

The Impacts of Haze on the Education Sector in Riau

The haze crisis in Riau is a prolonged disaster with serious impacts on almost all aspects of life. One of the most impacted sectors is the education sector. The haze that engulfed Riau Province for almost 3 months in 2015 disrupted more than 1.5 million students' access to education. The loss of many school hours due to the inconducive learning environment caused a great loss in this sector.

In detail, kindergartens or early childhood education programmes had to be closed for three months, while students of elementary schools were given a leave of 54 days. Secondary schools (junior high and high schools) were shut down for 42 days, causing a loss of 266 school hours for junior high students and 308 hours for high school students.¹ In average, schoolchildren were given a leave for approximately 28 days starting from early August 2015. Pekanbaru City's students are distributed in 255 kindergartens, 274 elementary schools, 98 junior high schools, 48 senior high schools, and 46 vocational high schools. They all suffered from a decline in the quality and quantity of education they received.

Pekanbaru City's Human Development Index (HDI) is 79.32, the highest HDI in Riau Province. This achievement is partly due to its good performance of education indicators. However, during the haze crisis, the control of its impacts on the education sector is still disorganised and far from satisfactory. Apart from the reduction of students' school hours, the preliminary study of the economic impacts of the haze in Riau carried out by Bank Indonesia's

Representative Office of Riau found that the financial loss of the disruption to school activities reached approximately IDR 20 billion²

Issues for Students during Temporary School Closure

Prior to the circular letter issued by the Minister of Education concerning haze, the Education Office of Pekanbaru City had decided to shut down the schools for almost one month in September 2015. This decision was taken to protect the safety and health of both students and teaching staff. However, the temporary school closures did not guarantee that the students in particular were prevented from an exposure to haze. Parents complain that during these shutdowns, their children rarely stay at home. They tend to choose playing outdoors due to the boredom caused by a long-term lack of activities.

At the same time, when children were given a holiday, their parents still had to work. This caused a problem in the supervision of the children. In addition, when they are required to assist with their children's lessons, parents would often complain of not understanding their children's subjects or homework. One of the parents, Ani, stated, *"I just graduated from elementary school and I need to work, so I have limited time and capability to help my child study at home."* This issue is particularly felt by the mothers, who are entrusted with more child-rearing duties compared to their spouses.

However, this issue is also dilemmatic for parents because if their children have to go to school, their safety is not guaranteed. Although schools commonly give out masks to minimise the risks of the haze, it is often the case that they are of poor quality. The journey to school is also quite dangerous, both due to direct exposure to the haze and the higher risk of accidents caused by haze-related restricted vision. In addition, most schools are not equipped with air conditioners and standard air purifiers.

After a month of temporary closure, the Education Office decided to resume the school activities for students of high schools and Madrasah Aliyah (Islamic high schools), although the school hours were limited to two hours per meeting whilst awaiting an improvement in the air quality. Apart from reducing the amount of hours, the teaching method was also modified. Teachers were expected to give an introduction to the assignments that students should do at home. Such homework should be submitted in the following meeting.

Owing to the situation where school activities are adjusted to the haze crisis, parents expressed their concern and complaints as this method was difficult for their children to follow. The assignments given were ineffective for both students and their parents,

especially since the students were often confused when they tried to learn something that had not been taught at school. This condition continued because oftentimes the sessions scheduled to discuss the assignments were cancelled due to the worsening air condition. As a result, the students were left behind in their lessons.

Students preparing themselves for national exams and high school or university admission exams are the group most affected by this situation. They were far behind in their lessons compared to their counterparts in other areas that were unaffected by haze. The high school students who participated in this research also confessed of their low confidence in competing at a national level to be admitted into university.

Apart from facing the dilemma and apprehension concerning their children's safety and education, parents were burdened even further with the school fees that must be paid despite the schools' closure. Parents with children in high schools were still required to pay for school fees and extra lessons. Although state elementary and junior high schools are free, but parents still needed to allocate budget for courses and extra lessons outside of school.

Data from Education Office of Pekanbaru City Estimation of Average School Contributions

School	Total Schools	Total Students	Estimation of Monthly Contributions	Total Loss
Kindergarten	254	12,000	150,000	1,800,000,000
Early Childhood Education Program	252	5,000	150,000	750,000,000
State Elementary School	194	87,738	Free	-
Private Elementary School	92	26,169	200,000	5,233,800,000
State Junior High	40	27,583	Free	-
Private Junior High	77	14,873	300,000	4,461,900,000
State High School	16	12,603	Free	-
Private High School	36	12,098	400,000	4,839,200,000
State Vocational High School	7	7,923	Free	-
Private Vocational High School	48	15,572	350,000	5,450,200,000

Source: Presentation of the Preliminary Study Temporary Findings of Haze Impacts on Riau's Economy by the Riau Province Representative of Bank Indonesia

Dilemmatic Situation for Educators

For the educators, the complex situation they faced was also a source of concern, especially in terms of the obstruction in teaching properly due to the shutdown. In addition, another challenge was teaching activities became far from ideal as their students' concentration declined due to the haze. Important activities such as exams also had to be halted or postponed due to the sudden deterioration in air quality that required a re-preparation.

