

# CSPS Strategy and Policy Journal

## **SCENARIO DEVELOPMENT FOR JOB FUTURES BRUNEI DARUSSALAM 2040**

*Diana Cheong, Pg Redhuan Rajak and Liew Chee Hau*

## **SCENARIOS FOR TEACHING AND TRAINING: FROM BEING “KODAKED” TO FUTURES LITERACY AND FUTURES-PROOFING**

*Sohail Inayatullah*

## **WORKFORCE NATIONALISATION POLICIES IN THE ARAB GULF STATES: LESSONS FOR BRUNEI DARUSSALAM**

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## **CHANGING PATTERNS OF THE ROLE OF MOTHERING IN BRUNEI DARUSSALAM**

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## **INTERGENERATIONAL SUPPORT FLOWS IN BRUNEI DARUSSALAM: POLICY IMPLICATIONS OF CONTINUED SUPPORT FROM OLDER ADULTS**

*Kartini Rahman*



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# Scenario Development for Job Futures Brunei Darussalam 2040\*

Diana Cheong<sup>1</sup>, Pg Redhuan Rajak and Liew Chee Hau

## Abstract

This paper is based on a scenario development exercise to identify economic and job futures possibilities, in terms of employment and working patterns as well as future types of jobs and related manpower policy issues. Mindset and mentality change at all levels, 4IR/future ready skills and education, economic competitiveness and extreme 4IR acceleration are the critical issues which was identified and treated as key driving forces in shaping Brunei's job futures 2040.

Three research questions as follows were then addressed:

- a) What are the four most probable future economic scenarios for Brunei 2040?
- b) What types of jobs will there be in each of the four future economic scenarios for Brunei 2040?
- c) What are the main manpower planning implications of the probable future economic scenarios for Brunei 2040?

The paper then outlines the manpower implications of the preferred economic and job futures scenario for Brunei 2040, which is the scenario built upon rapid 4IR transformation and economic competitiveness.

**Keywords:** *job futures, strategic foresight, scenario planning, fourth industrial revolution, Brunei Vision 2035*

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\* This paper was written prior to the COVID-19 pandemic. However, as the pandemic has accelerated a number of aspects of the 4IR which is the focus of the paper, the points made are still relevant.

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## **1.0 Introduction**

Wawasan Brunei 2035 or Vision 2035<sup>2</sup> aims for the nation to be widely recognized for the:

- Accomplishment of its educated and highly skilled people as measured by the highest international standards;
- Quality of life among the top 10 in the world as measured by the United Nations Human Development Index;
- Dynamic and sustainable economy with income per capita within the top 10 in the world.

Brunei recognizes the need to achieve economic diversification away from oil and gas for sustainability and has pledged to transform itself from a primarily resource-based economy to a Fourth Industrial Revolution (4IR) economy. A number of initiatives have been undertaken to increase industrialization, capital deepening, private sector growth and to encourage Foreign Direct Investments (FDIs). Recently there has been an increase in FDI projects, such as the first production of the downstream oil and gas industry for an Oil and Petrochemical Plant Project and the construction of the Brunei Fertilizer Industries (BFI) plant<sup>3</sup>. However, the country's moves to diversify the economy away from a predominantly oil and gas economy has so far lacked the success levels that it aspires to and the 4IR has yet to be established within the country. In addition, increasing levels of unemployment and the worry that our current situation and job futures are quite bleak and highly uncertain is a serious policy concern, especially if Wawasan 2035 goals are to be achieved. Brunei's unemployment rate at 9.3% (Brunei Labour Force Survey, 2017) is higher than the ASEAN average of 3.3%. This concern is even more serious when we look at the youth (15-24 years old) unemployment rate where the figure is 31.7%. Basically, one in three Bruneian youth are unemployed.

What is the future of jobs for our youth over the next 20 years and beyond? How will Brunei be affected in terms of manpower implications given our goal of economic transformation towards the 4IR? There are a number of unknown opportunities and challenges (Cheong, 2019). Will Bruneians be faced with a jobless future? Lights out manufacturing? New types of jobs? Labour bifurcation? New job organization - portfolio careers, gig economy, new skills and knowledge and attitudes? For now, Brunei's economic future and, at least, the longer-term trends including how our employment and educational structures will be impacted in our quest towards 4IR are still uncertain in Brunei. This paper outlines the findings of a sub-project under a National Youth Unemployment and Job Futures project<sup>4</sup>, which attempts to answer some of the questions raised. Bruneian youth is the target population for our study as they (up to 35

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<sup>2</sup> See Brunei Darussalam Long Term Development Plan, 2007.

<sup>3</sup> Brunei's GDP growth has been low to negative for nearly 20 years and it is forecasted that its oil reserves are near depletion. However, in 2019, the IMF has projected the country's GDP growth at a promising 4.7 per cent for 2020, taking into account the new FDI projects. Source: Othman, 2020.

<sup>4</sup> See CSPS (2019). Study of Youth Unemployment in Brunei Darussalam: Towards a Sustainable Job Future, Final Report (publication pending).

years old) comprise approximately 60 per cent of our population and represent the future of the country.

The 4IR in this paper refers to what Schwab (2016) has described as a ‘profound change in economic and social structures’ in which the new technologies of automation - artificial intelligence (AI) and digitalization are predominant and this results in ‘a fundamental shift in how we produce, consume and relate to one another’

Our approach here is a combination of strategic foresight (or futures studies) with strategic forecasting. Strategic forecasting makes assumptions that an event will happen and usually with a defined probability which is extrapolated from the use of competitive intelligence analysis or environmental scanning of the trends and emerging issues of the event. The tendency in strategic forecasting is to assume that the future is a linear outcome of the progression or regression of identified current trends and emerging issues. On the other hand, strategic foresight is a broader term, encompassing forecasting but emphasizing the need to explore a number of alternative future possibilities, which are in addition to business as usual (BAU) expectations.

Futures studies - research - is concerned not only with forecasting the future, interpreting the future and critiquing the future, but also with creating not just the possibility but the reality of alternative worlds, alternative futures. Through structured methods, the emergence of new visions and strategies result (Inayatullah, 2015)<sup>5</sup>.

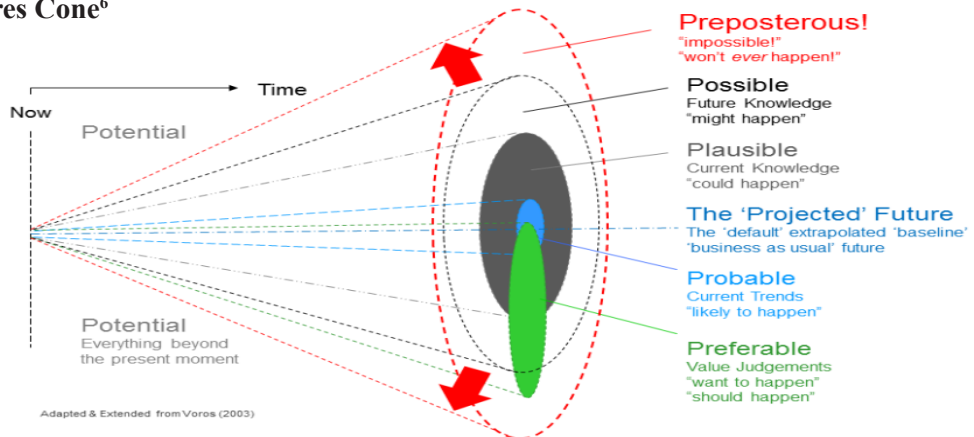
Strategic forecasting is useful for the short-term horizon, typically 1-5-year strategic plans, whereas strategic foresight is necessary for medium to longer term planning horizons of 10-30 years. Central to the distinction between the two approaches is the viewpoint that is held as to the certainty, control and impact that the environment holds upon the event in question. These critical issues – the driving forces that will affect our future – are usually further distinguished as to whether they are ‘predetermined’ forces or ‘critical uncertainties’. Critical uncertainties are issues that are high impact and high uncertainty to occur. ‘Predetermined elements’ are issues that are high impact and high certainty to occur.

Strategic forecasting is less likely to take into account variables that are outside the normal course of events, whereas strategic foresight acknowledges and, in fact, emphasizes the importance of driving forces that are critical uncertainties. Typically illustrated by the ‘Futures Cone’ in Figure 1, if we do simple forecasting based on our current trends and well-known driving forces, the tendency is to provide a linear ‘Projected Future’, perhaps with an allowance for a small deviation of 10% away from our expected outcome, as also shown in Figure 2.

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<sup>5</sup> See also Bell, 1997 and Dator, 2002.

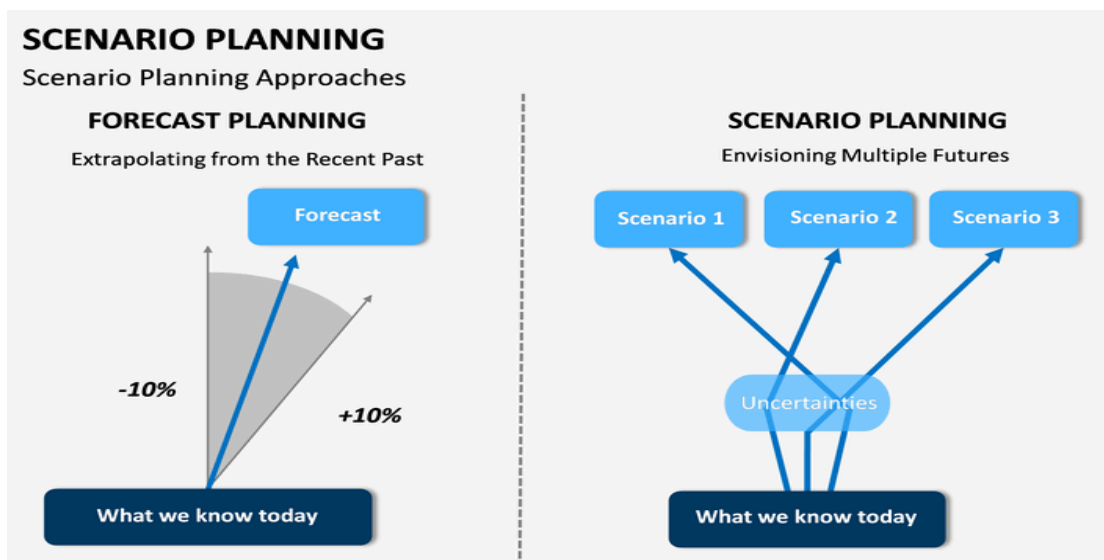
Figure 1:  
Futures Cone<sup>6</sup>



By taking into account plausible, probable, possible and even preposterous futures, strategic foresight at this stage undertakes 'scenario planning', in which multiple futures are considered, usually from 4 to 5 scenarios. The identification of which are the key driving forces helps in shaping each identified future scenario. This anticipatory approach is seen as the wiser way, since faced with a highly uncertain world, we must be prepared to address any of the main possible future scenarios.

Scenarios are the tool par excellence of futures studies. They open up the present, contour the range of uncertainty, reduce risk, offer alternatives, create more flexible organizational mindsets... (Inayatullah, 2015, Ibid)

Figure 2:  
A scenario approach to strategic planning



<sup>6</sup> Hancock & Bezold, 1994

With the above approaches in mind, the following questions are addressed specifically for the purposes of this paper:

## Research Methodology

### **What are the four most probable future economic scenarios for Brunei 2040?**

Carry out horizon scanning using STEEP (Social, Technological, Education, Economy, and Technology) to identify trends and emerging issues that will impact upon our future economic scenario 2040.

Prioritize these issues as key driving forces according to the impact and certainty to occur.

Develop probable alternative economic scenarios based on the identified driving forces



### **What types of jobs will there be in each of the four future economic scenarios for Brunei 2040?**

Map out the potential jobs based on the four probable future economic scenarios for Brunei 2040.

Three job categories were formulated: 1) Declining Jobs 2) Sustainable Jobs 3) Future Jobs. (CSPS Job Prism)



### **What are the main manpower planning implications of the probable future economic scenarios for Brunei 2040?**

To identify 1) the types of jobs, 2) employment structure and 3) educational requirements of each of the four probable future economic scenarios.

## **2.0 Research Question 1: What Are The Four Most Probable Future Economic Scenarios For Brunei 2040?**

A participatory action learning approach was undertaken in our scenario development process whereby we consulted with a wide range of key stakeholders. In total, approximately 150 stakeholders were consulted via multiple workshops. Key stakeholders included the Directors and relevant officers from the Prime Minister's Office, Ministry of Education, Ministry of Finance and Economy, Ministry of Energy, Ministry of Primary Resources and Tourism, Ministry of Home Affairs, Ministry of Transport and Infocommunications, Ministry of Culture, Youth and Sports, Ministry of Development, Ministry of Health, industry and business leaders, youths, career counselors, teachers, and thought leaders from both the private and public sectors.

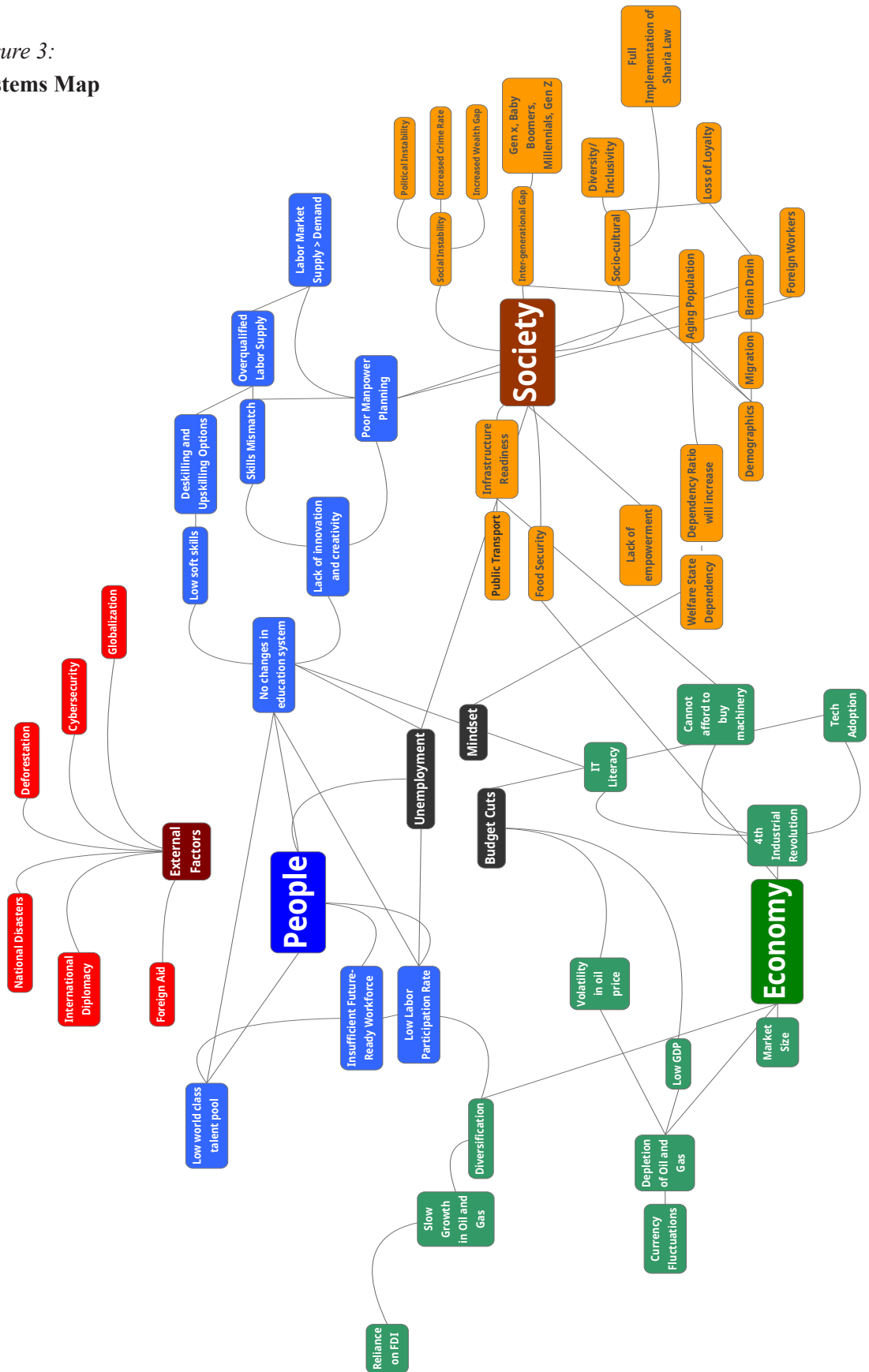
Aside from extensive data analysis (Brunei Official Statistics from the Department of Economic Planning and Statistics (DEPS) and a review of the relevant literature on the future of work and jobs (WEF, 2018, ILO, 2016, WEF, 2019, RSA Action and Research Centre, 2019), we also collected substantial primary data via the more qualitative parts of a National Youth Survey with a sample of 2,403 youth and a National Youth Unemployment Survey with a sample of 1,486 youth<sup>7</sup>. The surveys, which covered information such as the job preferences and aspirations of our youth, their employment status, and level of self-development in terms of skills and mindsets, provided useful qualitative background for our workshops to refer to in our discussions. This participatory approach is important to understand and to unpack the viewpoints and assumptions, the 'myths and metaphors' (Inayatullah, 2007) held by the various stakeholders when they think about the future and the potential future scenarios.

For the first stage of scenario development, we held two workshops of around 50 stakeholders per event and a series of smaller focus group interviews. The main purpose of this Stage 1 workshops and interviews was to conduct a horizon scan focusing on the more general question of what are the critical issues that may impact Brunei's development future in 2040. After extensive brainstorming, we captured the main identified issues under three main headings of 'People', 'Economy' and 'Society' in a Systems Map, as shown in Figure 3.

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<sup>7</sup> The two National Surveys were conducted by the Centre for Strategic and Policy Studies (CSPS) and the Ministry of Culture (MCYS) in 2018 (CSPS/MCYS, 2018), See CSPS Final Report (2019), Ibid.

Figure 3:  
Systems Map





With so many issues at hand, we then further conducted three smaller group workshops of around 25 different stakeholders each to work on the necessary exercise of prioritizing the issues proposed. For these stage 2 workshops, our prioritization was conducted focusing more specifically upon the question of the critical issues impacting on Brunei's economy and job futures in 2040. Conducting this further horizon scan from our Systems Map we followed a STEEP analysis. Some issues were clustered for practicality or renamed for clarity or eliminated because of duplication. Prioritizing prevents over-complicating the workings of our future scenarios while ensuring the critical issues which have most impact are captured. After extensive discussion, a total of 33 issues were identified as follows:

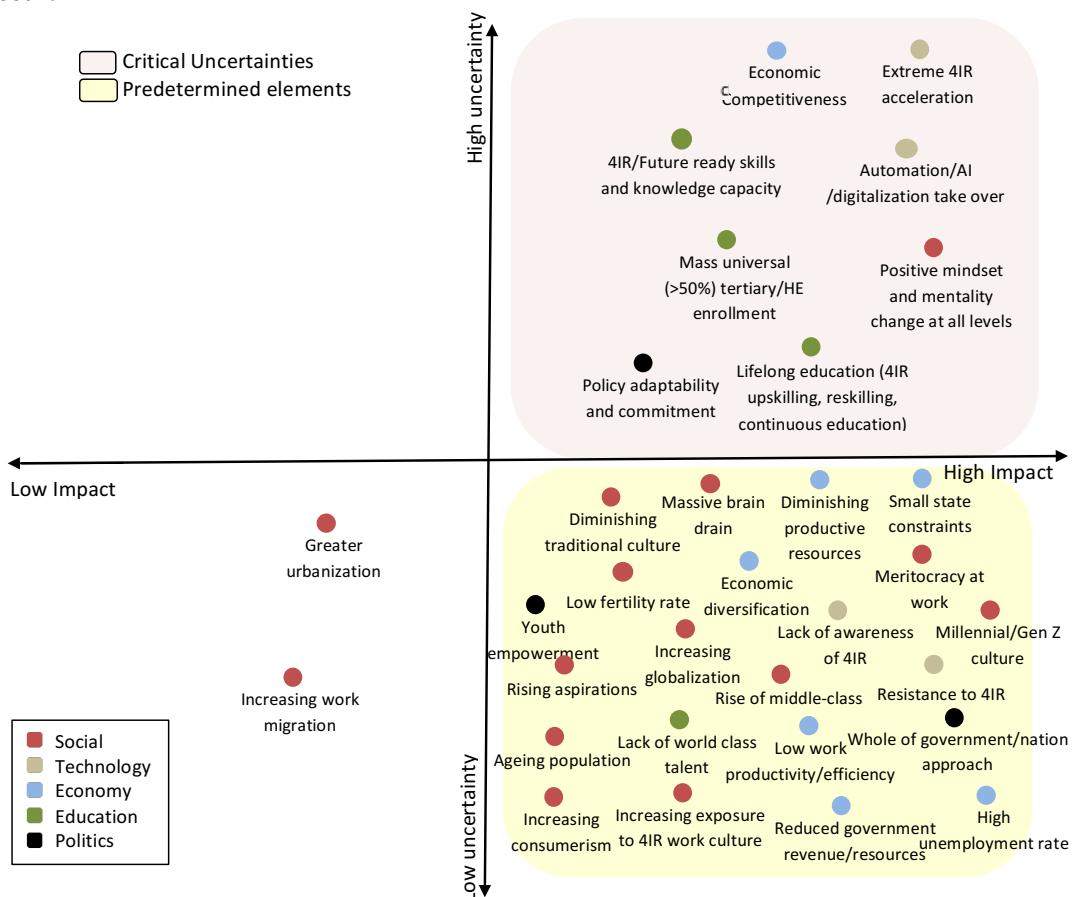
Critical issues on Brunei's Economy and Job Future 2040 using STEEP framework:

<b>Social</b>	<ol style="list-style-type: none"> <li>1. Ageing population</li> <li>2. Low fertility rate</li> <li>3. Negative mindset and mentality at all levels</li> <li>4. Rising aspirations</li> <li>5. Increasing consumerism</li> <li>6. Lack of meritocracy at work</li> <li>7. Increasing globalization</li> <li>8. Diminishing traditional culture</li> <li>9. Greater urbanization</li> <li>10. Rise of middle-class</li> <li>11. Increasing work migration</li> <li>12. Millennial/Gen Z culture</li> <li>13. Increasing exposure to 4IR work culture</li> <li>14. Massive brain drain</li> </ol>
<b>Technology</b>	<ol style="list-style-type: none"> <li>15. Automation/AI/digitalization take over</li> <li>16. Need for extreme 4IR acceleration</li> <li>17. Resistance to 4IR</li> <li>18. Lack of awareness of 4IR</li> </ol>
<b>Economy</b>	<ol style="list-style-type: none"> <li>19. Lack of economic competitiveness</li> <li>20. Lack of economic diversification</li> <li>21. Lack of viable economic blueprint</li> <li>22. Diminishing productive resources</li> <li>23. Small state constraints</li> <li>24. High unemployment rate</li> <li>25. Low work productivity/efficiency</li> <li>26. Reduced government revenue/resources</li> </ol>
<b>Education</b>	<ol style="list-style-type: none"> <li>27. Lack of 4IR/future-ready skills and knowledge capacity</li> <li>28. Lack of world class talent</li> <li>29. Lack of lifelong education (4IR upskilling, reskilling, continuous education)</li> <li>30. Need for mass universal (&gt;50%) tertiary/HE enrollment</li> </ol>
<b>Politics</b>	<ol style="list-style-type: none"> <li>31. Lack of whole of government/nation approach.</li> <li>32. Lack of policy adaptability and commitment</li> <li>33. Youth empowerment</li> </ol>

Next, a 2x2 Matrix as shown in Figure 4 was used in these Stage 2 workshops whereby stakeholders had to place the 33 issues according to their perceived impact on economic and job futures, and certainty to occur.

