefore denying them the right to be their own voice in determining their path.

SECTION 6: POLICY RECOMMENDATIONS

I. Policies and Programmes

Address the challenges rather than symptoms in formulating or revising policies and programmes.

The design of the policies and programmes has to address the challenges faced by the Orang Asli children. Programmes, such as K9 schools and PIKAP, are in the right direction but could be refined and improved in terms of their implementation. The K9 schools could be a holistic school model that provides an environment that embraces the diversity of the Orang Asli culture and way of life. It could be done through participation from the parents and communities in providing inputs and contributing efforts in building the school. PIKAP would serve its purpose as an indigenous curriculum, customized to the local context and using the indigenous pedagogy, which is at the same level as the mainstream syllabus.

Incorporate indigenous curriculum and indigenous pedagogy in the existing syllabus, teaching and learning.

The indigenous curriculum needs to have a customized content that incorporates the Orang Asli and other indigenous communities' culture, environment and local context. It should be the same knowledge content as the national syllabus but presented in a localized manner. It should be recognized that the Orang Asli is not a homogenous group. Therefore, it is important to work together with the communities to develop the curriculum. The right to self-determination should be honoured by incorporating the voices of the communities. Teachers, who teach in Orang Asli schools, need to be trained in the indigenous pedagogy to ensure that the teaching and learning would be suitable. This should take into consideration the Orang Asli's lifestyle, their cultural values and their way of learning, which is based on their environment and interaction with the people around them.

Provide quality pre-posting and continuous training to teachers.

The analysis above has shown that teachers are the key personnel in ensuring the success of these policies and programmes. Two factors are crucial for a balanced implementation and in ensuring the success of the programmes, namely resources given to teachers and their scope of responsibilities. The lack of either one will hinder the outcome of the teaching and learning in class. Compatibility of the subjects assigned to teachers will determine the outcome of the teaching. It does not mean that teachers could not reskill, but necessary and adequate training is important to ensure reskilling. Besides that, teachers should receive adequate training before their posting to an Orang Asli school, and continuous training is needed to ensure constant improvements, as they are on the job. Although pre-posting training is provided, previous studies have shown that it is inadequate, and there is a need to improve the content of the training. New programmes should be clear and communicated to teachers before the implementation to ensure that teachers have sufficient time and planning to execute the programmes.

Impact analysis of specific policies and programmes are needed to re-evaluate and revise periodically to ensure that they address the challenges and new issues that arise.

Impact analysis and method of analysis should be designed and determine at the start of the policymaking process so as to ensure that the progress and the right indicators are being tracked. Hindsight impact analysis may not provide the understanding of the impact thoroughly due to the lack of data and observation throughout the development of the policies and programmes.

Continuous and sustainable funding is needed to ensure the continuity of programmes.

As highlighted in the case of KEDAP, funding is an important agent to ensure that there are resources to run the classes for the parents. Disruption of allocation will reduce the impact and result of the programmes. In this case, sufficient

classes are needed to ensure that participants can master basic literacy and numeracy skills. Resources and commitment from the school will depend on sustainable allocations.

Leverage on the existing network of the National Cluster of Excellence and strengthen the teacher peer support network and mentoring network. Teaching is a skill that requires sharpening and adaptation to different students. Teachers will benefit from having a peer support network with other teachers in different Orang Asli schools to exchange ideas and experiences on how to improve their teaching. A mentoring programme with more experienced teachers or Orang Asli teachers will provide some handles for the teachers to improve themselves. Visitation and peer-to-peer observation to Orang Asli schools and class teaching will help generate peer-to-peer learning.

Monitoring and evaluation need to be strengthened by having a clear target and progress monitoring to ensure that the indicators portray a holistic picture for addressing existing weaknesses. Monitoring can help to identify issues that arise or unintended consequences. However, a wrong focus of monitoring will distort the direction of the policies and programmes. Evaluation needs to be done periodically, and adjustment is made to address the existing weaknesses.

II. Unaddressed Issues

The issue of Orang Asli children who have never been to school needs to be examined further to understand the current state. The primary focus of educational policies and programmes for Orang Asli has been on retaining the students in schools; thus, the focus on dropout and transition rates. It is in the right direction, but this can be complemented by ensuring that all school-going age Orang Asli children are enrolled and in school. The number of Orang Asli children who have never been to school, and the reasons why they are not enrolled in a school must be examined further. Monitoring and tracking the enrolment rate will enable targeted efforts to address this critical issue.

Pre-school education needs to be expanded, and community learning centres can play an increasing role in providing pre-school education. There are community learning centres in the Orang Asli villages, which aim to help provide supplementary education to the Orang Asli children, especially the younger, dropout students and children who could not go to school, such as children with disabilities. These centres also play a role in enhancing the 3M skills of adults. These bottom-up initiatives are operated by non-profit organizations and individuals from the communities. According to one of the founders of these initiatives²¹, they have developed a module, which aims to teach Orang Asli children using their own culture, heritage and environment. This initiative has received support from MOE and is supported by private funders and charities. It also shows the initiative and desire of the communities to provide education for their children. This debunks the stereotypical narrative that Orang Asli do not value education. They do face more obstacles in accessing and learning in schools, which hinders them from going and staying in schools. These community learning centres are operated by the communities in which they set up committees to manage the day-to-day operations. These committees are supported and guided by group of NGOs, such as Jaringan Orang Asal SeMalaysia (JOAS), Centre for Orang Asli Concerns (COAC) and other organizations. The need for pre-school education can be expanded with more bottom-up approaches, such as these, and provide a headstart for the Orang Asli children so that they can start primary school at the same level as their peers.