The educators that Women Research Institute (WRI) interviewed in Pekanbaru City conveyed their concern about the students' declining performance due to the haze crisis. When confirmed about the possibility of the haze impacting the students' performance, a representative from the Education Office claimed that the haze would not affect the students' performance significantly.

However, WRI's findings on the field show that there is indeed a decline in the students' performance. WRI's FGD with the locals in Rumbai District revealed that there was a case of an alarmingly low passing rate in one of the high schools in Rumbai. In this school, only three students passed their national exams, while the others had to re-take the exams in order to pass.

Response from the Local Government and Ministry of Education and Culture

The Indonesian Government is still slow in responding the forest and land fires that took place simultaneously in various areas. In this particular case, the response on the impacts of haze on the education sector was also still relatively slow. The Ministry of Education and Culture finally released a Circular Letter on 23rd October 2015 or almost 2 months after the haze started. The circular letter addressed to the regional heads emphasised the importance of prioritising the safety of students, teachers, and other school staff. In addition, it also instructs emergency adjustments and actions to be taken during the haze crisis.

When the letter was issued, the air condition in Pekanbaru City was already improving. In other words,

this circular letter was too late in responding to the crisis. Especially since as a circular letter its objective was only to inform, explain, and/or provide guidelines; the implementation or actions were the discretion of each Education Office in haze-impacted areas. Then, Education Offices would leave the final decision to the schools to independently decide what their actions were. As a result, there were no standardised actions between one school and the other, causing a confusion among the educators and students' parents.

Post-Crisis Impact Control on the Education Sector

As a city that is particularly susceptible to the haze crisis, the local government and all supporting offices in Pekanbaru City must improve and carry out better anticipatory actions in response to the haze. Anticipation is the key in preparing for worst-case scenarios, including disasters. This should also be carried out by the Education Office of Pekanbaru City because, clouded in the haze, the future of our nation's generation is at stake.

"The academic curriculum cannot be delivered properly, students also fail to do their homework because they don't understand the lessons. How can children study by themselves for two months?"

(Quote taken from WRI's FGD with Sukajadi's locals)

WRI records that although Pekanbaru has regularly experienced the haze, until June 2016 (the time of this research) there is still no policy or regulation that has been issued in terms of disaster anticipation and mitigation for the education sector. One of the reasons is the financial obstacle due to no budget, and as such it is difficult for the Education Office to take anticipatory or mitigating actions.

The aid that the Education Office receives is commonly in the form of masks. There is no financial

assistance to support the procurement of air conditioners or air purifiers in schools to protect students when they are forced to go to school in the smoke. In other words, despite the fact that the haze crisis has been an annual disaster, most of the schools in Pekanbaru have yet to accommodate that condition and equip their buildings with necessary protections.

"When students are sent home, teachers are still expected to come to school and this burdens us because we have nothing to do and without students at school, we could only sit around and chat with each other."

(Quote from Wati, one of the interviewed teachers)

When the haze occurred in 2015, there was a plan for the Education Office of Pekanbaru City to receive assistance in the form of air conditioners and air purifiers. However at the time of writing, a follow-up of this plan has yet to transpire. The procurement plan disappeared along with the ceasing haze intensity.

Apart from ensuring smoke-free classrooms, the Education Office can only prepare to formulate a module that can be used specifically during disasters or state of emergency. The modules are formulated every start of the year in the Assembly of Subject Teachers, where the Education Office and all teaching staff formulate the targets to achieve learning indicators by grouping the materials of each subject. In addition, the Education Office also added the school hours once the air condition had improved.

However, this decision was protested by both parents and students because it was viewed as too burdensome on the students.

Point 6 of the Minister of Education's Circular Letter states that if a school undergoes a temporary closure for more than 28 days, it should make adjustments, including in its academic calendar. Ideally, such adjustments should also reschedule examinations until the completion of the academic curriculum. In practice, in Pekanbaru City, only school-level semester exams are postponed. Other examinations, especially national-level ones such as final exams and university admission tests are not adjusted accordingly.

No one can guarantee that the haze will not return to Pekanbaru City. Therefore, it is imperative to think of our future generation, whose essential rights to education are at risk due to the haze. School closures should no longer happen when schools are sufficiently protected and become a smoke-free area safe for students, teachers, and school staff. A permanent regulation on the anticipation and management must be immediately drafted to ensure an ideal learning environment during the haze.

End Note :

1. Winahyu. (2015). "Inilah Dampak Asap Bagi Dunia Pendidikan". Accessed at <http://www.riauonline.co.id/2015/11/02/inilah-dampak-asap-bagi-dunia-pendidikan>, on 28 September 2016, at 20.33.
2. *The Preliminary Study of the Economic Impacts of Haze on Riau's Economy by Bank Indonesia's Representative Office of Riau, FGD with Riau's entrepreneurs on 28 September 2015, Bank Indonesia's Representative Office of Riau.*