Figure 4:

**Prioritization of issues according to impact on economic and job futures, and certainty to occur.**



We ended up with eight critical uncertainties as represented in the top right-hand quadrant of Figure 4:

1. Extreme 4IR acceleration
2. Economic competitiveness
3. 4IR/future-ready skills and knowledge capacity
4. Positive mindset and mentality change at all levels
5. Policy adaptability and commitment
6. Mass universal (>50%) tertiary/HE enrollment

## 7. Automation/AI/digitalization take over

## 8. Lifelong education (4IR upskilling, reskilling, continuous education)

Focusing on these eight issues, we further narrowed down the list particularly in terms of their extent of overlap. Whilst acknowledging that all are not mutually exclusive, we prioritized only the issues that were considered most distinct in terms of having the least correlation with each other. These issues then represent the driving forces to envision our probable future economic scenarios. Four issues are identified for us to add detail to and these are seen as key driving forces which are most likely to pose institutional surprises, and are strategic, as the consequences they generate, are high impact and cut across multiple domains of policy making:

- Mindset and mentality change at all levels<sup>8</sup> - Stakeholders noted the often-cited lack of entrepreneurship and preference of our youth for white collar and public sector jobs despite the fact that this sector is already oversaturated<sup>9</sup>. However, it is also emphasized that a negative mindset amongst employers is also prevalent in that better HR and policy approaches suitable to 4IR transformation are required. Overall, a dependency culture appears to pervade in the country, and the mindset and mentality assumes a business as usual attitude is ok even though the country's primary resources are depleting, with a high number of jobless youths. A permanent 'golden umbrella' or always a rainbow over the near horizon are appropriate metaphors to describe assumptions of the future. Acquiring a (positive) mindset and mentality change at all levels within the country is therefore seen as a big challenge and a factor leading to uncertainty.
- 4IR/Future ready skills and education<sup>10</sup> – Stakeholders noted that the capacity to properly transform into 4IR is not yet available as the country lacks sufficient 4IR knowledge (e.g. Science, Technology, Engineering, Mathematics (STEM)) and required digital skills and future-ready skills (e.g. adaptability, creativity, curiosity). Lifelong education is still in its infancy, upskilling and reskilling programmes are limited and only provided via formal structures - tertiary colleges or IHLs - which may not be equipped or suitable for the purpose. Moreover, it is a common complaint that there is a need for future proofed manpower planning to identify what are the future-ready skills and knowledge that are required to avoid substantial mismatches in education and skills requirements in the long run<sup>11</sup>. Important too are the constraints posed for a

<sup>8</sup> For example, in the National Youth Survey (CSPS/MCYS, 2018. Ibid), 70% of youth stated that negative mindset and mentality is the second top policy concern. A large 32% of our youth sample prefer to work in the government sector and 30% even prefer a low paid/qualified job in the government sector compared to a better paid/qualified job in the private sector.

<sup>9</sup> See Cheong, D. & Lawrey, R. 2009 and Rizzo, G., Cheong, D. & Koh, W.C. 2016.

<sup>10</sup> The new proposed Brunei National Youth Policy and Strategy 2020-2035 (publication pending) identifies 4IR future ready skills as lacking and is a main goal for Brunei youth to achieve.

<sup>11</sup> Cheong, D. & Lawrey, R. (2009) & Rizzo, G., Cheong, D. & Koh, W.C. (2016). Ibid.

small state, whereby there is a lack of world class talents and a critical mass of highly educated workforce<sup>12</sup> to compete in a very sophisticated global economy made up of technological giants.

- Economic competitiveness – Stakeholders acknowledged that Brunei has to ramp up its economic diversification efforts. Ultimately, Brunei’s targeted industrial clusters needs to leverage on its comparative advantages and an acceleration of 4IR transformation. In the first instance, as a primarily resource-based economy with limited productivity and technological capacity<sup>13</sup>, Brunei will have to pursue accelerated and possibly extreme 4IR transformation. Facing global complexities and multinational and technological giants is indeed a tremendous challenge for a small state with limited resources, thereby explaining why economic competitiveness is identified as the top critical uncertainty for Brunei’s future.
- Extreme 4IR acceleration – This final issue encapsulates all the previous three issues and therefore is another top critical uncertainty for Brunei’s future. In order to achieve 4IR transformation, we are looking at a complete overhaul of our economic and social structures and capacity – mindset and mentality change, 4IR skills and education capacity and economic competitiveness. This will require the country to carry out extreme transformation.

We then conducted our Stage 3 workshop consisting of our own internal project team of 8 policy researchers to construct our future economic scenarios for Brunei 2040. Using Shell’s 2x2 method, we formulated the final two driving forces which we felt are most critical, ranked as such at Stage 2 workshops, and cutting across all of the previously stated 8 critical uncertainties (Figure 4). The two final driving forces are “4IR Transformation” and “Economic Competitiveness”.

**4IR Transformation:** This driving force is most akin to extreme 4IR acceleration and incorporates the related issues of 4IR future ready skills and education, policy certainty and commitment, and mindset and mentality change at all levels.

**Economic Competitiveness:** Together with 4IR Transformation, this driving force is the highest ranked in terms of uncertainty and impact.

We finally came up with four alternative economic scenarios for Brunei 2040 as follows:

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<sup>12</sup> Higher education enrolment rate in Brunei is low at 22% of student age cohort (2016) - a minimum of 50% is generally a recognised minimum threshold for developed countries (Trow, 2010). See also Cleary & Wong, 2016 for an explanation of Brunei’s economic constraints as a small state.

<sup>13</sup> See Cheong, D., 2013.

### Scenario 1: Learning to surf the waves

A continuity and growth scenario, this is Brunei's default future; the country manages to diversify its economy and growth ensues without relying on major transformation towards a 4IR economy.

### Scenario 2: River overrun

A continuity and collapse scenario, this is the future where business as usual does not work, Brunei is left as a previously successful oil and gas economy which is now backward and the economy has collapsed.

### Scenario 3: Lost at sea while surfing

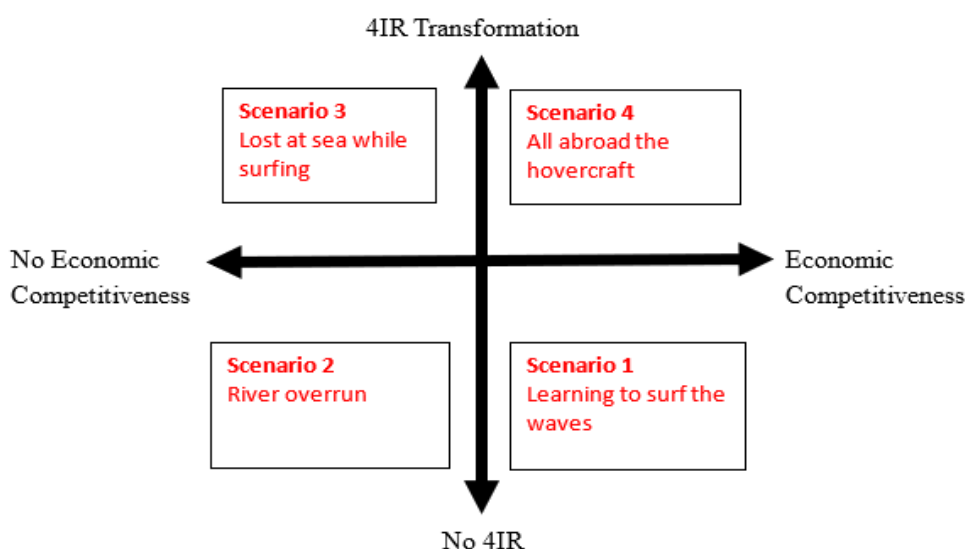
A transformation and failure scenario, this is an unfortunate future where Brunei goes all out for 4IR transformation to prosper but fails regardless.

### Scenario 4: All aboard the hovercraft

A transformation and growth scenario, this is a future where Brunei goes all out for 4IR transformation and manages to grow and prosper.

Figure 5:

2x2 Shell Scenario Matrix



### 3.0 Research Question 2: What Types Of Jobs Will There Be In Each Of The Four Future Economic Scenarios For Brunei 2040?

Our focus here is to map out potential jobs for the short to medium term (about 5 - 10 years) and the medium to long term (about 10 - 20 years) future, assuming Brunei is to transform itself into a 4IR economy. Extensive literature and desktop research was carried out and the main reports

1. The Future of Employment Study by Frey and Osbourne (2013)
2. Atlas of Emerging Jobs Report (2015)
3. 100 Jobs of the Future Report by Ford Australia, Deakin University and Griffith University (2019)
4. World Economic Forum's 'Future of Jobs' report (2018)

We then formulated three job categories; 'declining', 'sustainable' and 'future' job and referred to these as the '*CSPS Job Prism*', as shown in Figure 6.

The categorisation of declining and sustainable jobs is based on the likelihood and probability of automation (Frey and Osbourne, *ibid*). Jobs that are identified to have greater than 50 per cent probability of being automated within the short-term period are categorized as 'declining', whereas those with less than 50 per cent likelihood of being automated are categorized as 'sustainable' jobs. A total of 702 jobs are contained in the list and we meticulously conducted several rounds to filter the jobs according to whether these are 'declining' or 'sustainable'. Future jobs, on the other hand, are a compilation of around 250 jobs taken from the Atlas of Emerging Jobs Report (*ibid*) and 100 Jobs of the Future Report (*ibid*).

Next, we then compiled the jobs according to how they relate to the recent Ministry of Finance and Economy (MOFE) list of five targeted industrial clusters: ICT industry, tourism industry, food manufacturing industry, business services industry and downstream oil and gas industry<sup>14</sup>. We also added on a sixth category to the five industrial clusters, which is to cover all job futures that are not industry specific and are required by all industrial clusters and for the country as a whole such as civil servants, public services (e.g. teachers; doctors), construction workers and so on<sup>15</sup>.

Overall, we have found that the types of jobs that are more likely to be categorised as sustainable and jobs of the future are those that are: (i) Non-Routine (ii) Non-Repetitive (iii)

<sup>14</sup> See InvestBN, 2020

<sup>15</sup> See Annex 1 for the full list of jobs within the declining, sustainable and future job categories according to the recent MOFE list of 5 targeted industrial clusters. The sixth category covers jobs not are industry specific and are required by all industrial clusters i.e. a) Declining jobs consist of mostly administrative support jobs. b) Sustainable jobs consist of mostly managers and professionals. c) Future jobs are mostly related to automation and ICT.

Non-Predictable. As Ford (2015) has explained, there are three criteria for jobs that survive. The first is jobs that involve “genuine creativity, such as being an artist, being a scientist, developing a new business strategy”. The second area is occupations that involve building complex relationships with people: nurses, for example, or a business role that requires you to build close relationships with clients. The third area is jobs that are highly unpredictable – for example, if you’re a plumber who is called out to emergencies in different locations.

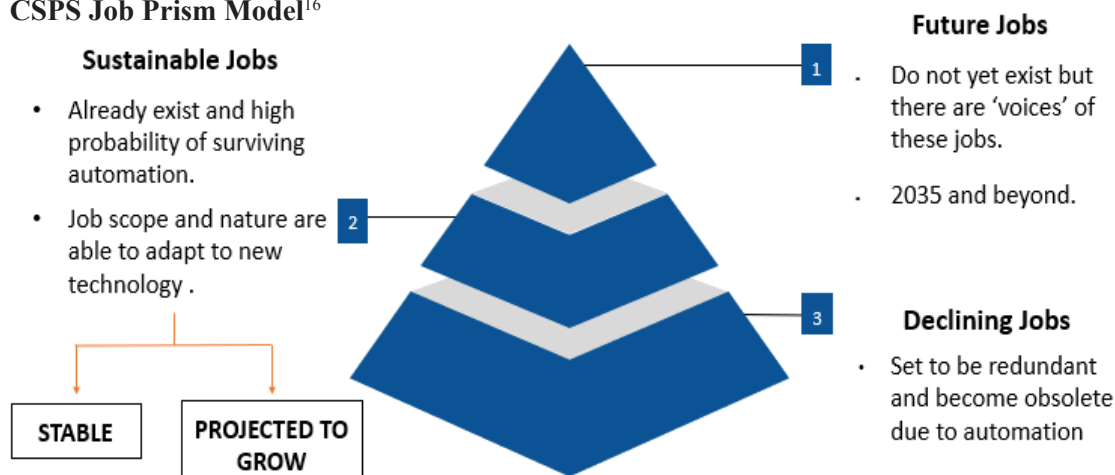
In summary, the job categories are:

- a) **Declining Jobs:** Declining jobs are defined as jobs that are set to decline or even become redundant and obsolete due to automation within the next short to medium term of 5-10 years or so. For example, under the downstream oil and gas industrial cluster, chemical plant and system operators or riggers are becoming redundant. These jobs can easily be automated as they are routine and predictable in nature. Another obvious example under the services industrial clusters are cashiers, as these are increasingly replaceable with cashless payment and self-checkout counters. Under the ICT industrial cluster, jobs like typists and meter readers are declining as these jobs are repetitive in nature. Although the likelihood is higher, declining jobs are not confined to non-professional jobs; accountants and auditors for example are also declining in demand as AI can now replace their core work.
- b) **Sustainable Jobs:** Sustainable jobs are jobs that already exist and have a high probability of surviving or adapting to automation into the medium and long term future of 10-20 years. We further subcategorise them into (i) stable and (ii) projected-to-grow jobs. ‘Stable jobs’ refers to jobs that will remain in demand. ‘Projected-to-grow’ jobs are expected to have a steady increase in demand over the upcoming years. Some examples of jobs under the downstream oil and gas industrial cluster such as chemical, civil and mechanical engineers are considered to be sustainable and stable. These jobs are STEM related, complex in nature, and, require creativity and adaptability that only humans can provide so far. Similarly, under the food industrial cluster, jobs such as chefs and head cooks, biomedical engineer, dietician and nutritionist require cognitive decision making and are therefore sustainable. Jobs that require people skills and human interaction such as first line supervisors, hotel and hospitality management, chief executives, HR managers and anthropologists are also sustainable.
- c) **Future Jobs:** Future jobs are jobs that are nearly or entirely new, dependent on the transformation to 4IR and expected to establish themselves in the longer-term future of 15 years and beyond. For example, under the services industrial cluster, foresighter, personal pension plan designer, environmental auditor, satellite network engineer, direct talent

investment fund manager and individual financial trajectory designer are considered as future jobs. They involve the use of key human skills such as critical thinking, creativity and complex problem solving. Importantly, these jobs also cater for the changing social structures and required skills of a 4IR culture, for example; virtual lawyer, robot attendant, new and advanced materials engineer and cyber detective. With the digitalization and proliferation of data, we will see a lot of jobs in the future that are related to ICT, such as AI educator, quantum computer programmer, forensic data analyst, cyber detective, data farmer, behaviour prediction analyst and so on.

Figure 6:

#### CSPS Job Prism Model<sup>16</sup>



### 4.0 Research Question 3: What Are The Main Manpower Planning Implications Of The Probable Future Economic Scenarios For Brunei 2040?

It is very important to emphasize that the four scenarios are not meant to make predictions about the future but to guide policy makers intending to plan for probable futures. We have elaborated that, faced with uncertain futures, we prefer to avoid traditional purely manpower forecasting approaches. To flesh out the narratives for each scenario, we referred to the identified four key driving forces of mindset and mentality change at all levels, 4IR/future-ready skills and education, economic competitiveness and extreme 4IR acceleration. Our discussions were centred on the following question:

If this scenario (Scenario 1, Scenario 2, Scenario 3, Scenario 4) were to occur, what would be the implications in terms of:

<sup>16</sup> We are grateful for the extensive desktop work that was conducted over several weeks by the CSPS project officers (Abdul Malik Omar, Adib Yusop & Anisah Zahraa Haji Isa) to filter out the types of jobs for the CSPS Job Prism.



1. Types of jobs
2. Employment structure
3. Educational requirements

#### 4.1 Scenario 1: Learning To Surf The Waves

This is Brunei's default future; the country manages to diversify its economy and growth ensues without relying on major transformation towards a 4IR economy. There is also not much need to transform the political machinery and social structures as continuity is successful and leads to further growth. The industrial clusters of ICT industry, tourism industry, food manufacturing industry, business services industry and downstream oil and gas industry develop and expands. Brunei succeeds in diversifying its economy and prospers, most likely sustained by continuing oil and gas reserves and the contributions of a number of increasing FDI investments from China and the region. Pursuing a targeted industrial policy, Brunei is fortunate enough to secure a sufficient number of responsible FDI ventures as it has started to do so with Hengyi Industries, Brunei Fertilizer Industries (BFI), and Golden Corporation<sup>17</sup>. These FDI's undertake to put local employment and training as a priority. Brunei's drive to expand the provision of higher education and vocational technical education over recent years<sup>18</sup> provides sufficiently qualified locals to drive the economy. Moreover, the employment generation and manpower development programmes also provided by the Government<sup>19</sup> also succeed in reducing local youth unemployment<sup>20</sup>. Jobs in traditional sectors of public services remain and there are growing job opportunities in new targeted industrial clusters from the 'declining' and 'sustainable' job categories in the CSPS Prism. While lacking in 4IR curriculum, existing educational and training institutions are adequate and able to provide functional skills and knowledge to its local youth, who are able to secure full employment in the growing economy.

#### 4.2 Scenario 2: River Overrun

This is the future in which 'business as usual' does not work, Brunei is left as a previously successful oil and gas economy which is now backward and the economy has collapsed. Without sufficient 4IR transformation, policy change and technological upgrading, Brunei's targeted industrial clusters fail to grow. Even though the country has managed to attract FDI's to invest in its targeted industrial clusters, global giants and technology behemoths and gains from these FDIs are offshored and concentrated in the hands of the FDIs and a handful of local business

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<sup>17</sup> See InvestBN, 2020. Ibid

<sup>18</sup> The existing Institute of Technology Brunei for example has been upgraded to university status to provide degree programmes in 2016, adding to Universiti Brunei Darussalam, which was the country's only university before. By 2016, Brunei boasted a total of 7 degree-granting institutions. Vocational Technical Education (VTE) expanded vastly to a total of 13 institutions.

<sup>19</sup> Examples of programmes to reduce unemployment under the Manpower Planning and Employment Council are establishment of Jobcentre Brunei, I-Ready Apprenticeship programme, i-Usahawan, 'Bruneisation Directive', etc.

<sup>20</sup> To an extent, the most recent reduction in Brunei's unemployment rate in 2018, from 9.3% to 8.3% (Department of Economic Planning and Statistics, Labour Force Survey 2018) may support this scenario.

elites<sup>21</sup>. Economic collapse is a realistic possibility in the face of further oil and gas revenue depletion, global competition, and the constraints of a small state, in particular the country's lack of comparative advantage, productivity and industrial efficiency in all industries except for the energy industrial cluster<sup>22</sup>. Without sustained and meaningful economic growth, labour demand perpetually lags behind labour supply and there is mass and permanent unemployment amongst locals and many have to gravitate towards low-skilled subsistence jobs to sustain themselves. Efforts to retrain are ineffective as there are simply not enough jobs to retrain for. This leaves a large fraction of the Bruneians permanently reliant on Government welfare with skills that are continuously depreciating the longer they are unemployed. Bruneian youth suffer not only from missing the first rung of skills development but there is hyper qualification inflation as people will try to be as qualified as possible to chase fewer and fewer jobs and employers will raise their qualification demands for the same jobs to filter an oversupply of qualified applicants. Education therefore no longer serves the requirements of the economy. The only jobs still available will be from the 'declining' and to an even smaller extent, the 'sustainable' job category, especially within the traditional and oversaturated sectors which are relied on by locals (i.e. Public Administration; Education; Wholesale & Retail Trade) but these historical employment avenues will also diminish even further over the medium to long term period (within 10 years and beyond).