²¹ Author's interview with the founder on 10 January 2020

The indigenizing of the policies and programmes requires the voice of the Orang Asli. Consultation and participation from the Orang Asli in these policies and programmes need to be increased at all levels: national, state, district, school and community. Feedback and consultation are important to evaluate the policies and programmes that will support and localize the indigenous context.

Our education system can draw educational points from the Orang Asli culture and values. The Orang Asli culture sees learning as being a good Orang Asli and emphasizes the responsibilities towards one's community. They value learning as self-development and communal responsibilities rather than education for economic efficiency. Their value is very much in line with the National Philosophy of Education, which was formulated in 1988:

Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving a high level of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society and the nation at large (MOE, 2008, p. ix).

The mismatch of their values and culture with mainstream education might suggest a re-examination of the current education system of competition and competency. Competition is good for improvement. However, a fixation on competition may drive the orientation of education towards examination-based learning. It neglects skills, such as creativity and critical thinking, which are difficult to assess in an examination and values rote-learning and keywords to answer the right question. It leads us to reflect on the broader society – do the non-indigenous students face the same challenges as the Orang Asli students? Are our students, who are more physically active, face the same challenges as the Orang Asli students, where long hours of sitting in classes and rote-learning are hindering their learning? It is not to suggest an education system without examinations, but rather to take a balance between an examination-based system and space for exploration in the classroom and learning in school. This will enable a more creative, interactive and critical learning environment for the students.

III. Co-ordination with Other Relevant Ministries

Undocumented children are an issue that needs to be addressed with urgency together with the National Registration Department and JAKOA. Even if undocumented children can register themselves in schools, they still fear if there are consequences towards them if they do so. One of the good initiatives that has been implemented and could be expanded is the mobile birth registration counters that go to the interiors and rural areas to register new births. It will help reduce the burden of the people living in the interiors from travelling a long distance to register their children's births.

Malnutrition is an area that needs to be researched and examined further with the Ministry of Health and JAKOA. As they face challenges of poverty and low parental education level, these conditions have led to poor diet and malnutrition. The study by Al-Mekhlafi et al. (2011), highlighted in the previous section, is an important study to show that the reason for poor working memory or lack of educational achievement is due to nutrient deficiency. More research and study has to be done to examine further the dietary patterns and needs of these children. The findings will help in the design of school lunch programmes, which involve healthy food, as well as the accessibility of the programmes to the Orang Asli students.

Ensure provision of electricity, water and sanitation, telecommunication, Internet and road access to Orang Asli communities with the co-operation of the Ministry of Rural Development and JAKOA.

Covid-19 has shown the importance of infrastructure in ensuring the continuity of education. Without the provision of an adequate supply of basic infrastructures, the Orang Asli children are further left behind in their education. After more than 60 years of independence and significant development in the country, we have cities like Kuala Lumpur, which is on par with cities of other developed nations. Therefore, there should be equal development in rural areas and interiors. Provision of basic infrastructure is a fundamental necessity. K9 schools model has provided infrastructure and facilities in such schools. Nevertheless, more needs to be done to bring these infrastructures and facilities to the communities and villages.

CONCLUSION

Malaysia's education provision has seen tremendous success and improvements over the years. However, this success must be enjoyed by all, including the vulnerable and marginalized communities, such as the Orang Asli. Recognizing the challenges that the Orang Asli communities face in accessing education, as well as to bridge the gap between the Orang Asli and the rest of the Malaysian communities, the government implemented several programmes, such as Pensiangan-Salinatan and OA Transformation Plan with specific teaching and learning modules for the Orang Asli children. Despite the efforts taken, the Orang Asli children still face significant challenges to access education.

This paper analyzes the evolution of the educational programmes for the Orang Asli children. A profound finding of this paper is the lack of evaluation and adjustment to the programmes, which have not addressed and reduced effectively the challenges faced by these children. There is misalignment of the objectives of the programmes and their monitoring indicators with the reality and challenges experienced by the Orang Asli children and their parents or guardians. Despite efforts and investments in these programmes over the years, the results and impact have not fully achieved the ultimate objective that the government sets out to do, which is to help Orang Asli children access quality education.

This paper only addresses the policy design and the direction of the programmes. It does not take into account the specifics of how these programmes are being implemented on the ground. The implementation of the programmes is crucial in determining the impact and effectiveness of the policy and programmes. Further studies on the implementation gap would enhance the understanding on the impact and improve the existing policies and programmes.

This paper puts forth several key recommendations, one of which is to include the voice of the Orang Asli in the formulation and implementation of the programmes meant for them. This is important in the process to provide 'indigenized education' that reflects and incorporates the culture and the environment of the Orang Asli communities. We need to respect the culture and self-determination rights of the Orang Asli communities, as well as recognize them as equal partners in the development of Malaysia.

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