### 4.3 Scenario 3: Lost At Sea While Surfing

This is an unfortunate future where Brunei goes all out for 4IR transformation but fails to prosper regardless. There is a big push for 4IR transformation, mindset and mentality drastically transforming together with policy practice. Brunei invests heavily into 4IR technology not just for transformation within the targeted industrial clusters, but the public sector is also digitally overhauled, spearheading broader digital takeover throughout the country. However, industrial development, within the targeted industrial clusters and overall, fails to take off properly. Similar to Scenario 2, even though the country has managed to attract FDI's to invest in its targeted industrial clusters, global giants and technology behemoths and gains from these FDIs are offshored and concentrated in the hands of the FDIs and a handful of local business elites. In order to maximize profits, the handful of industries emerging with FDI investments operate on a 'lights-out manufacturing' policy whereby the factories are fully automated with little human presence on site. Lacking in economic growth, the country is unable to continue 4IR transformation comprehensively. Although a minority of very highly trained locals with 4IR skills and knowledge will benefit with top jobs especially within the 'sustainable' and

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<sup>21</sup> As Cheong, 2019 (ibid) has argued, of the 16 recent FDIs that have invested in the country, only approximately 1,600 local employment can be created- insignificant in view that there were approximately 18,000 unemployed locals in 2017.

<sup>22</sup> As illustrated by Rizzo, 2020 (See Chapter 4: Economic Cluster Development and Employment Creation in Brunei Darussalam, CSPS Final Report on Study of Youth Unemployment - pending publication) only the energy industrial cluster has comparative advantage in Brunei and there are significant productivity and efficiency gaps in the industrial practices of other clusters as well as in public spending and regulations.

increasingly, ‘future’ job category, the country suffers with mass and permanent unemployment due to the extreme bifurcation of labour. As there is limited top job availability, competition is fierce and newly qualified graduates with 4IR skills and training find themselves unemployable unless they are willing to take up the remaining low wage, low skilled and non-automatable jobs. The country witnesses a massive brain drain and migration of its young locals. Others who cannot migrate but prefer meaningful work<sup>23</sup> become increasingly disenfranchised as standards of living drop drastically. The Government is pressured to provide extensive welfare, such as universal basic income for the majority population, but this becomes unsustainable due to the dwindling GDP. Education, even with a 4IR transformed curricula, no longer serves the requirements of the economy.

#### **4.4 Scenario 4: All Aboard The Hovercraft**

This is a future where Brunei goes all out for 4IR transformation and manages to grow and prosper. As with Scenario 3, there is a big push for 4IR transformation, mindset and mentality drastically transform together with policy practice. Brunei invests heavily into 4IR technology, not just for transformation within the targeted industrial clusters, but the public sector is also digitally overhauled, spearheading broader digital takeover throughout the country. Fortunately, the country is able to secure responsible technological giants and FDI collaboration whereby industries and factories operate with ‘Human-AI Co-existence’ and avoid lights out manufacturing. Work and productivity are radically redesigned to bring out the best in 4IR technology. Educational provision is drastically overhauled and lifelong education with full emphasis on 4IR skills and knowledge takes over formal and informal educational systems. With historically high levels of literacy, cosmopolitanism and political stability, Bruneians are easily trained to a world class standard in 4IR technologies and are seen as highly employable by technological giants. There is near or full employment, including meaningful employment as Bruneians find gainful work particularly in the ‘sustainable’ and increasingly ‘future’ job category, especially within the targeted industrial clusters for which they have been well trained for. The establishment of strong technological and digital infrastructure within the public and private sector prepares Brunei to successfully launch itself into the 4IR and the country takes off and prospers within the medium to long term period (10 years and beyond). Initial constraints of a small state become insignificant. Particularly as the 4IR economy requires a highly educated future-ready workforce and not a large workforce, and Brunei successfully looks outwards for an international market for its goods and services. Brunei no longer relies on oil and gas and it achieves Wawasan 2035 goals of being in the top 10 in standard of living and GDP per capital, and its citizens are viewed as highly educated and employable.

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<sup>23</sup> Notwithstanding our negative mindset and mentality finding on youth job preferences, we also find that this situation is changing and there is now increasing desire for meaningful work including a more entrepreneurial mindset and need to be empowered culture amongst local youth. For example, the National Youth Survey (CSPS/MCYS, 2018. Ibid) found that a substantial 68% stated that they prefer “to support young people to get a more decent job and meaningful employment” and 82% prefer “to enable youth to contribute fully to the economy and society and participate in decision making.”

Table 1:

**Summary of Manpower Planning Implications: 1) the types of jobs, 2) employment structure and 3) educational requirements**

	<b>Scenario 1 <i>Learning to surf the waves</i></b>	<b>Scenario 2 <i>River overrun</i></b>	<b>Scenario 3 <i>Lost at sea while surfing</i></b>	<b>Scenario 4 <i>All aboard hovercraft</i></b>
<b>Economic Scenario</b>	Economy diversifies and grows with new industrial policy of targeted industrial clusters even without 4IR transformation.	Economy collapses even with new industrial policy of targeted industrial clusters due to global competition, small state constraints and insufficient 4IR capacity.	Economy collapses as targeted industrial clusters fail to grow even with extreme 4IR transformation due to technological behemoth and lack of reciprocal technical giants.	Economy diversifies and targeted industrial clusters take off with 4IR transformation, integrates successfully in the world economy and secures responsible technological giants and FDIs.
<b>Type of Jobs</b>	Jobs in traditional sectors of public services remain and there is growing job opportunities in new targeted industrial clusters from 'declining' and 'sustainable' job category, CSPPS Prism.	Only a handful of jobs remain within traditional sectors of public services and targeted industrial clusters from 'declining' and 'sustainable' job category, CSPPS Prism.	Only a handful of very highly trained locals with 4IR skills and knowledge will benefit with top jobs within targeted industrial clusters from 'sustainable' and 'future' job category, CSPPS Prism. Some others may take up low wage, low skilled and non-automatable jobs.	Plenty or sufficient gainful work for all Bruneians within targeted industrial clusters from 'sustainable' and increasingly 'future' job category, CSPPS Prism.
<b>Employment Structure</b>	Full or nearly full employment levels.	Mass and permanent unemployment.	Lights out manufacturing and or extreme bifurcation of labour leading to mass and permanent unemployment.	As industries and factories operate successfully with 'Human-AI Co-existence' and avoids lights out manufacturing, there is near or full employment, including gainful and meaningful employment.
<b>Education Implications</b>	Existing educational and training institutions remain and expands. Education provides relevant skills and knowledge even without 4IR transformation.	Bruneian youth miss first rung of skills development. Hyper qualification inflation. Education no longer serves the requirements of the economy	Drastic overhaul of education towards lifelong and 4IR curriculum. However, education is not functional for the economy.	Drastic overhaul of education towards lifelong and 4IR curriculum. Education is highly functional for the economy.

## **5.0 Conclusion**

Our workshop discussions were consensual in our views that Scenarios 1 and Scenario 2 should be avoided at all costs. The inevitability of globalization and our dependent linkage to the world economy necessitates that Brunei catches up with 4IR, by leapfrogging if possible, particularly if we aspire for the Wawasan 2035 goals. The preferred future as chosen by the majority of our stakeholders is Scenario 4, which is the scenario where our economy, employment and educational structure are focused upon rapid transformation towards 4IR technologies with specific emphasis upon the Government's targeted industrial clusters. However, it was agreed that it would be policy wise to also be prepared for Scenario 3 in the event that 4IR transformation does not work out and Brunei's economy fails to grow particularly in the face of global competition.

The broad strategic policies towards achieving a successful Scenario 4 as implicated from the scenario outlines include:

- i. Overhaul of dependency mindset and mentality towards a 4IR culture
- ii. Explicit policy commitment towards 4IR transformation especially on targeted industrial clusters
- iii. Investment in 4IR skills and education transformation
- iv. Digital transformation of all sectors
- v. Capacity to negotiate for responsible technological giants and FDI's
- vi. Social policy to manage social gaps in 4IR transformation (as shown likely in Scenario 3)

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Annex 1:

**Job categories according to 5 industrial clusters under Minister of Finance and Economy (MOFE)**

**Declining Jobs**

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Industrial Truck and Tractor Operators	Farm Equipment Mechanics and Service Technicians	Museum Technician and Conservators	Architectural and Civil Drafters/ Assistants	Radio, Cellular, and Tower Equipment Installers and Repairs	Customer Service Representatives
Rotary Drill Operators	Agricultural Technicians (Agri-food)	Hotel, Motel, and Resort Desk Clerks	Advertising Sales Agents	Electrical and Electronics Engineering Technicians	Market Research Analysts and Marketing Specialists
Roustabouts, Oil and Gas	Food Science Technicians (Halal)	Porters and Bellhops	Aircraft Mechanics and Service Technicians	Medical Records and Health Info Technicians	Janitors and Cleaners, Except Maids and Housekeeping Cleaners
Geological and Petroleum Technicians	First-Line Supervisors of Food Preparation and Serving Workers	Bus Drivers, Transit and Intercity	Insurance Claims and Policy	Computer Support Specialists	Administrative Services Managers
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Food Cooking Machine Operators and Tenders	Taxi Drivers and Chauffeurs	Insurance Appraisers, Auto Damage	Audio and Video Equipment Technicians	Security Guards
Gas Compressor and Gas Pumping Station Operators	Packaging and Filling Machine Operators and Tender	Hosts and Hostess, Restaurant Lounge, and Coffee Shop	Legal Secretaries/ Paralegals and Legal Assistants	Electronic Home Entertainment Equipment Installers and Repairers	Executive Secretaries and Executive Administrative Assistants
Chemical Plant and System Operators	Pesticide Handlers, Sprayers, and Applicators, Vegetation	Ushers, Lobby Attendants, and Ticket Takers	Retail Salespersons and Cashiers	Switchboard Operators (Answering Service)	Correspondence Clerks
Moulders, Shapers, and Casters except Metal and Plastic	Cooks and Short Order (Fast Food)	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	Cost Estimators	Camera Operators, TV, Video and Motion Picture	Human Resources Assistants except Payroll and Timekeeping
Reinforcing Iron and Rebar Workers	Cooks and Short Order (Restaurant)	Motorboat Operators	Recreational Vehicle Service Technicians	Broadcast Technicians	Retail Salespersons
		Agricultural Inspectors	Insurance Underwriters	Computer Operators	Accountants and Auditors
			Tax Preparers	Meter Readers, Utilities	Receptionists and Information Clerks
			Credit and Budget Analysts	Plant and Systems Operators	Office Clerks, General Secretaries and Administrative Assistants except Legal, Medical, and Executive
				Semiconductor Processors/Integrated Circuit Technicians	File Clerks



## Declining Jobs (Cont)

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Riggers / Derrick Operators, Oil and Gas	Agricultural and Food Science Technicians	Reservation and Transportation Ticket Agents	Aircraft Structure, Surface, Rigging and Systems	Traffic Technicians (Switchboard)	Payroll and Timekeeping Clerks
Surveying and Mapping Technicians	Farm Labour	Demonstrators and Product Promoters	Appraisers and Assessors of Real Estate	Electromechanical Equipment Assemblers	Bookkeeping, Accounting, and Auditing Clerks
Operating Engineers & Other Construction Equipment Operators	Animal Breeders	Janitors and Maids (Hotel)	Assemblers	Typists	Legal Secretaries
Welders, Cutters, Solderers, & Brazers	Food Batch Makers	Sales and Correspondents Clerks	Loan Officers	Pharmacy Technicians (Software)	Procurement Clerks
Industrial Machinery Mechanics	Health Technologists and Technicians (Agri-food) Contractors	Personal/ Freelance Tour Guides	Bill and Account Collectors	Proof-readers and Copy Markers	Order Clerks
Gas Plant Operators	Forest and Conservation Workers (Agri-food)	Tourism Receptionist (such as those in Airport)	Court Reports	Computer, Automated Teller, and Office Machine Repairers	Dental Assistants
Engine and other Machine Assemblers	Food Preparation Workers	Travel Information Clerks	Customer Service	Helpers - Electricians	Teacher Assistants
Derrick Operators	Meat, Poultry, and Fish Cutters and Trimmers	Amusement and Recreation Attendants	Personal Financial Advisors	Electrical and Electronics Engineering Assemblers	Healthcare Support Workers
Heavy & Tractor-Trailer Truck Drivers	Bakers	Transportation Attendants	Transportation, Storage, and Distribution Managers		Bus Drivers
Chemical Equipment Operators & Tenders	Meat Packers	Food Servers	Light Truck or Delivery Services Drivers		Postal Service Mail Carriers
Service Unit Operators, Oil, Gas, and Mining	Slaughterers and Meat Packers	Tour Guides and Escorts	Heavy and Tractor-Trailer Truck Drivers		Tile Installers
Chemical Technicians	Fishers and Related Fishing Workers	Retail	Labourers and Freight, Stock, and Material Movers		Floor Layers
	Buyers and Purchasing Agents, Farm Products	Laundry and Dry Cleaning Workers	Sales Representatives		Construction Labourers / Inspectors
			Transportation Inspectors		Painting, Coating, and Decorating Workers
					Tax Examiners and Collectors
					Library Assistants
					Library Technicians

## Declining Jobs (Cont)

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Pipelayers Geoscientists Hoist and Winch Operators Boilermakers Petroleum Pump System Operators, Refinery Operators, and Gaugers Wellhead Pumpers Dredge Operators	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders Cooling and Freezing Butchers and Meat Cutters Waiters and Waitresses Dishwashers	First Line Supervisors of Housekeeping and Janitorial Workers	Insurance Sales Agent Shipping, Receiving, and Traffic Clerks Data Entry Keyers Cargo and Freight Agents Avionic Technicians		

## Sustainable Jobs

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Chemical Engineers Petroleum Engineers Civil Engineers for Renewable-Energy Materials Scientists and Engineers Environmental Engineers and Technicians	Dietitians and Nutritionists Biological Scientists Natural Sciences Managers Animal Control Workers Biomedical Engineers	Lodging (hotel) Manager Commercial Divers (and Operators) Tourism Operations Specialists Travel Agents/ Guides (for Groups) Public Relations Specialists	Architectural Managers Training and Development Specialists Surveyors Business Operations Specialists Business Continuity Planners (BCP)	Software Developers, Applications and Systems Software IT Security Analysts, Web Developers, and Computer Network Architects Computer and Information Research Scientists Health Technologist and Technicians Multimedia Artists and Animators	Human Resources Managers Training and Development Managers Sales Managers Marketing Managers First-Line Supervisors of Office and Administrative Support Workers

## Sustainable Jobs (Cont)

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Industrial Production Managers and Engineers	Butchers and Meat Cutters (Halal)	Interpreters and Translators	Risk Management Specialists	Computer Hardware Engineers	Public Relations and Fundraising Managers
Emergency Management Directors	Food Scientists	First-Line Supervisors of Transportation and Vehicle	Securities, Commodities, and Financial Services Sales Agents	Data Warehousing Specialists	Chief Executives
First-Line Supervisors of Mechanics, Installers and Repairers	Food Service Managers	Airline Pilots, Co-pilots and Flight Engineers	Credit Counsellors	Agri-food and Smart Home Advisors	First-Line Supervisors of Production and Operating Workers
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	Chefs and Head Cooks	Aircraft Cargo Handling Supervisors	Financial Managers and Examiners	Set and Exhibit Designer (Digital)	Network and Computer Systems Administrators
Solar Photovoltaic Installers	Agri-food Engineers	Flight Attendants	Management Analyst	Telecommunications Equipment Installers and Repairers, Except Line Installers	Database Administrators
Electrical Power- Line Installers and Repairers	Farm and Home Management Advisors	Air Traffic Controllers	Actuaries	Forensic Science Technicians	Lawyers
Electrical and Electronics Repairers, Commercial and Industrial Equipment	Foresters	Curators (Stories, Myth, Legends)	Financial Analysts and Specialist	Computer Systems Analysts	Computer and Information Systems Managers
Mechanical Engineers and Technicians	Hydrologists	Conservation Scientist	Statisticians	Mathematicians	Advertising and Promotions Managers
Captains, Mates, and Pilots of Water Vessels	Conservation Scientists	Recreation Workers	Advertising and Promotions Manager	Computer Programmers	Financial Managers
HSE Specialist and Technicians	Microbiologists	Anthropologist and Archaeologists	Operations Research Analyst	IT Database Administrators	General and Operations Managers
	Soil and Plant Scientists		Meeting, Convention, and Event Planners	Graphic Designers	Occupational Health and Safety Technicians
	Farmers, Ranchers, and Other Agri-food Managers		Logisticians	Gaming Supervisors	Managers
	HSE Specialists and Technicians (Farm and Food Safety Advisor)		Architects	Computer Numerically Controlled Machine Tool Programmers	Healthcare Social Workers
	Food Technologists		Survey Researchers		Physicians and Surgeons
	Environmental Engineers		Judicial Law Clerks		Psychologists
					Dentists

## Sustainable Jobs (Cont)

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
<p>First-Line Supervisors of Fire Fighting and Preventions Workers</p> <p>Structural Metal Fabricators and Fitters</p> <p>Mining and Geological Engineers, including Mining Safety Engineers</p> <p>Health and Safety Engineers</p> <p>Industrial-Organizational Psychologists</p> <p>Engineering Managers</p>					<p>Elementary / Secondary Special Education / Technical / Vocational / Career School teachers</p> <p>Medical and Health Services Managers</p> <p>Registered Nurses</p> <p>Pharmacists</p> <p>Fitness Trainers and Aerobics Instructors</p> <p>First-Line Supervisors of Construction Trades and Extraction Workers</p> <p>Ambulance Drivers and Attendants, Except Emergency Medical Technicians</p> <p>Judges, Magistrate Judges, and Magistrates</p> <p>Construction Managers</p>

## Future Jobs

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
Power generation system upgrade manager	Agroecological Farmer	Individual (bespoke) tour director	Integrated industrial Security Auditor	Online Lawyer	Remote Security coordinator
	Agricultural Ecologist	Space tourism manager	Corporate anthropologist	Quantum Computer Programmer	Business Continuity Manager
Energy and data systems installer	Environmental Counselor (Halal)	Space travel operator	Smart house infrastructure Designer	Digital Implant Designer	Big Data Model Designer
Weather expert in power industry (Solar and Wind Engineer)	Agricultural Informatics and Engineering Expert	Territory architect (Geography)	Zero energy house architect	Neural interface designer	Information systems architect
	City Farmer	Smart travel system designer	Specialist in old structure renovation/ reinforcement	Digital linguist	Information security supervisor
	Farm Safety Advisor (A.I.)	Tour navigator designer (Digital)		Interface designer	Power consumption system designer
Integrated Energy Systems Strategist	GMO farmer		Personal pension plan designer	Chief digital augmentation officer	Virtual reality architect
	Automated farming equipment operator	Virtual and augmented reality experience creator	Multicurrency translator	Data farmer	Virtual world designer
Local power supply system specialist (A.I.)				Child assistant bot programmer	Augmented reality area designer
Energy auditor	Automated farming equipment designer	Emotion designer	Direct talent investment fund manager	Forensic data analyst	Robot attendant
				Bioinformatician	Trend watcher/ foresighter
Electricity consumer rights expert	Cricket Farmer	Automated transportation system operator	Intellectual property appraiser	IT auditor	Automation anomaly analyst
	Unmanned exploration aircraft operator (Farming)	Space structure designer	Corporate venture fund portfolio manager	Unmanned exploration aircraft operator	Digital augmentation officer
System engineer for smart power grids				Telemetric data interpretation engineer	DigiTech troubleshooter
Energy storage device designer (Battery Packs for E-cars, etc.)	Bio- Ethicist/ Genetic Consultant	Human habitat designer	Individual financial trajectory designer	Wearable power device designer	Machine-learning developer
	Bio-Jacker (or Bio/DNA Modifier)	Local community coordinator	Sharing auditors	Crowd sourcing expert for social issues	Algorithm interpreter
Integrated ecology restoration worker	Spiritual Advisor (Halal Food)	Regional community growth coordinator	Crowd funding and crowd investing platform manager	Personal profile security advisor	Behaviour prediction analyst
				Cyber Detective	Data privacy strategist
					AI intellectual property negotiator

## Future Jobs (Cont)

Downstream Oil and Gas Industry	Food	Tourism	Service	Infocommunication Technology	Jobs that are not industry specific and required by all industrial clusters
New and advanced materials engineer	Additive Manufacturing Engineer	Net positive architect	Environment auditor	Virtual assistant personality designer	Chief ethics officer
Sustainable energy solutions engineer	Molecular nutrition expert	Collective Art Supervisor	Satellite network maintenance engineer	Predictive regulation analyst	Innovation manager
Smart dust wrangler	Farm Safety Advisor (For Halal)	Creative State Trainer	Small aircraft production engineer		Personalised marketer
Recycling Technologist	Automated food manufacturing systems operator	Smart environment Cyber Technician	Smart management system architect		Start up mentor
Nanomaterial Designer	Agricultural economist	Intermodal Hub Designer (Tourism Hub)			Virtual Lawyer
Distributed Mining Team Coordinator					Personalized Healthcare Expert
Ecorecycler in Metallurgy					Urban Ecologist
Power Grid Adjuster					Personal Security Designer
Multi-Purpose Robotic Systems Designer (Renewable Energy)					Construction Technology Upgrade Specialist
Mining system engineer					3D Printing Designer in Construction
Robotic system engineer					Multi-Purpose Robotic Systems Designer
Environmental analyst in mining industries					Educational Online Platform Coordinator
					Government Authority Communication Platform Moderator
					AI Educator
					Lifelong Education Advisor
					Data-Based Medical Diagnostician

# Scenarios for Teaching and Training: From Being “Kodaked” to Futures Literacy and Futures-Proofing\*

*Sohail Inayatullah*

## Abstract

Given the likely reduction if not disappearance of many jobs due to automation, how should educational departments best prepare? Using the Change progression scenario method based on case studies from Australia and Malaysia, four scenarios are developed. In the first future, educators assume youth - high school and university students - will have one job, one career and live in one nation. No change to current educational policy is made. In the second future, through national broadband and 5G networks, the speed of access to information changes, but there is no real change in social infrastructure or in pedagogy. Academic hierarchy continues. Classrooms remain ordered in rows. In the third future, academic institutions learn how to teach and train for the emerging jobs - robotics, care for the aged, for example. Flexibility and adaptability are critical in this future. In the last radical future, teaching and training is for a world where most do not have jobs, where capitalism has ended or has fundamentally changed.

**Keywords:** *Scenarios, Artificial Intelligence, Jobs, Educational Policy, Teaching, Training*

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## 1.0 The Challenging Forecasts

A World Development Report “asserts that 68.9% of jobs in India are at high risk - and that number remains at 42.6%, even if adjusted for a lag in technology adoption.” (Verick, 2017). In the United States, economists Carl Frey and Michael Osborne concluded 47% of jobs are at high risk of automation (Frey and Osborne, 2013). The International Labour Organization estimates that 137 million workers or 56% of the salaried workforce from Cambodia, Indonesia, the Philippines, Thailand and Vietnam are at great risk of losing employment in the next twenty years (Aravindan & Wong, 2016).

An earlier report by the Foundation for Young Australians provides three dramatic forecasts for 2030 (Brown, 2015). These were:

- *44 per cent of jobs will be automated in the next 10 years*
- *60 per cent of students are chasing careers that won't exist*
- *Young people will have an average of 17 different jobs*

In a similar vein, the World Economic Forum forecasts in its report, *The Future of Jobs* that five million jobs will disappear because of automation (World Economic Forum, 2016). It is not just factory jobs, but office workers as well as professionals in law and accounting will also be hit. McKinsey and Company assert that 45% of “today’s workplace activities could be done by robots” (Wright, 2016). In Australia, The Committee for Economic Development in Australia argues that 60% of all jobs in rural and regional Australia are at risk by 2030 (Tuffley, 2015). In addition, the International Labour Organization predicts that as Adidas shifts shoe production back to Germany (robots are far more cost competitive than labour) that up to 90% of Southeast Asian workers could face unemployment due to automation (Hoskins, 2016). The former Bank of England Governor, Mark Carney, warned that: “Up to 15 million of the current jobs in Britain” – nearly 50% of 31.8 million workforce - could be replaced by robotics and artificial intelligence over the coming years as livelihoods were ‘mercilessly destroyed’ by revolutions in technology. He argued that not just administrative, clerical and production staff would be under threat but entire professions such as accounting would likely disappear (Duncan, 2016). Going further, Ruchir Sharma, chief global strategist at Morgan Stanley Investment Management, argues that “before long economists [will] be worrying about a global shortage of robots” (Sharma, 2016). Indeed, recently “speed factories” or robotic factories would be moved back to Asia, that is, as the headline states, “European robots losing jobs to Asian robots as Adidas shifts manufacturing” (Parson, 2020).

While this paper does not factor in the impacts of COVID-19, it seems clear that the pandemic



will hasten the shift to virtual and automated environments. Moreover, growth when it returns is likely to be jobless.

## **2.0 Back to the 1990s**

While forecasts like these are normally reserved for predictive futurists, the dramatic nature of disruption that the world has experienced in the last few decades has made change the norm. If we go back thirty years ago to the early 1990s, a number of significant changes were just commencing that have been instrumental in creating the world we live in today. These included:

1. The fall of the Berlin wall, the breakdown of the Soviet Union and the eventual integration of much of Eastern Europe into the European Union.
2. The beginning of the World Wide Web creating a world where the pivotal issue today is the virtual entering the material world - “leaving the screen”, the creation of the internet of things, persons and systems - the full digitization of information and perhaps the realization of the hundred year dream of the H.G.Wells’ classic, *The World Brain* (Wells, 1938).
3. The beginning of the Human Genome Project, creating a world where prevention becomes the norm and every citizen of wealthy nations born in 2025 could receive a full life map of personalized genetic risk factors.
4. The rise of China with the nation moving from a peripheral global economic player - from twenty billion in foreign reserves to nearly four trillion - to the largest economy in the world by some measures (PPP – purchasing power parity) (Investopedia, 2020).
5. The beginning of ageing throughout the Western world and East Asia, leading to a number of issues, including depopulation, with entire European villages for sale for under 100,000 euros, lifelong learning, and the quite dramatic shift from there being enough young people to pay for the pensions of the aged, to there being a lack of young people to pay for pensions (Kassam, 2014 and National Public Radio, 2015). The lack of young people impacts not just the superannuation formula (the worker-retiree ratio) but decreasing enrolments in the education sector, among other factors.
6. The beginning of what we now call international terrorism with the Arab CIA recruits eventually becoming Al-Qaeda, uniting with the Taliban, and further disruptions in Iraq and Syria leading to the rise of Daesh. The result of the inability of finding a geopolitical solution in Syria led to the largest refugee crisis in Europe since World War Two, indeed, calling into question the entire European project. With Russia an active player in the conflict in the Middle

East, we can easily anticipate Afghanistan 2.0. And with the rise of Trump, and the European mini-Trumps, the escalation of global conflict appears inevitable.

7. The 90s also began the great boom - from globalization, from the peace dividend, and from the imagination of the “end of history,” of the end of social and political conflict. But history as it has turned out did not end; instead, a global financial crisis in 2007-8 resulted, caused by

- A. The shift of the world economy to China,
- B. Disintermediation created by the new digital and robotic technologies,
- C. The shift from coal and oil to the new renewables,
- D. Lack of global and national regulation of financial institutions, and,
- E. Speculative bubbles in housing.

The result for national education policy in many Western nations has been a shift from education as an investment to education as an expense. Governments throughout the world have reduced their expenditures in education, as they deal with increased social security costs (an ageing society) and security costs (from the reality and the imagination of international terrorism) (Inayatullah, 2012).

To deal with the new reality of decreased government subsidies, in 2015, universities found themselves moving toward virtual learning with the intention of having more students with reduced labour costs, and continuing to expand to new areas the emerging markets where the demand for education is insatiable (British Council, 2012). At the same time, to deal with a drop in government funding, the workforce is undergoing casualization, with more being demanded for less (Whyte, 2011). In Australia, “casualization” is now 60 percent of the higher education workforce (Luyt et al., 2008). Comparing the university to the garment industry, Patricia Kelly calls casual lecturers “piece workers of the mind” (Kelly, 2011).

### **3.0 The Mid-Range Future**

These trends are unlikely to stop in the next ten years (EY, n.d.). The number of students enrolled in higher education, for example, is likely to double to 262 million by 2025, with most of the growth in developing nations such as India and China (Maslen, 2012). Over 8 million of these students will travel to other countries (Maslen, 2012). The market size for global education was 2.5 trillion dollars in 2011 (edarabia, 2010) and expected to hit 10 trillion dollars by 2030 (Holon IQ, 2018).

We can thus expect more digitalization and virtualization (and with holograms and virtual

technology) far more high-tech-soft touch experiences. We can also expect the continued globalization of education with providers at high school and university levels coming from all over the world, competing for the student dollar. Major disruptions are likely. Perhaps it will be like Uber, Lyft, Airbnb, Snapgoods (Bercovici, n.d. and the Economist, 2013) and other aspects of the sharing economy, where formal providers - the universities - are disrupted by peer-to-peer app based networks. This means a world where learning is where you want it, when you want it, how you want it, at a cheaper cost, and how you might want to learn the emerging future. Already, we are seeing the advent of predictive avatars and coaches in the Healthcare industry via innovation (Idavatars, n.d.).

Education may also be disrupted by the major players - Alibaba, Google, Facebook - who could offer degree courses not just for employees or training but doctoral courses. Of course, national accreditation remains the barrier. While this barrier may be feudal, the debate in the next ten years will be can it be broken, can the castle walls of the university be breached by the new tech “bedouins”? They may be innovators or barbarians, but the castle will be challenged.

And, youth expect this to be so. Having grown up in a digital environment where the user and connectivity add value, these digital natives are likely to be in positions of executive power throughout the world by 2025-2030. While there are always pendulum shifts to “the good old days” of the industrial era, in 15 years iPads and iPhones will not be considered new technologies, but like chairs and tables, part of the infrastructure, of what is expected (Joy, 2012). Brain-implanted devices will most likely be the norm (Monks, 2014).

However, it is not just youth that are relevant. Alina Tugend (2019) writes of the need for a “60-year” curriculum. As we live longer and will likely need to work longer, the curriculum will need to change. “The 60-year curriculum, which is more an evolving model than a concrete program, is primarily taking shape in the continuing education arm of universities, with the goal of developing a higher education model that is nimbler. It needs to respond quickly to the reality that employees now change jobs and careers many times and that rapidly evolving industries require them to continually learn new skills.” Employees, as in the forecasts above, will continue to change jobs, but for 60-80 years.

But what if most jobs are automated? And more significantly, which jobs are least likely to be automated? According to an article by the website Planet Money, “mental health and substance abuse social workers” are least likely to be replaced as the work involves “cleverness, negotiation, and helping others” (Bui, 2015). Elementary school teachers are also extremely unlikely to be roboticized, while librarians have higher than a 50% chance to be automated. However, as digital natives come to power, the odds for automation are likely to increase

(not to mention the pressures from globalization). Moshe Vardi, Director of the Institute for Information Technology at Rice University, asks if we are prepared for “a global economy ...with 50% unemployment (Santini, 2016).” Six to ten percent of American jobs will disappear due to driverless cars, to begin with. And as automation spreads through the entire economic system, no profession will be safe (Santini, 2016). Indeed, car ownership will likely shift to a culture of mobility - an integrated network of travel options (Kosoff, 2016). Traditional car companies focused on selling the car as product will find themselves severely challenged. The innovation will be creating and selling mobility options.

However, the above analysis assumes a straight-line trend projection, but as there are many uncertainties with respect to the growth of artificial intelligence and our educational response, we need to explore not the future, but alternative futures.

This has been made painfully clear with the COVID-19 pandemic, with many universities facing severe shortfalls in budgets (The Conversation, 2020). In Malaysia, Hunter (2020) argues that “an imminent collapse is pending within Malaysia’s private higher education sector that could potentially permanently close the doors to up to half of the country’s private institutions, leaving only a few with strong backers to financially guarantee their survival.” While it is beyond the terms of this paper to articulate COVID- 19 implications for higher education, suffice to say that the pandemic (Inayatullah and Black, 2020) is likely to be followed by other disruptions: new pandemics, financial shocks and climate change. Teaching and learning thus need to embrace innovation and articulate scenarios. Moving to online platforms is likely to be enhanced because of lockdowns. Already, it is estimated that the global 5G market will reach 45.96 billion by 2030, growing annually over 2020-2030 (Bezinga, 2020). Thus, COVID-19 dramatically exacerbates these trends, the further casualization of the university as international students are forced to return home and the virtualization of teaching.

This paper uses Australia and Malaysia as case studies to develop scenarios. The Australian scenarios were developed for Queensland Association of State School Principals (Inayatullah, 2016). In the Change progression scenario method, four futures are presented: the “No Change”, the Marginal Change, the Adaptive Change and the Radical Change. The Malaysian scenarios for the Ministry of Higher Education were developed before as part of a book on the futures of Malaysian Universities (Inayatullah and Ithinin, 2018). The method focuses not just on how the world is changing, but how individuals and institutions can or should react to the changing future. It is developed from the Futures Triangle (Inayatullah, 2008) via insights by Ivana Milojevic (2002).

## 4.0 Alternative Futures

Four scenarios are possible.

	<b>NO CHANGE</b>	<b>MARGINAL CHANGE</b>	<b>ADAPTIVE CHANGE</b>	<b>RADICAL CHANGE</b>
Scenario title	Teach and Train for the 1950s.	Teach and Train for incremental change.	Teach and Train for emerging industries.	Teach and Train for a world after most jobs.
Systemic change	No curriculum change.	Minor curriculum change.	Focus on emerging futures - major curriculum change.	Focus on meaning and purpose with multiple forms of intelligence.
Worldview	The Industrial era continues.	Muddling through.	Forecast and Adapt.	After Capitalism.
Core myth/metaphor	"Teaching for jobs that no longer exist"	"Too little, too late."	"How well do you get along with your green robot?"	"Strangers in a strange land."
Consequence	Kodaked	Drowning	Future-ready	Futures-proof

### 4.1 Teach and Train for the 1950s

In this future, educators assume youth - high school and university students - will have one job, one career and live in one nation. Focused on the past successes and mired down by party politics, Australia, for example, is unable to shift to a post-industrial economy. Already Australia is ranked a lowly 48 for average internet speed and 60 during peak periods (Lui, 2016). For students and teachers, it will be like living in a prison cell (wasting their time, and when they are free, they will be irrelevant). As the economy shifts, large sectors will disappear. The story line would be: “teaching for jobs that no longer exist.” As William Bossert, a Harvard Professor who taught computer sciences in the 1970s, recently commented: “If you’re afraid that you might be replaced by a computer, then you probably can be and should be” (Colvin, 2015). Dystopian images of the “last job on Earth” and riots against the new technologies are likely (Riley & Paddison, 2016). However, it is worthwhile remembering that prior to the alarm clock, “knocker-uppers” woke up factory workers by banging on bedroom windows. Transitions to new economic eras are fraught with challenges. Transitional strategies are crucial. There are

clear implications in this future. If national educational systems do not challenge traditional models of pedagogy, they will fall behind. This is true between nations and within nations as well. Over time, this will create a dramatic two class system: those who are future-ready and those hoping for the past to return. They will have been “Kodaked.”

## **4.2 Teach and Train for Incremental Change**

In this future, through national broadband networks, the speed of access to information changes, but there is no real change in social infrastructure. Academic hierarchy continues. Classrooms remain ordered in rows. Knowledge is about repeating information. The story line would be: “too little, too late”. For students, they will face a disconnect between virtual world/peer-to-peer networks and the formal industrial educational system. They will be physically in class, but mentally far away. This marginal change scenario, while likely to continue, is being challenged by COVID-19. The lockdown caused by the pandemic is forcing educational institutions to shift. Marginal change when the rate of change is steady can be an acceptable strategy. But if the river current is quick, and one does not keep up, then drowning is likely to result. While most educational systems are slow to adapt, this scenario suggests that as technological innovation continues and as events like COVID-19 force virtualization then finding ways to match skills with emerging jobs is crucial.

## **4.3 Teach and Train for Emerging Industries**

In this future, high schools and universities, indeed, the entire educational system, teaches for current emerging futures. Retraining is crucial as it was in the shift from agriculture to industrial. For example, farming throughout the developed world was once the largest labour source. In the USA, technological advancements in farming have reduced labour from “10 million in 1950 to 3 million in 2010” (Hiner, 2015). “Similarly, back in 1901, 200,000 of England and Wales’s 32.5 million people were employed in the clothes-washing business, and by 2011, just 35,000 in a population of 56.1 million are flying the launderers’ flag” (Crew, 2015).

We are in the midst of a similar structural change to the next economic revolution. The curriculum will likely be focused on the following areas (Moran, 2016):

- Robotics and artificial intelligence in all products and processes
- Bio-informatics
- Peer to peer economics
- Care for ageing
- Meditation and emotional intelligence

- Software design, including the software of food
- City design
- 3d printing - local manufacturing
- The internet of everything
- Solar and wind energy, including smart houses and cities

Teaching will be focused on preparing futures not just for the new jobs, but in a world where many traditional jobs will disappear. The focus will be on teaching flexibility as some students will have portfolio careers - what they can do, not positions held - and multiple careers (changing careers every few years). Some will stay focused in one area, but many will wander innovating to create new types of work. Technology will create new categories of jobs, some unimaginable through today's lenses.

Students find their needs met, they are excited about education and blend easily between formal high school and university and their own virtual peer to peer learning frameworks. The value added is not problem solving as computers can do that with ease, but with defining the problem and with being alert to how the nature of the problem keeps on shifting, that is, we are embedded in complex adaptive systems that change as we intervene in the system, as we solve the problem. Indeed, Ruchir Sharma argues that with the rise of robots, we will soon likely learn to “treasure our robots” (Sharma, 2016). Indeed, in nations such as Germany, Japan and South Korea that are already employing robots, the job picture is strong, that is, roboticization will create new types of work (Sharma, 2016). The ability to use, live with, understand, co-evolved with new emergent technologies will be a critical competitive advantage in this future. A tag line for this future could be: “How well do you get along with your green robot?”

For nations, adapting to this future not only ensures competitive advantage, but reduces social unrest. Students are learning to develop skills that the economic system needs. They are becoming futures literate. However, this strategy requires consultation with all stakeholders to succeed. Parents, ministry bureaucrats, educational administrators and leaders will need to see the benefits of innovation. A dramatic change in narrative might be necessary. In the Philippines, for example, we reported on a workshop where senior leaders believed that adaptive change meant tearing down the system. As we wrote (Inayatullah, 2020: 4):

During a workshop for national government officers in the Philippines focused on redoing the K-12 educational system, there was a desire to shift the metaphor from “walls - too many bricks come between us” to “wrecking ball.” Participants asserted that the current system was focused on conformity with walls between technology, nature and the environment. It focused on conformity, keeping students protected from new ideas,



from others - it was isolating. A new system was needed that could embrace creativity and innovation. Only a “wrecking ball” they believed could do that. Marginal change or a reformist agenda would not succeed, given the tensions that exist between the reality of the educational system, and the emerging future.

Thus, while adapting to the changing world is a necessity, the question remains: can educational systems do so? The fourth future is even more radical and imagines a world after jobs.

#### **4.4 Teach and Train for a World After Most Jobs**

This future takes forecasts for the end of jobs seriously, concluding that the emerging efficient, collaborative and sharing economy will likely dominate by 2030. Robotics, the internet of everything and major disruptions will make education no longer about jobs but about purpose, adaptability and meaning.

Students at Edmund Rice Education Australia suggested that for them in this scenario, education would become a matching system, the “tinder of education.” They would have access to smart global platforms that would allow them to choose educators. Suppliers could be local or global, on-line or face to face (Inayatullah, 2020).

Techno-optimists argue that smart machines will dramatically economic surplus so “that we could collectively afford to liberate much of humanity from both labour and suffering (Lim, 2016).” With labour transformed, knowledge passing on between generations will not be data based but about the sharing of emotional, spiritual and new forms of intelligence. Says Meg Bear, former Vice-president of Oracle, “Empathy is the critical 21st-century skill” (Colvin, 2015). Indeed, the main issue will be: “how well do you get along with your robot?” (Fisher, 2015). As AI is best suited for standardized work, performance is not about being like a “lean machine,” but “good at being a person. Great performance requires us to be intensely human beings,” argues Geoff Colvin in his new book, *Humans are Underrated*. Value comes from the ability “to build relationships, brainstorm, collaborate, and lead” (Colvin, 2015). The shift would not just be from the current corporate model to the sharing economy - Uber - but creating platform cooperativism where drivers own the business - cooperation. Productivity will likely be higher as there is enhanced buy-in. So, it is not really the “gig” economy as many argue (a recent report suggests that 40% of U.S. workers will be independent contractors or freelancers by 2020), but a true cooperative economy (Neuner, 2013). Of course, with dis-intermediation, some sectors will likely be run by large state or corporate actors who can control because of the economies of scale. But the boom will be in platforms that create new value through cooperation. This leads to greater equity and productivity. Well-being can potentially result.



Ideally, in this future we shift from teaching and learning for GDP to a more balanced world where we are focused on prosperity, the planet, people, and purpose.

This scenario essentially is long-term oriented. For most educational systems, designed to produce workers and now talent for jobs, a world generally after jobs is too difficult to contemplate. However, it is essential to do as, even if this future does not result, the act of imagining a radically different type of world helps us prepare for novelty. It truly future-proofs us. Certainly, part of education needs to remain about the larger purpose of civilization, not just national and global competition.

#### **4.5 Breaching the Castle**

However, if we are not careful inequality could spike even more, where the owners of robots accrue all the profits and the rest live in a state of fear and despair - perpetual job anxiety (Wright, 2016). Safety and security is a must. This can emerge from a basic universal income (BIEN, n.d.). This ensures that survival is taken care of so that individuals can focus on “thrival”. Already, a number of countries are experiments with this approach: for example, in 2017 Finland became the first European country to trial the application of a UBI (Worstall, 2015). This is a guaranteed and unconditional payment made to all adult citizens to allow them to meet their basic needs. This income was not activity or means tested – with unemployed Finns receiving a guaranteed payment per month for two years, paid even if they find work during that period (Samuels, 2017). The nation decided not to continue the trial with the evaluation suggesting that participants were happier - less stressed - but jobs did not result. (BBC, 2019).

Since 2017, two cities in Ontario, Canada, have been trialling basic income. One group receives a basic income and another does not. Barcelona has also been trialling UBI since October 2017. Again, one group of 1000 receives income and the second does not. Scotland will provide 250,000 pounds for a trial as well (Reynolds, 2018). American presidential candidate Andrew Yang called for a UBI of 1000 US\$ for each American citizen during his campaign run (Darrough, 2019).

If developments in robotics continue and universal basic income becomes the planetary norm, it would be a post-scarcity world, where current - 2020 - way of acting and being would be disadvantageous. The tag line for this scenario is: “strangers in a strange land”.

Students will find this world both exciting and threatening. Exciting as it opens up many possibilities, but threatening in that they will need to adjust to and create new forms of physical and knowledge infrastructure. The future will be truly unknown.

Education would have been disrupted in this scenario. The castle would have been breached. The knights - the professors - could go back to what they truly love - reflecting, learning, teaching and the creation of new knowledge. One possibility is the elimination of a large percentage of academics, especially for those universities reliant on foreign students or unable to compete with the global market for students.

As the factory disappears, could education become a digital ecological playground? Perhaps. But once the moat disappears down, it is unclear what will emerge afterwards. Perhaps the villagers outside the castle walls may storm inside, or perhaps they will welcome the new global brain?

#### **4.6 Malaysia and Brunei**

When the neighbouring government of Malaysia went through a similar process - though focused on the delivery of education - they concluded the following (Ministry of Higher Education, Government of Malaysia, 2018). In the no change scenario, accreditation is foundational. The assumption of one job and one career continues. In the long run, universities are not sustainable as they do not respond to the changing world. In the marginal change scenario, there is some flexibility and students can choose courses and educational programmes from various Malaysian universities. This is the “jukebox” model of education. Educational suppliers - teachers and universities - thus shift depending on whether their music - knowledge products - are regularly picked. It is a dynamic economic and learning model. In the adaptive scenario, education is cost effective as learning platforms are used. Education is delivered on demand, self-tailored, highly accessible and convenient. “The focus of this model is flexible education which promotes lifelong learning (Ministry of Higher Education, Government of Malaysia, 2018: 63). The guiding narrative is the “Uberized University.” Designing and maintaining the platform becomes the critical learning task. The issue will be who owns the platform - the State, large private AI companies, or will it be peer-to-peer owned, that is, a platform cooperative? In the Radical scenario, instead of Uber as the guiding narrative, it is nano and micro certification. Thus, accreditation continues, but it is stackable, given by thousands of providers instead of one official degree. The Ministry along with social networks (the Trip-Advisor model) ensure standards and excellence; however, it is the individual student who collects these credits over a lifetime. Industry acknowledges and respects these credits. In this future, the job is not central but learning and the ability to show mastery over particular skills.

For Brunei, as a wealthy small nation, flexibility is possible. It could invest in young people, platform cooperatives, peer to peer learning, and see itself as, if not a global player in education and learning, at least a leader in the region. For this to occur, the old worldview of education

as a factory needs to be challenged. The factory needs to be transformed into an alternative narrative. In high schools in Australia, for example, they discussed moving from the suit bought off the rack, that is, one size fits all, to the tailor-made suit. Thus, the narrative suggests flexibility, seeing the student at the centre and designing educational pathways for his and her personal and economic life journey.

For Brunei, as well, given the argument made here that incremental change is unlikely to suffice in the educational challenges ahead, it is crucial to articulate a shared vision of education, create new narratives that allow the new vision to flourish, and insist on systemic changes - how education is taught, when it is taught, through which media, and by whom. The radical future may fit well for Brunei as it is already focused not just on external measurements of success, but inner measurements, thus inner and outer well-being may be worthy goals for its educational sector. The radical scenario in the Malaysian micro-certification model would also fit the social nature of Brunei society. Education would thus be a collective effort.

What is clear, is that believing that tomorrow will be like today is a precursor to obsolescence. The no change scenario means going backward while the rest of the planet transforms. The marginal change is likely to mean drowning as the speed of the river of change increases. The adaptive change scenario means futures literacy. Finally, the radical change scenario means being truly futures-proof.

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# Workforce Nationalisation Policies in the Arab Gulf States: Lessons for Brunei Darussalam

*Koh Wee Chian*

## Abstract

The Brunei government has been facing mounting pressures to create new jobs for nationals with acceptable wages in the private sector due to rising youth unemployment and a high public wage bill. Replacing foreign workers with locals through the use of quotas and blanket reservation of certain jobs has emerged as a core strategy in the “Bruneianisation” drive. Lessons from four decades of interventionist nationalisation policies in the Arab Gulf States suggest that these administrative restrictions are unlikely to achieve much success as they impose high costs on businesses and can lead to corruption, evasion and phantom employment. Instead, market mechanisms to address the underlying causes of labour market segmentation are more effective. In particular, policies should focus on narrowing the gap in labour costs between locals and foreigners, as well as the gap in labour market mobility. Complementary policies are also required, such as strengthening monitoring and enforcement capacity, redesigning the rent distribution model, enhancing human capital and skills acquisition, and facilitating private sector growth and foreign investment.

**Keywords:** *labour market, nationalisation, unemployment, Brunei Darussalam, GCC*

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## **1.0 Introduction**

Unemployment, particularly amongst the local youth, is the most important socio-economic challenge that Brunei is currently facing. Brunei's youth unemployment rate in 2018 stood at 29.9 percent—the tenth highest in the world (World Bank, 2019). Youth unemployment in Brunei is most pronounced among the highly educated. More than two-fifths of youth with a tertiary qualification were unemployed in 2018, up from one-third in 2014.

Brunei has always pursued some form of labour market nationalisation policy, most notably the employment of a large proportion of Brunei citizens in the public sector as a way of distributing oil rents. Until recently, unemployment pressures could be restrained as the public sector acted as the employer of first and last resort. Since 2014, however, when oil prices plunged and fiscal deficits soared, the government has sharply reduced public sector hiring amid fiscal consolidation measures. Job creation in the private sector has also been hampered by lower government spending. Consequently, unemployment has risen and nationalisation policies to increase Bruneian employment in the private sector have intensified.

During the past few decades, a liberal foreign labour policy has allowed the private sector to rely on cheaper, better-trained, and more flexible foreign workers. Enforcing mandatory nationalisation policies is likely to encounter pushback from businesses when their profitability erodes. Policymakers need to strike the right balance between reducing local unemployment and maintaining the competitiveness of the private sector.

The Gulf Cooperation Council (GCC) states—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—share many similarities with Brunei. Their economies are highly dependent on oil and gas revenues, with the rents used to fund a generous and extensive welfare system for citizens to enjoy a high standard of living. Their labour markets are deeply segmented and notoriously rigid, with a majority of protected nationals in the public sector while the private sector relies heavily on foreign labour subject to limited mobility. They also face mounting pressures to create new jobs with acceptable wages for the rapidly growing young and educated population and, at the same time, reduce the public wage bill. Over the past four decades, these Arab Gulf nations have been experimenting with various nationalisation policies—administrative restrictions and market-based incentives—and have reinvigorated several measures in the wake of the Arab Spring crisis to stem citizen discontent. The effects of these policy interventions are thus useful in drawing lessons for Brunei as it embarks on the nationalisation journey.

The rest of the paper is organised as follows. Section 2 provides an overview of Brunei's labour market and nationalisation policies. Section 3 focuses on the policies in the Arab Gulf States. Section 4 discusses policy lessons, drawing from the experiences of the Arab Gulf States. Section 5 offers some policy suggestions for Brunei and Section 6 concludes.

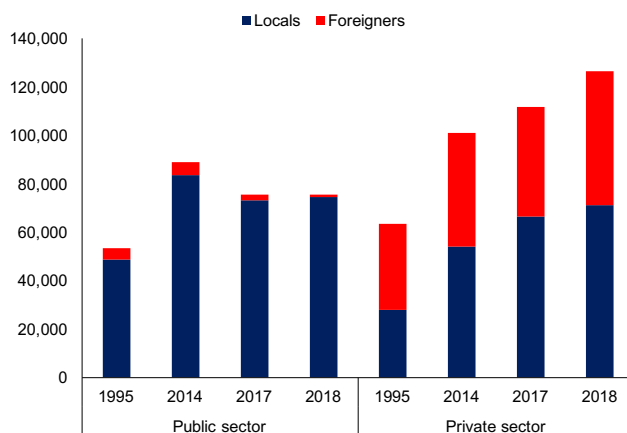
## 2.0 Overview of Brunei's Labour Market

Foreign labour, both skilled and unskilled, has fuelled Brunei's rapid economic development. The capital-intensive and highly specialized oil and gas industries engaged foreign expertise from the outset, while an influx of unskilled immigrant labour from neighbouring ASEAN countries and South Asia filled jobs in other sectors of the economy, particularly in menial, blue-collar positions such as construction workers and domestic helpers (Ooi, 2016). After gaining independence in 1984, Brunei accommodated more foreign labour. Private sector employment, which had averaged around 30,000 workers, surged to 43,870 in 1988 and more than doubled to 63,118 in 1992.

Long-term dependence on foreign labour has resulted in a segmented and dual labour market structure. Brunei citizens seek employment in the public sector whereas foreign workers are employed primarily in the private sector (Figure 1). There are more locals in the public sector than in the private sector. In certain industries, particularly construction and domestic work, low-skilled foreign workers constitute the vast majority.<sup>1</sup> This is a key reason for declining labour productivity in Brunei since the 1980s (Koh, 2014). The availability of cheap unskilled foreign labour has undermined incentives for firms to invest in technology upgrades or training of the national workforce to improve productivity per worker.

Figure 1.

### Employment by citizenship and sector



Source: Labour Force Survey, Department of Economic Planning and Statistics.

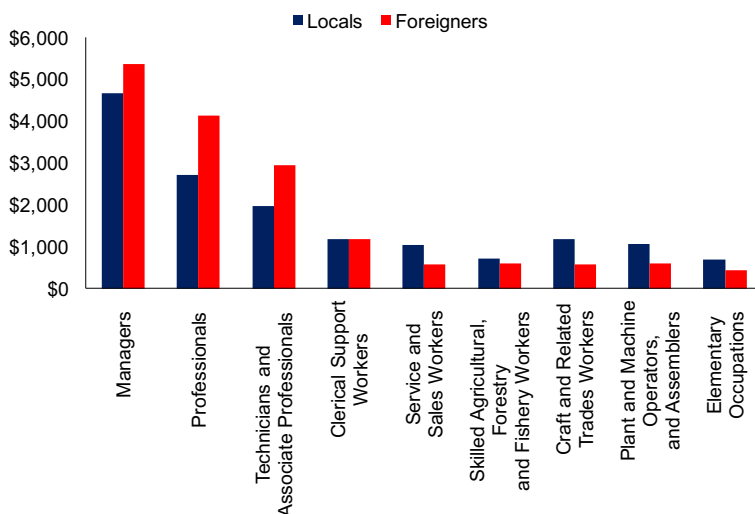
<sup>1</sup> According to the 2018 Labour Force Survey, 28 percent of foreign workers worked in construction, followed by 23 percent in domestic work, and 15 percent in wholesale and retail trade.

The segmentation in Brunei's labour market can be attributed to five main factors: (i) large wage differentials between locals and foreigners; (ii) limited mobility of foreign workers; (iii) better working conditions in the public sector; (iv) mismatch in skills of locals and those demanded by the private sector; and (v) soft aspects of labour market behaviour.

In semi-skilled and low-skilled occupations, locals earn up to twice as much as non-locals (Figure 2). Private sector employers therefore prefer foreign workers, who are willing to accept lower wages, often benchmarked to wages in their home country.<sup>2</sup> In addition, foreign workers are attractive because they have limited mobility in the labour market and are more easily controlled. The sponsorship system requires every foreign worker to have a sponsor, who is also the employer. Foreign workers are prevented from moving to another employer without the consent of the present one. In some cases, their passports or travel documents are retained by the sponsor. Foreign workers therefore have a weak bargaining position and have few incentives to improve their productivity. Locals, on the other hand, are not subject to the sponsorship system and can move freely in the labour market. They demand higher wages as their reservation wage is benchmarked against the public sector. Locals also enjoy other labour rights such as social security and higher leave entitlement, further contributing to making them less attractive to businesses.

Figure 2.

**Average monthly earnings by citizenship and occupation, 2018**



Source: Labour Force Survey, Department of Economic Planning and Statistics.

Public sector jobs are by far the most attractive option for locals. While talented locals may have better opportunities in the private sector, particularly in the high-paying mining and finance industries, most locals have strong incentives to prefer public sector employment (Figure

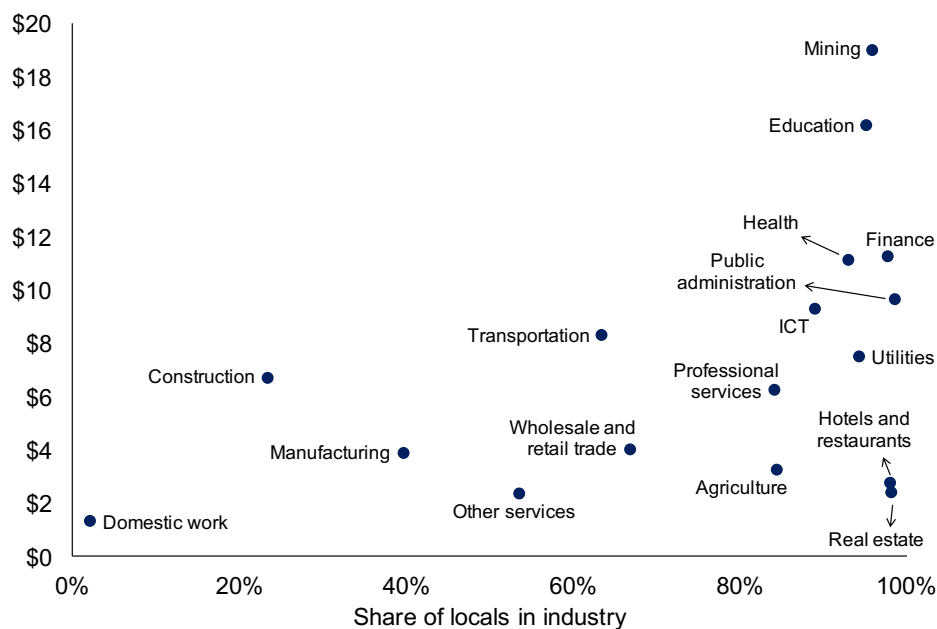
<sup>2</sup> Foreigners are attracted to work in Brunei as their expected earnings are higher than in their home countries. They also enjoy subsidised government services such as education, health, energy, food, and utilities. There are also no income or consumption taxes.

3).<sup>3</sup> Not only are wages higher than the private sector, especially at entry levels, but working conditions are also better: high job security, shorter and more flexible working hours, automatic salary increments and bonuses, and various fringe benefits. All these elements have led to high reservation wages among locals.

The prospect of public sector employment also distorts education choices, leading to graduates with skills and qualifications that are not aligned to private sector demands (Bhaskaran, 2007; Rizzo, Cheong and Koh, 2017).<sup>4</sup> Some graduates are willing to wait for a public sector job rather than take up employment in the private sector. Another incentive for private sector employers to prefer foreign workers is their concern that locals will leave as soon as a public sector position becomes available. Private employers are therefore reluctant to train locals, who may leave the company at any time.

Figure 3.

**Average hourly earnings by industry and share of locals, 2017**



Source: International Labour Organization and author's calculations.

The preference of private sector employers for foreign workers also reflects “soft” aspects. Certain jobs are shunned by locals due to their undesirability and low social prestige, especially low-skilled, manual jobs in construction and domestic work (Cheong and Lawrey, 2009). Many locals prefer clerical white-collar jobs in the public sector, although they lack vocational skills. The poor work ethic in the national workforce is also a constraint to private sector employment (WEF, 2017).

<sup>3</sup> Besides public administration, the public sector includes education, health, and utilities.

<sup>4</sup> In 2018, more than three-fifths (62 percent) of tertiary students were graduates in non-technical subjects such as arts, humanities, social sciences, business administration, and education. This share has declined from around three-quarters in 2010.

Gaps in wages and labour rights between locals and non-locals remain key obstacles to higher local participation in the private sector. Unless these differences are addressed, it is unlikely that private sector employers will alter their preference for cheaper and more docile foreign workers. Targeted policy intervention is thus necessary to induce changes in the labour market structure.

Since 2014, when unemployment emerged as an urgent policy concern amid plunging oil revenues and economic recession, the government has taken various measures aimed at increasing private sector employment of locals—the “Bruneianisation” policy. In 2014, work permits for the employment of foreigners for the posts of cashier, driver, supervisor, sales clerk, shop staff, butcher and baker were suspended. Additional levies were imposed on recruitment of foreign workers in the wholesale and retail trade, transportation, hotels and restaurants and support services industries. In 2018, a Bruneianisation directive for the oil and gas sector was rolled out to maximise employment opportunities for locals, with the ultimate goal of a minimum of 90 percent Bruneians at all levels and skill pools in each company in the sector. In 2019, the directive was expanded to cover eight non-oil and gas industries: construction; wholesale and retail; education; transportation and storage; accommodation and food services; manufacturing; professional, scientific and technical services; and administration. In wholesale and retail trade, the local to foreign workforce ratio has been set at 50:50 while the ratios for the other sectors have not been disclosed. Another recent initiative is *i-Usahawan*, in which certain government contracts are reserved or ringfenced for *Raykat Jati* (Bruneian Malay) businesses.

The government has also introduced active labour market programmes to help the unemployed find work. In 2017, a one-stop employment centre (JobCentre Brunei) was set up to facilitate job matching. A training institution (Centre for Capacity Building) was established to upgrade the skills of Brunei citizens to prepare them for certain private sector jobs. A government-funded apprentice scheme (i-Ready) provided university graduates with a modest stipend, but more importantly, enabled them to gain working experience to be industry-ready. At present, there are no wage subsidies for private sector employment and no minimum wage.

### 3.0 Nationalisation Policies in the Arab Gulf States

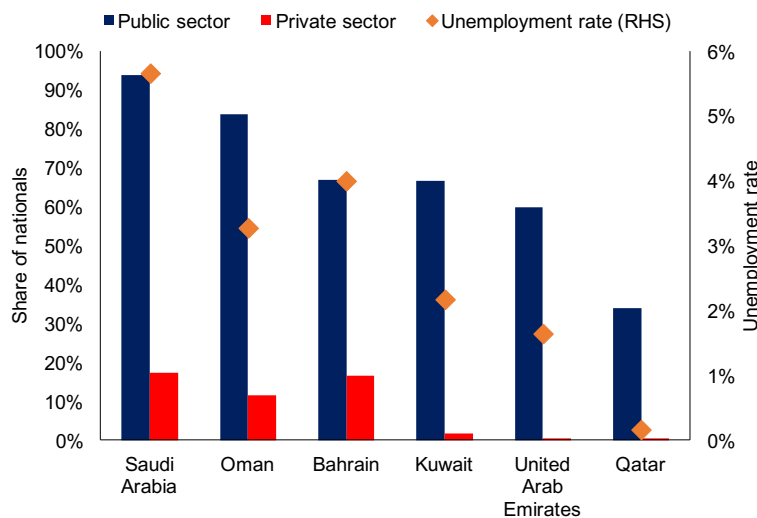
Similar to Brunei, the GCC countries’ skewed dependence on foreign workers dates back to the discovery of oil on the Arabian shore of the Gulf in the 1930s (Thiollet, 2016). The dependence on foreign labour rose further following the oil price shocks in the 1970s, as the increase in incomes spurred large-scale construction, industrial and infrastructure projects. Beyond the contribution to economic development, the segmentation between citizens and migrants also had a political aspect (De Bel-Air, 2015). Oil rents were transformed into welfare packages for nationals,

leading to the emergence of a class of white-collar, well-paid, but unproductive public sector employees—in exchange for political allegiance. The subordination of foreigners to citizens to enhance the nationals’ privileged status, including through the *kafala* (sponsorship) system, was essential in upholding the fragile rentier social contracts. Concerns of losing “ownership” of the private sector to foreigners, demographic pressures, and rising youth unemployment have led to interventionist nationalisation policies across the GCC since the 1980s.

In recent years, especially since the onset of the Arab Spring crisis, “Gulfisation” policies have become more fervent. This is true particularly in Saudi Arabia, Oman and Bahrain, which have faced the most acute unemployment issues (Figure 4). Labour market dynamics in the richer GCC countries—Kuwait, the United Arab Emirates and Qatar—are somewhat different given the relatively low unemployment. Reform initiatives have been less comprehensive but there have been nonetheless some policy changes in the sponsorship systems due to international pressure from human rights and migrant groups.

Figure 4.

#### Share of nationals by sector and unemployment rate in GCC countries, 2016



Source: GCC Statistical Center, World Bank.

Note: Bahrain’s unemployment rate is for 2011. The share of nationals for the United Arab Emirates is an estimate for 2013.

The GCC countries have implemented a broad array of nationalisation policies. However, the imposition of employment quotas for nationals has been the “flagship” policy (Baldwin-Edwards, 2011). Other policies have attempted to reduce the demand for foreign labour (e.g. blanket reservation of certain jobs for nationals, raising foreign recruitment costs), reduce the supply of foreign labour (e.g., restrictions on visa issuance, deportation of irregular migrants),

increase the demand for native labour (e.g. preferential treatment for firms that employ more nationals, training and development of the local workforce), and reduce wage disparities between locals and foreigners (e.g., wage subsidy for nationals, reform of the kafala institution).

Despite a multitude of nationalisation measures, success has remained elusive. Unsurprisingly, nationalisation of the public sector has been the most successful in all GCC countries. Saudi Arabia has the highest nationalisation rate in the private sector, but it remains low. In 2016 several industries had a Saudi presence of more than 50 percent: mining, finance and insurance, real estate and utilities. In the other GCC countries, mining and finance are also typically the industries with the largest share of nationals.

### **3.1 Saudi Arabia**

A “Saudisation” policy to nationalise private sector jobs was formalised as early as 1969 when a law stipulated that 75 percent of private sector employment should be Saudi nationals and they should receive at least 51 percent of total salaries paid (Wright, 1996). However, there was no pressure to enforce the policy as most Saudis were interested in only working in the more lucrative public sector. The sharp increase in incomes following the two oil price shocks in the 1970s allowed the public sector to absorb a large proportion of the national workforce. Moreover, the business elites, which had close relations with the successive ruling regimes, had the socio-political agency to oppose any reform as foreign labour was paramount in their personal pursuits (Okruhlik, 1999).

It was not until the 1990s that rising demographic pressure and high unemployment rates among the nationals gave Saudisation a renewed focus. In 1995, an annual increase of 5 percent in the employment share of Saudis in all companies with more than 20 employees was decreed, employment of foreigners in certain professions (mostly administrative) was banned, and fees on recruitment of expatriates were increased to fund the nationalisation programme (Looney, 2004). Firms have raised concerns that Saudisation could erode their competitiveness and the unpredictability of the program—with rules and quotas changing randomly—could deter foreign direct investment. The Saudisation policy, with the intent to reduce unemployment among nationals, also did not address the lack of skills and technical competence (Al-Dosary and Rahman, 2005).<sup>5</sup> Moreover, Saudi nationals are more expensive to employ, less disciplined and more difficult to control, and reluctant to seriously pursue certain types of jobs due to social status (Ramady, 2013).

The previous Saudisation rate of 75 percent, which had been overly ambitious, was revised to a more feasible target of 25 percent by 2002 in the Seventh Development Plan (2000-2004), and

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<sup>5</sup> The Saudi education system had focused heavily on rote learning of patriotic and religious texts. Between 1995 and 1998, only 8 percent of graduates studied technical subjects such as architecture or engineering (Bremmer, 2004).



subsequently raised to 30 percent in the Eighth Development Plan (2005-2009). Nonetheless, the consultative council ordered that 70 percent of the workforce must be Saudi nationals by 2007. Along with the quotas, several occupations were also reserved for locals, such as security, administrative clerk, salesperson, and taxi driver. However, the Saudisation rate in 2010 remained low at about 10 percent, a far cry from its target.

Following the political and social upheavals of the Arab uprisings, the government implemented several distributional measures to placate young Saudis: subsidies for new housing programmes, new public sector jobs, raising the minimum wage for public sector employees, and monthly unemployment allowances (Hertog, 2014). These ad-hoc measures have undermined the progress in Saudisation as it further entrenched the privileged status of Saudi citizenship.

In 2011 the government rolled out a new and improved Saudisation quota system, “Nitaqat”, which classifies private sector companies into groups based on their nationalisation performance. Nitaqat differentiates quotas by industry and company size. It provides more flexibility and is more aligned to businesses’ capacity to employ Saudis. Nitaqat’s main tool is visa control achieved via incentives and sanctions: companies that meet targets are given preferential treatment in facilitating visa renewals or granting of new visas, while those that fail to comply are penalised with restrictions on hiring of foreign workers.

The impact of Nitaqat is somewhat mixed. The number of micro enterprises (less than 10 employees), which are exempted from the Saudisation requirement, increased by 9 percent in 2012—evidence of some companies trying to escape penalties by downsizing (Alsheikh, 2015). Meanwhile, the number of companies in the compliant categories increased—a positive outcome—indicating that more Saudis were employed. Notably, the number of employed Saudi women more than doubled in 2012. The number of male Saudis increased by 23 percent, but at the same time, the number of foreign male workers increased by 6 percent and the number of approved visas jumped 33 percent, mostly issued to the construction industry. This had led to concerns of “phantom employment”, such that Saudis were registered in the companies’ payroll, paid a nominal salary, but did not perform actual work. The significant drop in average education levels of Saudi employees and the increase in low-skilled jobs indicate that Saudis with limited qualifications were employed for quota purposes. A survey of private sector managers also revealed concerns that Saudis were hired simply to meet quotas rather than for meaningful work (Sadi, 2013).

Although Saudisation improved immediately following the implementation of the Nitaqat scheme, it came at a heavy cost to businesses (Peck, 2017). Surviving firms increased Saudi employment and/or reduced foreign labour to meet quotas, but others further below the quota

cutoffs either downsized or exited the market. Overall the programme decreased total private sector employment by 948,000 workers and caused 11,000 firms to exit over a 16-month period. The Nitaqat system does little to address the persistent large gaps in labour costs between locals and foreigners: open foreign labour migration is still permitted for compliant firms. Therefore, foreign wages continue to be strongly influenced by low reservation wages in their home countries. In addition to imposing high costs and inefficiency losses on businesses, it puts a large monitoring and enforcement burden on the regulatory authorities, and can lead to corruption, widespread evasion, and artificial or unproductive Saudi employment (Hertog, 2018).<sup>6</sup>

### **3.2 Oman**

An “Omanisation” policy begun in 1988 to reduce dependence on foreign labour by replacing expatriates with Omani workers (Das and Gokhale, 2010). Several occupations were reserved for citizens only, including specialists (e.g. lawyer, civil engineer, accountant), technicians (e.g. primary school teacher, nurse), occupational workers (e.g. clerk, mechanic, salesperson), skilled workers (e.g. welder, electrician), and limited skilled workers (e.g. machine operator). In 1994, laws were passed to impose quotas for the employment of Omani nationals in the private sector (Winckler, 2000). The quotas were: 60 percent in transport, storage, and communications; 45 percent in finance, insurance, and real estate; 35 percent in industry; 30 percent in hotels and restaurants; 20 percent in wholesale and retail trade; and 15 percent in contracting. The government also began to impose fees on hiring of foreign workers, which was used to finance the training of nationals. Private sector companies with 20 or more employees were required to train their Omani employees (Al-Lakmi, 2000). The emphasis on nationalisation was intensified in Oman’s Vision 2020, which prescribed Omanisation rates of 95 and 75 percent in the public and private sectors respectively by 2020. These policies were viewed as a relative failure, despite some Omanisation success in the public sector and in the finance and mining industries.<sup>7</sup> Barriers to Omanisation had reflected in part the unattractiveness of the compensation and benefits package in the private sector and lack of awareness of private sector employment opportunities (Al-Lakmi, 1998).

In the mid-2000s, the government broadened its policies beyond the mere imposition of quotas. It reformed the sponsorship system by allowing foreign workers to switch to a new employer without the consent of the present one. Foreigners can therefore compete on more even terms with locals, which led to an increase in foreign wages. The regulatory shift toward an integrated labour market contributed to an increase in Omani employment in the private sector by 138 percent between 2003 and 2010 (Hertog, 2014).

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<sup>6</sup> The kafala system has created a large informal market for visa trading. In 2013, a “regularisation campaign” deported 2 million illegal migrants (Black, 2013).

<sup>7</sup> In 2005, the public sector achieved 82.7 percent Omanisation and the private sector reached 22.5 percent. In 2016, Omanisation rate in the public sector was 83.9 percent but only 11.6 percent in the private sector. Only three industries had a majority of Omani nationals: finance (79.0 percent), mining (73.8 percent), and utilities (59.5 percent).

Omanisation, however, has stagnated since 2011 as new policies have reversed the incentives to reduce labour market distortions (Ennis and al-Jamali, 2014). To appease young Omanis who participated in street protests following regional unrest in the Arab world, the government created new government jobs, increased allowances and social security for government employees, increased the minimum wage for nationals, and created unemployment benefits for nationals. These policies induced Omanis to resign from their private sector positions to seek public sector employment. The high minimum wage also forced employers to reduce labour demand, while some nationals dropped out of the labour force or rejected low-paid employment and remained unemployed. Following further protests, in 2018 the government created hiring freezes for foreigners in various sectors on a six-month basis, mostly in high-paying occupations such as professional and technical services. A new “traffic light” system has also been rolled out to monitor employers’ compliance with Omanisation policies.

### **3.3 Bahrain**

A “Bahrainisation” policy began in the early 1980s with the launching of “Project 10,000”, which aimed to train and employ young Bahrainis in private sector jobs (Randeree, 2012). In 1995, the government imposed quotas to ultimately achieve employment of 50 percent of nationals in each company, following a 5 percent annual increment. However, the quotas were often not reached and led to an informal trade in labour (Hertog, 2014).

After a comprehensive policy review, the government concluded that nationalisation could only be attained by integrating the labour market. A series of reforms began in 2007 to deregulate the labour market, narrow the wage gap between locals and foreigners, allow greater mobility to foreigners, and eliminate quota rules, among others. In 2008 a regulatory authority was established to oversee visa matters and work regulations. The two core components of the reform were to increase the price of foreign labour through levies (visa fee and monthly fee) and abolition of the sponsorship system. Private sector employment of Bahrainis increased substantially in 2009 but stagnated thereafter.

The labour market reforms have not been as effective as initially planned. Business lobbying and protests forced the government to lower foreign levies after complaints of high labour costs, and quotas were only reduced instead of being abolished instantly (Al-Hasan, 2012). Following regional unrest in 2011, the government suspended the monthly fee, forbade foreigners to switch employers in the first year, created new public sector jobs, and increased public sector salaries. These policies have undermined the reforms and further reoriented the expectations of young Bahrainis toward public employment.

The practical impact of greater mobility of foreigners in the labour market has also been limited. The intention had been to mobilise lower-skilled foreign workers to increase their costs relative to locals. However, lower-skilled foreign workers lack the legal knowledge and resources to switch to new jobs. Complementary policies are therefore needed to educate them on their rights and provide support services, and at the same time, prevent employers from threatening them and withholding their wages.

The foreign labour levies were used to train and educate Bahrainis to give them a competitive edge in the private sector. The government also introduced an unemployment assistance and insurance scheme which paid unemployed university graduates a stipend in return for attending training courses. However, many question the efficacy of the training and educational programmes. They produced more highly educated nationals, yet they did not improve the employability of nationals in the private sector, illustrating a weak link between education attainment and the ethics and skills required by employers (Nair, 2017).

More recently, in 2017, the government launched a new “Flexi Permit”, which allows eligible expatriates to work and live in Bahrain without a sponsor. However, eligibility includes only expatriates whose work permits have been terminated or have not been renewed. The flexi permit also does not remove the sponsorship system as the foreign worker still needs a sponsor to enter the country, and the role is then passed on to the government (Abdulla, 2018).

### **3.4 Kuwait**

“Kuwaitisation” began in 1978 with rigid directives that only permitted foreign workers to enter Kuwait without family members and foreign workers were to be replaced with locals whenever possible (El-Shalakani, El-Sabah and Iskander, 1996). In 2000 a wage subsidy policy was enacted to pay additional allowances to Kuwaitis in the private sector. Kuwaitisation quotas for various industries were decreed in 2003, and by 2008 the targets were 60 percent in banks, 15 percent in real estate, and 2 percent in manufacturing (Randeree, 2012). However, these quotas were often breached as the regulatory and enforcement capacity had been insufficient. A black market selling foreign work visas emerged, which involved senior government officials acting as large-scale brokers (Jabr, 2014).

Sponsorship rules were relaxed in 2009 to allow foreign workers to change employers without their consent after three years. However, in practice, lower-skilled and less educated workers had difficulty in exercising their rights. In 2013 a manpower authority was established to handle matters pertaining to foreign labour recruitment. Bans on issuing foreign work permits for certain age groups and education qualifications have been enforced recently. Wage subsidies,

which vary according to family status and education, have almost doubled, providing strong incentives to less educated Kuwaitis to consider private sector employment. The government aims to achieve 100 percent Kuwaitisation in the public sector and 30 to 60 percent in the private sector by 2028. In 2016, the share of nationals in the public sector was about two-thirds, while in the private sector the share was less than 2 percent.

### **3.5 United Arab Emirates**

To encourage “Emiratisation”, industry quotas on expatriate labour, employment targets for UAE nationals, and wage restraint for government employees were stipulated in the late 1990s. In the mid 2000s certain occupations such as secretaries and administrative managers were reserved for nationals. A series of ministerial orders promulgated firms in selected industries to increase their annual share of nationals: commercial entities by 2 percent; banks by 4 percent; and insurance companies by 5 percent. In addition, a number of policies were designed to restrict the flow of foreign workers into the country, such as taxes on businesses importing foreign labour, taxes on salaries of imported labour, and higher visa and residency requirements (Gonzalez et al., 2008).

However, there has been limited success in Emiratisation as the policies were often only loosely enforced. The banking industry, despite having made considerable gains, also fell short of its Emiratisation goal. Barriers to Emiratisation also reflected low standards of education and skills, a lack of trust by employers in the work readiness of UAE nationals, strong reservations about employing nationals for reasons related to hierarchy and prestige, and limited interest among nationals in working in the private sector (Al-Ali, 2008; Forstenlechner et al., 2012). By focusing on setting quotas arbitrarily, Emiratisation implicitly equates economic progress with employment and not productivity (Toledo, 2013).

In recent years, more serious labour market reform initiatives were undertaken. In 2011 sponsorship rules were partially relaxed to allow foreign workers to switch to new employers under certain conditions, which have resulted in an increase in foreign wages—an indication of better labour market matching (Naidu, Nyarko and Wang, 2016). Although transition to new employers has doubled, this reflected movements by high-skilled workers rather than lower-skilled ones as they remain easier to control. Differentiation of foreign labour levies has also been implemented according to the extent of Emiratisation, in some resemblance to Saudi Arabia’s Nitaqat system. Nonetheless, Emiratisation remains a challenge given the easy availability of jobs and generous wages in the public sector: in Abu Dhabi, nationals can receive an implicit salary premium of up to 600 percent (Hertog, 2014).

### 3.6 Qatar

A “Qatarisation” policy was first initiated in 1962 when a law was enacted to prioritize Qatari nationals to fill vacant positions (Gonzalez et al., 2008). In the early 1970s, administrative posts in the government sector were reserved for nationals. In 1997, private sector businesses had to ensure that at least 20 percent of their employees were locals. Qatarisation of 50 percent in the energy and industry sectors was set to be achieved by 2005; however, the program fell way short of its target. Achieving such high quotas over a short period of time appears to have been unrealistic.

In 2016 Qataris made up less than 5 percent of the labour force. Ninety percent of Qataris were government employees but expatriates still outnumbered the locals even in the public sector. The Qatarisation strategy in its present form, which targets at least 50 percent local employment in both the public and private sectors, is argued to be ineffective (Al-Subaiey, 2016). Major barriers to producing a competitive workforce need to be addressed, including disparate education and training institutions, challenges in school-to-work transition, cultural norms and prejudices, and other structural constraints typical of GCC labour markets. Qatar has recently pledged to abolish the sponsorship system after its labour laws were subject to international pressure after being selected as the host of the 2022 World Cup.

### 4.0 Policy Lessons

Several lessons can be drawn from the experiences of the GCC countries in effecting nationalisation policies over four decades:

- i. *Administrative restrictions, such as quotas, can increase private sector employment of nationals—but at a high cost to firms.*

The Nitaqat programme in Saudi Arabia, one of the world’s largest quota-based labour policies and enforced on an unprecedented scale and scope, shows that although regulations can force firms to employ more nationals, the short-term benefits come at substantial cost to long-term economic growth.

- ii. *Blanket reservation of low wage professions for nationals is unlikely to yield much success.*

Despite reserving certain occupations for nationals in Oman, Saudi Arabia and the United Arab Emirates, the take-up has only been gradual as jobs that are deemed low-status remain shunned by locals. Employers have also been unwilling to employ nationals due to relatively higher labour costs, lack of skills, and poor work ethic.

- iii. *Forced labour market interventions can lead to corruption, evasion and phantom*

*employment, which are difficult to monitor.*

Several visa scandals were reported in Kuwait which involved senior government officials controlling an organised network of visa trafficking operations. Illegal visa trading is also prevalent in the other GCC nations. In Saudi Arabia, some firms have downsized to escape penalties or created sub-companies in industries that have lower Saudisation ratios. Others have registered low-skilled nationals and females on their payrolls to meet quotas, but actual work is performed by foreign workers. Micro-interventions also put a heavy burden on the monitoring and enforcement capacity of the administration.

- iv. *Market-based incentives, such as allowing greater labour market mobility, are more effective than restrictive measures.*

Bahrain and Oman have pursued more market-based reforms; one of the most important measures is the abolition of the requirement for a “no objection certificate” from the current employer to switch to a new one. This has allowed foreigners to compete with locals on a more competitive basis, which has helped to narrow the gap in labour costs. Bahraini and Omani employment in the private sector increased substantially after the reforms, although it stagnated following a reversal of policy momentum.

- v. *Closing the mobility gap alone is insufficient; complementary policies are required.*

In principle, increasing the mobility of foreign labour reduces employers’ incentive to hire foreigners as they would be less easily controlled, or exploited. A better bargaining position can result in higher foreign wages, thus making employing nationals more attractive. In practice, less educated foreign workers lack the confidence, legal knowledge, and market information to move freely in the labour market, as is evident in Bahrain, Kuwait, Oman and the United Arab Emirates.

Complementary policies, such as labour ombudsmen services and multi-language information campaigns and hotlines, can help educate them on their rights. Policies should also allow foreign workers to remain in the country to seek a new job as well as prevent the threat of employers from expelling them or reporting them as absconding.

- vi. *Closing the gap in labour costs is difficult without reducing public sector benefits.*

Increasing the cost of hiring foreigners (e.g., taxes on recruitment of foreign labour in Saudi Arabia) and reducing the price of employing nationals (e.g., permanent wage subsidies in Kuwait) can narrow the wage gap between locals and foreigners. However, the wage differential in lower-skilled jobs can be very large. To close the gap, foreign levies would need to be prohibitively high or subsidies would be fiscally expensive. As long as the public



sector remains attractive, the high reservation wage of nationals would continue to drive the wedge in labour prices.

Policies should also ensure that manipulation of the subsidy system is minimised and levies are not passed on to foreign workers in the form of depressed wages, which would otherwise have little effect in addressing the disparity in labour costs. Sanctions for subsidy abuse and minimum wages for foreigners can address these issues.

vii. *Lobbying and protests are major obstacles to nationalisation.*

The elite business class and the unemployed youth can exert significant influence on the enforcement of nationalisation policies. Business lobbying led to a reduction of foreign worker levies in Bahrain. Protests in the wake of the Arab Spring pressured the governments in Oman and Saudi Arabia to expand public sector hiring and benefits, further entrenching the privileged status of nationals.

viii. *Labour market reforms are dictated by political economy considerations.*

GCC governments have been hesitant to touch the long-standing rent distribution model of employing nationals in well-paid low-effort public sector jobs as it forms the basis of the social contract between citizens and states. Faced with mounting demographic and fiscal pressures, nationalisation policies emerged as the obvious short-term fix. The challenge has been how to make them less distortionary without a drastic change to the distributional bargain that underlies the political economies of the GCC.

## 5.0 Policy Suggestions for Brunei

The lessons from the GCC countries are relevant and applicable to Brunei, given similar economic and institutional characteristics. The government should heed these lessons in devising Bruneianisation policies. At present, the core measures are the imposition of industry-specific quotas and reservation of certain occupations for citizens. Unfortunately, the outcome of these policies is unlikely to be favourable, if the GCC experience is any indication. The government can consider the following suggestions in its policy design:

i. *Calibrate quotas to maximise employment of locals.*

Instead of quotas, Bruneianisation should be implemented more through market-based incentives. But if quotas are a must, they should be calibrated—and not arbitrarily set—to take into account industry structure and the degree of substitutability between locals and foreigners.



Economic reasoning suggests that a binding quota on local labour increases the cost of labour. It also increases production costs and reduces output. In response to these two forces, the demand for foreign labour would unambiguously fall. The demand for local labour could fall too if quotas are set too high, as firms scale down their operations on profitability concerns.

Quotas on industries with lower elasticity of demand for output would have a higher chance of success as the downward pressure on demand for inputs, including local labour, is reduced. Quotas can target firms operating in imperfectly competitive markets as the monopoly rents can be used to finance the hiring of more expensive locals. For instance, non-tradable sectors such as services, which are less exposed to international competition, and heavy manufacturing industries, which are capital-intensive, could be prioritised over labour-intensive tradable sectors. Industries with greater substitutability between locals and foreign also have better prospects as the increase in per unit labour cost would be relatively lower.

- ii. *Target industries or occupations that locals are most competitive on the basis of skills and have the narrowest local-foreigner wage gap.*

Bruneianisation can make the largest impact in mid-skills, mid-wage sectors where the locals are most likely to be competitive on skills and where the wage premium of locals is the smallest. In 2018, more than 11,000 foreigners worked in service and sales and about 8,900 were employed as craft and trades workers. These mid-skilled jobs could be targeted for Bruneianisation and would make a difference to aggregate national employment. However, the wage differential is substantial—locals are twice as expensive (see Figure 2 above). Complementary policies are thus needed to narrow the wage gap.

Although the largest foreign workforce is in elementary occupations (more than 21,600), Bruneianisation of these jobs is unlikely to be successful as they are deemed low-status. Moreover, with current national reservation wages, these low-wage jobs are neither feasible nor economically desirable. In the highly-paid occupational categories, the supply of highly qualified locals is limited and expatriates are required to fill the roles, which explains the considerably higher foreign wages.

- iii. *Implement a work permit trading system to set labour prices through a market mechanism.*
- At present, foreign workers licenses are issued to employers subject to a dependency ratio (maximum share of foreigners in a firm's total employment). Dependency ceilings are set for each industry and are uniform across firms. However, a single rigid limit is unlikely to be optimal for all firms. A flexible system of tradable permits would allow a more efficient

allocation of foreign workers while achieving the aggregate employment ratios. Prices would be determined through a market mechanism. The system could also eliminate the informal market of selling permits or renting of foreign workers.

iv. *Increase the foreign worker levy to finance wage subsidies for locals in the private sector.*

As mentioned in point (ii) above, the wage differential between locals and foreigners would need to be narrowed for Bruneianisation to be effective. The gap should ideally be closed from two directions; by making foreigners more expensive and locals more affordable. A fiscally-neutral proposal would be to increase the foreign worker levy, which is used to directly finance wage subsidies for the employment of locals. This could lower the (pre-subsidy) wage expectations of locals as their total wage (post-subsidy) would be unchanged, or even higher.

v. *Increase mobility of foreign workers.*

Giving foreign workers more rights and allowing them greater mobility would strengthen their bargaining position, which could reduce the gap in labour costs between locals and foreigners. The sponsorship system can be partially relaxed to allow foreigners to remain in Brunei for a limited period to look for a new job under certain conditions, such as after completing the first two years of their employment contract. This should be accompanied by policies to facilitate mobility of foreign workers, especially lower skilled ones.

vi. *Impose sanctions for abuse; give recognition for compliance.*

Firms would naturally find creative workarounds to circumvent the regulations. Sanctions should be imposed on employers for abuse, such as passing higher levy fees onto foreign workers by depressing their wages or falsely reporting workers absconding as a threat to prevent them from switching employers. Likewise, locals who abuse the wage subsidy system by faking employment to receive payments should be penalised. At the same time, employers should be rewarded for complying with stipulated regulations. This can come in the form of an expedited process for new application, renewal, or transfer of foreign workers licenses, or be presented with awards for public recognition.

vii. *Strengthen monitoring and enforcement capacity.*

The monitoring and enforcement capacity of the administration should be enhanced to minimise cases of corruption, evasion and phantom employment. It has been reported that there are syndicates operating in Brunei that use counterfeit company licences to hire foreign workers, who are then sold or rented in the informal market.

viii. *Reduce the attractiveness of the public sector.*

There needs to be a gradual shift of mindset and expectations among locals regarding well-paid, low-effort public sector employment. The government should commit to a consistent message on reduced public sector hiring and benefits. The public wage bill remains high and the civil service would need to be streamlined.

ix. *Redesign the distribution of oil rents to citizens.*

A public sector job comes with generous fringe benefits, in addition to a relatively high salary and shorter working hours. Implicit in the package is a share of oil rents. However, this form of rent distribution is inequitable as citizens working in the private sector do not receive a proportionate share.

A proposal to reduce the distortionary effects of rent distribution is a direct distribution of unconditional cash grants to all citizens. In effect, public sector wages and social benefits would be separated—all working citizens would receive the same benefits. Public sector employees receive a lower remuneration package but their total income would remain unchanged with the citizens' income, while private sector employees would see an increase. The cash grants would also provide basic income security during unemployment and help to reduce the reservation wage of locals in the private sector.

x. *Enhance human capital and acquisition of skills.*

The private sector is more likely to employ locals if they possess the skills demanded and a strong work ethic. At present, Brunei's skills ecosystem is inadequate. School-based learning outcomes are poor, as measured by PISA 2018: about one-half (48-54 percent) of students in Brunei achieved the minimum level of proficiency in mathematics, science, and reading, compared to 76-78 percent in OECD countries.<sup>8</sup> Moreover, the learning environment is not conducive: 50 percent of students reported being bullied at least a few times a month (second highest in the world) while 19 percent of students reported always feeling sad (highest in the world). Incentives for up-skilling or re-skilling are also lacking. Strengthening teaching practices, fostering a schooling environment conducive to learning, enhancing technical and vocational training, encouraging internships and apprenticeships, designing school curricula to align to industry needs, providing incentives for lifelong learning, and nurturing entrepreneurship can help to build skills and expertise in the local workforce.

xi. *Facilitate private sector growth and attract foreign investment.*

The strategy of a one-to-one replacement of foreigners with locals is unrealistic as employers would hire fewer local workers for cost reasons. Sustainable job creation will

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<sup>8</sup> PISA is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. See OECD (2019).

instead have to come from organic private sector growth. Economic reforms can focus on fostering a more conducive business environment, improving institutional quality, attracting foreign investment, facilitating private sector consultation and engagement, and promoting projects that can make use of a higher value-added local workforce.

It should be noted that these policy suggestions invariably involve trade-offs and the cost-benefit calculus should account for unintended consequences, such as higher wage costs being passed on to consumers, opposition from those adversely affected, and an additional fiscal burden, among others. Implementation can adopt an experimental learning-by-doing approach to assess the effectiveness of the policies and to refine them accordingly.

## **6.0 Conclusion**

Faced with a young and educated population, rising youth unemployment, and a high public wage bill, the Brunei government has intensified efforts to secure jobs in the private sector for its citizens by imposing employment quotas and blanket reservation of certain jobs. Lessons from four decades of interventionist nationalisation policies in the Arab Gulf States suggest that these administrative restrictions—the core strategy of Bruneianisation policy—are unlikely to be successful. Instead, the government should address the underlying causes of labour market segmentation by focusing on market mechanisms to close the gap in labour costs and labour mobility between locals and foreigners.

Bruneianisation policies create three primary conflictive parties: the government, the business community, and the local workforce. The government faces trade-offs in maintaining sound public finance, creating jobs for its citizens, and spurring private sector growth. The business community prefers foreign workers and regards enforcing mandatory national employment as detrimental to their profitability. At the same time, locals are not enticed to work in the private sector as they have high expectations of guaranteed public sector jobs that come with high wages and generous benefits. For Bruneianisation to succeed, the government should first acknowledge these push backs, engage in public consultation, and design incentives to reconcile the apparent conflict of interests among all parties.

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# Changing Patterns Of The Role Of Mothering In Brunei Darussalam

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## Abstract

This paper analyses the patterns of mothering among Bruneian mothers by comparing the meaning and practices of mothering between two generations of Bruneian mothers from their perspective and personal experiences. Research on this subject is lacking in Brunei. Diverse mothering ideals in Western and Asian context have influenced how mothering is viewed in the country particularly upon engagement in paid work and social change over the years. Based on the 26 in-depth interviews carried out between an older generation of mothers with adult children and a younger generation of mothers with young children, changing patterns in approaches to and the meanings of mothering is evident. Changes in intensification of mothering work is clearly seen in the daily practices of the younger generation of Bruneian mothers. This paper provides insights into the role of mothering in Brunei based on interviews and a small sample. Therefore, it is recommended that more rigorous research be undertaken on this subject in the future using a larger sample.

**Keywords:** *maternal employment, intensive mothering, integrated mothering*

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## 1.0 Introduction

This article will explore the meaning and practices associated with mothering from Bruneian mothers' perspectives and personal experiences. In feminist research, "the documentation of women's voices and experience is a central tenant" (Baker, 1998, p. 32). By analysing data obtained from interviews with two generations of mothers in Brunei, I was able to see the transformation which suggest that mothering is not biologically determined, nor is it a static or fixed state.

As literature will show, there are different mothering ideologies in Western and Asian contexts and differing definitions of the good mother. The ideology of 'intensive mothering' as identified by Sharon Hays (1996) recognises the dominant expectation that mothers should be the main caregivers for their children. This ideology, which is highly gendered, expects mothers to be child-centric and intensely focused on their children. Since Hays' conceptualisation of 'intensive mothering', numerous studies have explored the evolution of intensive mothering (Arendell, 2000; Hochschild, 1997; Johnston & Swanson, 2007; Walls, Helms & Grzywacz, 2016). Newer conceptions of 'integrated and extensive mothering' and the redefinition of intensive motherhood by employed mothers have been identified (see Bryson, 2007; Christopher, 2012; Craig, 2016; Hattery, 2001a, 2001b; Lupton & Schmied, 2002; Maher, 2005, 2009; Morehead, 2001). Whatever their employment status however, mothers are still located and locate themselves often as the primary carer, 'in charge' of, and making daily decisions for their children, even if significant childcare work is delegated to others.

Although intensive mothering ideology was initially conceptualized as a White middle-class ideal, several studies of mothers from different racial, ethnic, national, and socioeconomic backgrounds reveal pressures to conform to this ideology of child-centered, time-intensive parenting (see Elliott, Powell & Brenton, 2015 for Black single mothers; Le-Phuong, Harman & Cappellini, 2017 for Vietnamese middle-class mothers; and Chae, 2015 for Korean mothers). Changes in mothering across East and Southeast Asian are linked to "dramatic social, economic and political changes through women's expanded educational opportunities and new career trajectories of new middle class" (Stivens, 2007, p. 31). In the Asian context, Confucian mothering, also popularly known as the term "Tiger mothering" coined by Amy Chua in 2011 has influenced mothers in East Asian societies including Singapore (Chan, 2008; Devasahayam & Yeoh, 2007; Hirao, 2001). This mothering ideology emphasises an intensive child rearing approach, with intensive involvement in children's education. A study by Frewen, Chew, Carter, Chunn and Jotanovic (2015) showed parents from non-Chinese Asian backgrounds in Singapore shared similar approaches to Chinese parents in relation to education. Korean mothers' devotion to their children's intellectual and moral development appears to reflect a

local form of intensive mothering, in which a woman's virtue is expressed through her devotion and sacrifice to her family. This idealised expectation of many different groups of mothers has had repercussions for mothers' engagement in paid labour. Indications that good mothering is incompatible with employment can be seen in East Asian patterns of exit from the labour force in the early years of a child's life (Hirao, 2001; Raymo & Lim, 2011).

## **1.1 Methodology**

The fieldwork for this study was conducted over the course of eight months, from August 2015 to March 2016 between two generation of mothers. In this study, the younger generation of mothers are defined as working women with young and teenage children while the older generation of mothers are those with married children and are also grandmothers. A total of 26 interviews were carried out. All the participants were recruited from the Brunei-Muara district, the most densely populated district in Brunei. To attain the objectives of this study and to discover the changing patterns of the role of mothering and how their employment affected this role, I chose to use a sample of married, employed women with at least one child for the younger generation. A total of 18 interviews with employed mothers were carried out, ages range from 27-43 years old. To provide insight into social changes in Brunei, I conducted interviews with eight grandmothers, married women between the ages of 58-75, who have also experienced motherhood and employment. The interviews with grandmothers aimed to explore in more detail how family life, motherhood and employment have changed in Brunei over the past 40 years. For the group of grandmother interviews, a smaller number had been planned to make data collection more manageable. The 18 employed mothers had a total of 45 children while the eight grandmothers had a total of 39 adult children.

## **2.0 Rejection of 'Older' Bruneian Mothering**

An intensive mothering approach is expected of mothers in Asian society regardless of their employment status (Stivens, 2007); their identities as mothers are paramount. Hays (1996) has argued the ideology of intensive mothering is actually not in the best interest of most people involved and impacts mothers who want to avoid the second shift, husbands who want more time with their children and/or partner, and employers who expect total commitment in and out of the office. Historically, simpler and less time-consuming child rearing methods were considered appropriate and acceptable in Brunei. In my findings, the older generation of Bruneian mothers I interviewed were mostly fulltime at home. Yet, they did not adhere to this hegemonic ideal as they explained their core mothering duties.

Personal lives and relationships are linked to social patterns and structures (Elliott, 2013; May

& Nordqvist, 2019; Smart, 2007). The socialisation of Malay children is shaped by the socio-economic conditions, cultural patterns, and religious beliefs. As cultural and social norms are based on Islamic teachings, Islam is the core of the socialisation process (Keshavarz & Baharudin, 2009). In Southeast Asia, children are taught early in life about the importance of relationships and obligations within the family, especially to their parents as well as the society. Studies of Southeast Asian families show that what is considered good behaviour for children includes family obligation, filial piety and communal reciprocity (Cheah, Bayram Özdemir, & Leung, 2012; Cheah, Leung, & Bayram Özdemir, 2018; Ismail, Tan & Ibrahim, 2009; Lee, Quek & Chew, 2001; Md-Yunus, 2005; Raymo et al., 2015).

Studies from other Asian countries showed similar findings (Cooper, Baker, Polichar, & Welsh, 1993; Mehta & Ko, 2004; Zhan & Montgomery, 2003). As a child grows, they are taught to develop a moral obligation and primary loyalty to the family. Parents teach children to respect elders and how to conduct themselves in a family (Blair & Qian, 1998). For example, “children are taught to suppress aggressive behaviour, overt expressions of negative emotions, and personal grievances; they must inhibit strong feelings and exercise self-control in order to maintain ‘family harmony’” (Morrow, 1989, p. 280).

Having only completed her schooling up to year eight, Bintang (69) was never engaged in paid employment. Her description of her mothering approach indicated no sign of key aspects of intensive mothering other than her constant presence at home. In her account of her life as a young mother, her main responsibility was primary care to ensure physical well-being. This responsibility included bathing, feeding and providing shelter. In her description, there was no emphasis on the emotional and educational well-being of her children. Formal education was something expected at school only. A strong emphasis on ensuring children’s obedience was mentioned as a good trait, echoing research on appropriate behaviours of children in Malay societies (Harun, 2014) and the responsibility for mothers to instil it. It resembles a Korean concept of “parental role modeling of good behavior, respect for parents and elders, and interdependence and centrality within family” (Choi, Kim, Y., Kim, S., & Park, 2013, p. 26).

*I didn’t monitor their development when they were young. Now, I see parents are concerned when their children can walk or talk. When my children were young, I would allow them play outside without my supervision. Yes I know they get hurt, fall down, play with dirt but that was considered normal. And they also had to walk half an hour to school on their own. There wasn’t much worry back then because you assumed it’s safe. When they started school, I didn’t sit down with them to do their homework. They learnt about the importance of education on their own. Five of them have a university degree. I didn’t even finish high school. Children back then are expected to listen to what their parents say. If they argue with us, then that is*

*considered disrespectful. We cane or smack our children back then if they got out of line. We didn't do negotiation. This is praised by family—to have respectful children. Children have a certain fear of their parents, which kept them well behaved. Nowadays, children are not scared of their parents; it's parents that are scared of their children. It's so funny. (Bintang, mother of six, grandmother of 15)*

Baitul (75), also a stay-at-home mother, expressed similar ideas. She never had any formal schooling. She explained that back then, it was normal for girls not to attend school. She describes her main task as a young mother as primary care (echoing Bintang) for all her children. In her description of her mothering role, there was little reference to an intensive mothering approach and her teachings were meant to instil obedience and respect.

*As a mother my job is to look after them, feed them, bathe them and make sure they are healthy. Since I had no schooling, I can't even read. I didn't do any schoolwork with them at home. What I teach them is respect to elders, not to defy parents' authority and to listen to elders' advice. (Baitul, mother of six, grandmother of 24)*

Rani (66) is a mother of eight adult children. Due to her large family size and her husband's income, she took up a job as a cook to help supplement the family finance. Her approach to mothering is similar to that of Bintang and Baitul. Although she was not constantly home, her responsibility for primary care is evident. Again, there is no emphasis on the importance of educational development and emotional well-being. Obedience and respect to the elderly were again mentioned as important traits for children.

*My parents lived in the Water Village where I grew up and stayed until I had four children. I took up work after that to supplement my husband's salary. We moved out soon after I started employment to government housing and were not able to get family support in childcare. The first four were left with a neighbour when I worked. I made sure they are bathed and fed before I sent them to the neighbour and I packed food for their lunch. The age gap between my first four and the last four is large. When the four were a bit older, I would leave them at home to look after the younger ones. I didn't think that was wrong back then because they were expected to listen to my command to not go anywhere. I believe they listen and if they don't, I will hit them with a cane. They were still young but we expect them to help around the house as they got older. My children didn't have much education because they were not very interested in school. I didn't push them. I wouldn't know how to even help my children academically anyway. (Rani, mother of eight, grandmother of 16)*

The current generation of mothers shared their experience of growing up and how they were mothered. Again, there was little evidence of intensive mothering approaches adopted by their mothers. In sharing her childhood experiences, Widuri (36) emphasised the stark difference between her approach and that of her mother, especially in ensuring emotional well-being. The provision of primary care was central in the mothering work for the older generation of mothers.

*The way I see my mother as we were growing up was someone who made sure food was on the table, the house was cleaned, clothes were washed. My parents never talked to me much about my life as we were growing up. It's mostly making sure we were just well in general. Not really into enhancing our development or being a friend or ensuring our emotional well-being. I didn't feel like I could confide in them with my problems. This is not how I want my children to grow up with. I want to be someone they can turn to and share their problems with. (Widuri, mother of three)*

Yasmine's (36) account of growing up was similar and her changed practice was evident too.

*My mother's main task was to cook our food, wash our clothes. So basically, making sure we were fed and clean. When we were younger, what my parents say goes. You don't argue with it or anything. Decisions are meant to be followed. And they were strict; we weren't allowed to make much noise at home. We needed to do things that we were told unquestioningly. It's definitely different from how I treat my children. I do more listening, taking into consideration what makes them happy and so on. (Yasmine, mother of two)*

Lily (41) emphasised her mother's lack of involvement in her education. Although she doesn't criticise, she believes such approach is not suitable now; it is not how she raises her children. There is a change in the meaning of 'good' mothering work.

*My parents never emphasised to us the importance of higher education, as they themselves were not highly educated. If I had decided to drop out of high school, I think they wouldn't have minded. Probably think it's okay if I can find a job and help support them financially. If my children say that he or she wants to drop out of school in the future, I would definitely not allow it. (Lily, mother of four)*

The older generation mothers indicated their expectations for children to be obedient and to be respectful to elders, and their roles included teaching these values. The recurring expectation to be respectful to elders is intrinsically linked to the notion of care and support for the elderly in Bruneian society, in line with cultural and Islamic teachings. Old age care for elderly parents by providing them with financial support is considered an obligation of the younger generation

towards their parents. As noted, the ideologies of intensive mothering were not present in the accounts of mothers in the older generation or in how current mothers described being mothered. But the younger cohort of mothers had different ideas and expectations. In the next section, I explore the meaning of good mothering for contemporary mothers in Brunei. I find that an integrated and extensive approach is the strategy adopted by most of my sample.

### **3.0 Contemporary Mothering Approaches in Brunei**

The increase in the scope and intensity of mothering work as outlined in the intensive mothering ideology has increased burdens for mothers. All mothers today are confronted with numerous conflicting demands on their time and energy. Contemporary mothers are expected to be nurturing and unselfish in their engagement of child rearing but also competitive and successful at work. Stivens, exploring modern motherhood in Malaysia (1998, 2002 & 2007), found that existence of social pressures in structuring women's mothering experience, with the portrayal of good mothers in mass media as working mothers who are active consumers providing all the necessary services to ensure optimal child development. Women face an ideological dilemma about what to do, "as motherhood and mothering continue to be a significant source of women's identity but also as sites for gender subordination even among working mothers" (Devasahayam & Yeoh, 2007, p. 7).

Hays (1996) acknowledges that not all mothers enact intensive mothering but argues all mothers adjust their decisions about work and family in relation to this ideology. When mothers engage in paid work and serve as the primary caregivers to their children, Hays (1996) argues that this does not mean they reject or escape intensive mothering. Instead, these mothers are expected to embody a 'super-mum' model who have successful careers while continuing to remain child focused. These mothers, therefore, may shift from being providers to coordinators of intensive mothering practices.

While using the good mother discourse, employed mothers have redefined the meaning of intensive mothering (Blair-Loy, 2009; Christopher, 2012; Dow, 2016; Walls, Helms, & Grzywacz, 2016). Dow (2016) in her study of African-American employed mothers argues for an "integrated mothering ideology" which assumes that child rearing remains a significant duty of mothers but that responsibility for childcare is shared with and supported by spouses, extended family and the community. It also assumes that while mothers experience challenges in managing the demands of work and family, working outside of the home is a normal and natural part of being a mother. Christopher (2012) in her study found that employed mothers endorsed "extensive" mothering, which allowed mothers to remain child-centred (a key element in intensive mothering) without spending all their time with children by taking up primary



responsibility for organising children's care.

Full-time employed mothers describe “extensive mothering”, where they delegate substantial amounts of the day-to-day childcare to others such as immigrant workers, and reframe good mothering as being “in charge rather than hands on”. Employed mothers navigate intensive mothering and ideal worker ideals to construct good mothering as more delegatory (Blair-Loy, 2009; Christopher, 2012; Walls et al., 2016). These findings underscore “variability among full-time employed mothers in their beliefs about mothering” (Walls et al., 2016, p. 251), as working motherhood has made some outsourcing of childcare a necessity (Karsten, 2015).

Mothers who worked full-time countered the intensive mothering ideology by constructing narratives of good mothering that are not defined by hands-on time or efforts. Mothers' identification of themselves as ‘in charge’ and as ‘managers’ is widespread among the Bruneian employed mothers in my study. The extensive mothering of the current generation of mothers show much of the primary care is delegated to grandparents or immigrant workers. Mothers are using various strategies to stay ‘in charge’: instructing grandparents and immigrant workers on their expectations of caring for their children in their absence. Extensive mothering practices are seen as a compromise between parental care and paid work.

A combination of grandparental care support and immigrant workers are preferred by most employed mothers in Brunei. The goal is that, even in their absence, mothers can be assured that their children have family supervision and are being parented according to the “best” intensive mothering approaches they have delegated to their immigrant workers. Yasmine shared her approach to mothering her two children; the older one attends preschool. As a teacher in a government school, she is expected to arrive at her workplace at seven o'clock in the morning. This leaves her very little time to spend with her children. As she lives in the parental home and has an immigrant worker, elements of grandparental care and hired help support her mothering strategy. Although her husband starts work much later, his contribution to daily care of the children is minimal; reflecting traditional gendered ideology and the belief that care work is a mother's responsibility. Delegation of most mothering work and her role as ‘manager’ is evident in her approach.

*Before I leave for work, I will provide clear instructions on what the helper needs to do for the children. Things like how to heat breast milk when my children were still infants, how to cook infant food, what medicine to give in case the children are sick and the dose. I will also remind my mother what the helper needs to do .... I call home during my free time to make sure all the things I asked them to do have been done. (Yasmine, mother of two)*



Alamanda (32), a school teacher also needs to leave for work early. Living in her own house, she performs her mothering daily duties with the help of an immigrant worker and her husband. She has a daughter currently attending school. Her husband is more involved in childcare. Delegation of the work to others is also a core strategy she adopts.

*My husband is great. He would help me bathe our daughter while I get her clothes ready and cook breakfast quickly. Since I have to be at work early certain days when my class is in the first period, he will send our daughter to school. After she comes back from school, the help will bathe her and feed her. (Alamanda, mother of one)*

“Women taking on multiple roles, trying to do everything, and doing it all well, report feeling overwhelmed, without the time or energy to meet the demands placed on them by others” (Spiteri & Xuereb, 2012, p. 213). This is reflected in the following few cases where mothers prioritise their children above their own needs. In Azalea’s (33) case, she described a hectic morning routine. She admits that it leaves her drained almost every day. Her two older children attend school while the youngest is still an infant. As she is living in the parental home and does not employ an immigrant worker, her strategy involves her performing a bulk of the work before heading to her office with her mother’s help for the rest. When she is staying at her in-laws’ place, she leaves instructions for her mother-in-law and the immigrant worker. In both places, her strategy reflects the gendered belief around care work responsibilities.

*I get up at 5 in the morning and prepare the children’s school snack box. Then I cook the baby’s food if I have time. If I don’t, I leave instructions for my mother to make it. Then either my husband or me would bathe the children and get them ready for school. As my youngest is still breastfeeding, I leave instructions for my mother on heating the frozen milk, when to feed and the amount. (Azalea, mother of three)*

In Widuri’s case, a managerial role and delegation is her mothering strategy. When her child was an infant, she had grandparental childcare. After her immigrant worker arrived and as her children became older, she began to manage her childcare without grandparental supervision. She leaves clear instructions on what is expected of the immigrant worker daily and calls several times to check up.

*I give the helper instructions on what to do with the children when they wake up and what needs to be cooked and cleaned. This gives me time to get myself ready for work. To make sure she does what is necessary, I will call a few times before I come back during lunchtime. If I go out and leave the children with the help, I will call a few times to check in on them. (Widuri, mother of three, nuclear family living)*

Although these mothers acknowledged that their engagement in paid work leaves them with very little everyday time with children, they work hard on constant monitoring, performing mothering work at a distance. Mothers at work are still ensuring that optimal care is provided to their children. This is evident in Yasmine's and Widuri's cases: as Maher, Lindsay and Franzway (2008) argue, mothering work and paid work intersect and are not carried out in separate spheres.

Employed mothers also try to mitigate their absence due to paid employment by allocating most of their time after work or weekends to mothering. Anggrek (34) who has two children knows that her work commitment leaves very little time for daily mothering. During the weekends she does all the primary care for the children. Although she could delegate to her immigrant worker then, she chooses not to.

*On weekdays I get up and go to work. That's it. The helper does most of the care stuff. But weekends, my routine totally changes. I will do the bathing and feeding stuff. (Anggrek, mother of two)*

This same approach to a child-centred approach when possible is adopted by Violet (41). Her work leaves her no time to see her children during the day. Therefore, she finds the time after work and weekends very precious.

*In the morning I will bathe the children just so I can spend some time with them. After that the helper takes over feeding them and my husband will send them to school. I don't get to see them until after work. Once I come back from work, everything is about the children. If they haven't been bathed by the helper, I will do it. No matter how tired I am. I just want to spend time with the children. (Violet, mother of three)*

Azalea talks about her mothering taking up all the time she has prior to work and says she continues with this after work ends. But she does express a sense of ambivalence with her mothering approach due to the lack of time for herself.

*I usually try to sneak in when I come home from work just to take a shower. Because once they see me, I won't have time for myself until they sleep. It's all about them. If they haven't eaten or bathed, I will do it. (Azalea, mother of three).*

The ambivalences discussed reflect these women's personal struggles in the face of their obligations and their approaches. Although Anggrek, Violet and Azalea try to 'make up' for

their time away from their children, there are conflicts that emerge, especially given the amount of primary care undertaken by immigrant workers. In Brunei, the presence of immigrant workers as a ‘second mother’ inflects the support mothers receive with ambivalence. For these mothers, the intimacy of their children with the immigrant workers created a sense of guilt, as it highlighted their decisions to participate in paid work rather than primary care. The strategy of delegating their mothering work was complex for these mothers in relation to their experiences of mother-child intimacy. While women worked to alleviate this possible loss of intimacy, others struggled with these feelings.

### 3.1 Mother as Financial Provider

The reframing of intensive mothering to incorporate the role of financial provider, is identified in Segura (1994), Christopher (2012), and Dow (2016). Hays (1996) also found that employed mothers talk about this aspect as part of their rationale for their participation in the labour force and as beneficial for their children. The income generated by employed mothers can add substantially to the family income. In trying to adhere to the intensive mothering ideal, financial resources are needed too. In Brunei, spending on education has recorded consistent increases (18.3 per cent per year) in the past five years (“Household income goes Up”, 2018).

Azalea acknowledges the financial implication of having more children. She views her engagement in paid work as important in her identity as a good mother; she is providing better opportunities for her children to succeed. Azalea explained that her husband provides for the basic necessities, in line with Islamic teachings that men are responsible for their wives and children’s daily needs. The construction of their house is underway, and her husband pays for most of that too. Her income, she said, is mostly to provide the extras for the family, and a large portion goes to paying for her children’s private education.

*Nowadays you need two incomes to cover the cost of a comfortable living. Should I let go of my \$4000+ monthly income and be a stay-home mother? Would that really make me a good mother or the opposite? If I don’t work, we won’t be able to afford good private schools for the children. (Azalea, mother of three)*

In my findings, most employed mothers use a large portion of their own income to provide better education for their children (paying for private school fees and extra-curricular activities). The allocation of mothers’ income to education is linked to ensuring childrens’ educational success, emphasised in Brunei and in line with the goals of Tiger mothering. I analyse this further in the next section. Since education is almost free and largely subsidized to university level for Bruneian citizens in government schools/institutions, technically parents do not have to spend

a fortune to educate their children. However, mothers in my sample are keen to put children into private schools.

Widuri explains that her husband takes care of household bills and payments, reflecting the traditional gendered notion of men as the financial provider for the family. She earns more than him and most of her expenditure goes to the provision of better education for her children.

*Being a good mother means providing the best for your children. It means giving them a good education. To put them in a good school and enrol them in other activities. All these need to be paid for. So I work to cover that cost. (Widuri, mother of three)*

Yasmine, too, stresses the importance of having more financial resources for her children. She believes the sacrifice she makes by time away from her children is redeemed through her ability to contribute to ensure their future success.

*If love is all my children need to be successful then maybe I don't have to work. But the reality is money makes the world go round. And if I don't work, I won't be able to provide them with the tools to make them succeed such as better schooling. (Yasmine, mother of two)*

In Asia, the rise of the proportion of middle-class in the population is linked to higher education and the ability of women to participate in paid labour, thereby increasing overall household income. Many of the Bruneian mothers in my sample were raised in families where their parents were not well-educated or working in white-collar jobs. Most did not grow up in middle-class families. These mothers have earned their middle-class status through their own hard work, and want their children to also enjoy a good life that can be guaranteed through having a good education.

### **3.2 Educational Success as Part of Mothering**

Family and work life scholarship suggests that middle-class families, share a common outlook about what is best for their children. Lareau (2011) calls it 'concerted cultivation', middle-class practices of building children's talents through extracurricular and other enrichment activities to help them develop a wide range of skills (Dow, 2012; Lareau, 2011). "Worried about how their children will get ahead, middle-class parents are increasingly determined to make sure that their children are not excluded from any opportunity that might eventually contribute to their advancement" (Lareau, 2011, p. 4).

"Global processes of competition have contributed to rising standards for personal achievement

for both parents and children” (Karsten, 2015, p. 55). Building on Lareau’s work (2011), several studies in Japan (see Matsuoka, 2015, 2018; Suzuki 2010; Yamamoto, 2015; Yamamoto & Brinton, 2010) found evidence of concerted cultivation in the centralised education system of Japan. Yamamoto and Brinton (2010) revealed the practice of concerted cultivation through extracurricular activities and the utilisation of *juku* (private school offering extra classes), as the country’s schooling system focused on standardised examination. Suzuki (2010) provides statistics of Japanese children’s extracurricular activity and finds a shift from sports to more academically inclined activities. In Matsuoka’s work (2015), evidence of concerted cultivation practices was captured using large-scale longitudinal data on Japan’s elementary school children.

Tiger mothering emphasises the importance of children’s academic success. Chua (2011), in her controversial book about ‘Tiger mothers’, describes the demanding style of parenting she adopted to raise her two daughters as being common among parents of Chinese ancestry and the reason for more Chinese students being math geniuses and music prodigies. The Chinese believe that childhood is a time to develop children’s skills through numerous exercises and activities (Karsten, 2015). According to Chua (2011, p. 5), the “Chinese mother believes, among other things, that (i) your child must be 2 years ahead of his/her classmates and (ii) schoolwork always come first and an A-minus is a bad grade”.

The high academic achievements of Asian children have been a focus of study (Sue & Okazaki, 1990). There is a widespread belief that tiger mothers have contributed positively to the education level and economic standards of their countries (Herr, 2016). South Korea was ranked first in the 2014 global ranking of student academic performance, ‘The Learning Curve’, an outcome that has been attributed to Korean tiger mothers pushing their children to excel. Despite criticisms of Tiger mothering as harsh, its influence in Brunei is evident and accepted. One of the reasons is the influence of the Chinese population in the country (they are the second largest ethnic group), as well as the popular belief that Chinese students perform much better than Malay students in exams. The influence as shown by my findings are also partly due to an increased number of intercultural marriages in Brunei.

Mawar’s (35) mother was ethnically Chinese. She converted to Islam when she married Mawar’s father, who is Muslim. The influence of the Chinese culture in raising their children was evident in both generation of mothers with an emphasis on educational success from an early age.

*I believe in the tiger mothering way and am currently using it. I was brought up in the same way. I see my children as better cognitively and developmentally as compared to my brother’s children due to this. My mother is Chinese so she raised us that way. So, I applied the same method. Every night after dinner we will have some education related activities, which I call*

*family lessons. We do different subjects every day. I will get angry if my son gets the answers wrong. He's only five years old but I believe learning should start early in life. (Mawar, mother of two)*

Anggrek too believes in the superiority of Chinese academic success through her personal experiences in high school. She claims that Chinese students usually top the class.

*When I was still in school, usually it was my Chinese classmates that got top marks and first place in most of our exams. They always excel academically. They are very hardworking. So the Chinese must do something right to excel. (Anggrek, mother of two)*

The work ethic of the Chinese is also commended by Lily, who believes it leads to academic success.

*If you see in Brunei, a lot of Chinese people are the successful businessman. Why? Because they are clever and they work hard. (Lily, mother of four)*

Lotuse (62), was an employed mother in her younger years and is of Chinese ethnic background. She married a Muslim and converted but her “Chinese approach” was present in the way she brought up her three adult children. The need to excel academically is very clear in her description as she said she pushes her children to always aim for top of the class.

*My children attended the only Chinese school in the city when they were younger. I handle the children's education. My husband only works and makes money. I was very strict with them. I didn't let them do anything else but study. I own a business so I would bring them to the shop and ask them to sit in a corner to do their work. So, I can monitor their homework. If they don't know how to do something, I make them do it repeatedly. They also attend tuition classes. I tell them that they need to get first or second place at school. If not, they will be left out of our family vacation. No TV, no play. So they work hard all the time. Always get top marks. Now they are very successful. (Lotuse, mother of three, grandmother of five)*

For Yasmine, her views about the superiority of the Chinese ethnic group in attaining academic excellence is also based on her experience as a teacher. She said in her class, her Chinese students always excel in most of the subjects.

*I once asked the Chinese parents of my daughter's classmate how they teach their children. And the answer was practice, practice, practice. Always doing work. That's how they get smart. Even in my school, it's mainly the Chinese students that get good grades. (Yasmine, mother of two)*

One notable feature of the Bruneian education system is that it adopts a strict exam-oriented approach of teaching in most schools, which encourages continuous memorisation. This style of education is common in Asian countries. Regular monthly tests and excessive homework were also mentioned by mothers in my study in their children's daily school life. Mothers confirmed that private schools use regular tests and exams for student assessment. Similar to patterns in Singapore (Ebbeck and Gokhale, 2004; Frewen et al., 2015), mothers in Brunei often put children in tutorial classes as early as preschool. Widuri's adoption of concerted cultivation and a Tiger mothering approach is clear in her description of the effort, resources and strict approach to her child's education. Widuri works hard to help her children get top place in their classes.

*I send my eldest daughter for extra Kumon class, which is for English and Maths. I'm even thinking of switching her school because the curriculum in her international school is too easy compared to the government curriculum. She is in top of her class there but, I don't know if easy is good for her. I want her to have it hard now so that she will not struggle in the future. We do test papers every week. I check her homework every night to make sure she is on top of things. And I don't allow her to play on the iPad even though she begs for it. (Widuri, mother of three)*

Some parents, in part to "escape" the high pressure of government curriculum, enrol their children in an international school, but then discover that the Western education is 'full of play', as they put it. This leads them to schedule extracurricular activities and tuition as they feel it is necessary to further supplement their children's education. Alamanda is one of those parents. She enrolled her child in an international school as they do not have yearly exams, which she doesn't support. However, when she compares her child's development with that of her nieces who attend normal private schools, she said she felt pressured to enrol her in extra classes to support her development.

*My daughter goes to an international school where excellence is not just based on 'book smarts'. Other areas of development such as social and creativity are also considered important. But the lack of schoolwork really worries me when I compare to her cousins who attend a private school that follows the government curriculum, where there is an emphasis on literacy, writing and maths for children even in preschool. I've no choice but to get her to attend supplementary classes. I'm afraid that she will lag behind if I don't. (Alamanda, mother of one)*

She feels she is influenced by Tiger mothering, with a disciplined approach to her child's literacy skills.



*My child took longer than others to learn to read. Although her teachers said that children her age develop differently, I still believe there should be some benchmark. So I force her every day to do her reading. She will refuse and I will get angry with her. But I still force her. It's embarrassing because her cousins of the same age are already reading very well. I even send her to reading classes to enhance her development. (Alamanda, mother of one)*

Another tension in terms of academic success is the requirement that all Muslim children attend religious school. Religious schools adhere to a strict exam-based approach with a final exam in the seventh year. In each year, students have to take four assessment tests for each subject. Lily acknowledges the burden of a dual school system for her mothering as it means more time invested in school revision.

*For the religious school, there is test every two to three months. It's really crazy. And they don't seem to cover a lot at school. So, I have to be a teacher at home as well. We also need to make sure they get good grades in religious school because their grades will be important when they apply for scholarships in the future. (Lily, mother of four)*

Azalea, in her description of her mothering approach, emphasises the need for her son to attain literacy and numeracy skills at a young age. This is done through lots of practice with him.

*Every day since he was five, I made my son do reading and maths. Even if he cries. I believe because of this he is good at school compared to his peers. The other mothers always praise him for being so smart. (Azalea, mother of three)*

The Brunei schooling system has been criticised for encouraging uniformity. It is seen as lacking the creativity, questioning, student participation, self-determination, autonomy, and independent thinking important for children's development in contemporary times. Therefore, parents enrol their children not only in academic classes but others as well.

Widuri sends her child to weekly enrichment classes so her children develop their non-academic skills too. Organising children's daily activities is highly demanding and parents are making it their lifelong project. "Raising children has become a project of purposefully organizing: 'doing time' and 'creating space' with age-specific deadlines" (Karsten, 2015, p. 558).

*Aside from her Kumon class twice weekly, she also has Quran reading classes twice a week. Other than that, I enrol her in swimming, ballet and dance classes. Most of my daughter's friends are also attending extra classes. (Widuri, mother of three)*



Azalea too sends her children to further enrichment classes.

*I enrol my child in extracurricular classes after schools and weekends. For my son, it's football, Quran reading, karate and swimming. For my daughter, phonics, Quran reading, hip-hop dance and swimming. To keep them busy and organised. It's better than just staying at home watching TV. And I believe it's good for their development. (Azalea, mother of three)*

Some have observed that middle-class children in both Eastern and Western contexts are becoming important as little consumers (Karsten, Kamphuis, & Remeijnse, 2015; McKendrick, Bradford, & Fielder, 2000), which may mean middle-class parents are engaged in a project child that leaves little space for spontaneous activities such as outdoor play.

#### 4.0 Conclusion

Descriptions of motherhood that stress inherent conflict between 'good mothering' and any other life aspirations reinforce difficulties for women seeking to combine mothering with other activities; they also set impossible standards for women focusing their primary energies on mothering. (Maher, 2005, p. 18)

Bruneian women's education and employment status have improved substantially, due to modernisation and the oil revenue that allowed for larger public spending on education and infrastructure since its independence in 1984. As a result, the socioeconomic characteristics of Bruneian women in their 30s and 40s differ substantially from those of the older generation of women. Despite these changes, women are still largely expected to conform to traditional gender roles, regardless of their employment status. The work of mothering continues to define women in Brunei. The findings from this study, as from many others, suggest childrearing is one of the most significant factors in the inequalities in domestic labor for women (Coltrane, 2000; Evertsson, 2014; Maher, 2005). In the course of analyzing the data, the complex integration of paid work and mothering work emerged as an important theme.

The intensification of mothering is clear in the daily practices of current generation of mothers. The older generation of mothers displayed a different approach: while they were constantly present, their emphasis was on primary care and on teaching of children to respect their elders and display obedience in line with Asian and Islamic values. The current generation of mothers in my sample, although they spend less time at home due to their engagement with paid work, demonstrated the intensification of mothering work, with new aspects. The core strategy of delegation and taking up a 'manager' role is common in the mothering approach of my sample. Mothers continue to identify themselves as primary carers because they are 'in charge'

of and making daily decisions for children, while delegating part of their mothering work to others, particularly to grandmothers and immigrant workers. This strategy has kept the tension between employment and motherhood private and has not challenged traditional definitions of motherhood or divisions of labour in the household in a significant way. But it continues to add burdens for working women. The changing practices of mothering between the two cohorts suggest there is a search for flexibility and more integrated ways of managing mothering and employment.

A core responsibility for mothers in Brunei is to ensure their children's academic success, strongly influenced by Tiger mothering. I found strong beliefs around 'good mothering', as advancing their children's academic development, seeing children's success as an important indicator of successful mothering. Employment is framed as an important component of their mothering identity in support of this outcome. A mother's employment is often related to the use of her financial resources for her children's education, linked to ensuring their educational success. Mothers in Brunei often put children in enrichment and extra classes and adopted a stricter personal teaching approach at home. This changing pattern in mothering is desirable from the point of view of the development of children as the assumption in the intensive-mothering ideology is that less maternal time is detrimental for children. This has been the cornerstone of long-lasting debates on the effects of maternal employment and child development (Bianchi, 2000; Hays, 1996). Even with support from family and immigrant workers, the intensity of contemporary mothering work takes much effort and resources and is the cause of mounting pressure and stress on contemporary mothers in their multiple roles. With the increasing shift in emphasis of mothering towards educational success, it will be interesting to see if the changing mothering and care pattern of the younger generation of mothers will impact their expectations of care and support for the elderly in the future, as the decrease in emphasis on family values in the current approach such as filial obligation and respect for the elderly, and aspects of Western values such as individuality and independence, become more pronounced. Potentially, this could slowly erode the traditional cultural expectation of family care in the years to come in Brunei. Further study and research using a bigger sample is recommended in the future to understand the mothering approach in Brunei and its implications for other related issues such as maternal well-being, intergenerational living arrangements, family values, care work and work-family conflict.

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# Intergenerational Support Flows In Brunei Darussalam: Policy Implications Of Continued Support From Older Adults

*Kartini Rahman*

## Abstract

It is generally thought that in Asian societies, older adults have been taken care of by their adult children, that modernisation affects family forms and consequently there is a decrease in support to older adults. This paper offers a different perspective using a literature review of intergenerational support in Southeast Asian family systems, and findings of intergenerational support flows from ethnographic fieldwork consisting of repeat interviews and participant observation in Brunei's Kampong Ayer. It is argued that in Brunei, much like neighbouring Malay countries, there is a pattern of uncertain support flows to older adults. This is not strictly due to declining fertility rates or modernisation, but also a result of the relationship between family systems and kinship rules, together with socio-structural circumstances. Families can successfully or appropriately adapt to socio-demographic and economic changes, but there are families who are unable to adapt, whose older adults are at risk due to a lack of support. The intertwined integrated circumstances of disadvantages of those who lack social mobility, with intergenerationally low socio-economic status families, older adults who are childless or without sustained ties to, or support from adult children or wider networks of support, are exacerbated by socio-demographic and economic changes. This paper illustrates the extent and limitations of intergenerational support, and who are vulnerable to a lack of support in Brunei.

**Keywords:** *inter-generational relations, inter-generational support, ethnography, Brunei Darussalam, Southeast Asia*

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## 1.0 Introduction

An investigation into Brunei's ageing population is important, as the fertility rate decreases and life expectancy increases<sup>1</sup> (Othman, 2020a;b). Brunei's decreasing fertility rate<sup>2</sup> is below the population replacement rate of 2.1; therefore the proportion of youth in the population is expected to continue to decline over time, and the proportion of people aged 60 and above will continue to increase (United Nations, 2007, p. 100). This would lead to Brunei having 30 percent of the population aged 60 years and above by 2050 (United Nations, 2019, p. 8). Globally 1 in 6 people will be aged 65 and over by 2050, a significant increase from 1 in 11 people in 2019 (United Nations Population Division, 2019). Due to this rapidly ageing population, the United Nations positions Brunei as amongst the top ten countries in the world with the largest percentage increase from 2019 to 2050 (Ibid). As a result, older adults will live far longer, and over time fall into an oldest-old category. This comprises people aged 80 years and above, who will eventually need support in their activities of daily living for a longer time period (Palanivel et al., 2016).

These aspects of Brunei's demography demonstrate that an ageing population needs to be considered in order to achieve Brunei's Wawasan 2035 (Vision 2035) of "quality of life that is among the top 10 nations in the world... with 'social security for all'" (Brunei Economic Development Board, 2007).

The challenge with Brunei's ageing population is that there is no comprehensive welfare system to cater to an ageing population. The aim of this paper is to address gaps in Brunei's family dependent strategy for older adult support and care.

## 2.0 Background

Brunei's strategy promotes self-reliance, whilst families are the safety net for older adults who need support. Despite depending on the family, there are no incentives for this strategy. It can be generally argued that in light of global demographic shifts, governments must provide policies or programmes to enable support where gaps are present, and stimulate family solidarity and exchange (Lowenstein and Katz, 2013, p. 193).

Brunei's old-age pension aims to act as a safety net to ensure no citizen is deprived of basic needs (Ministry of Culture, Youth and Sports (Brunei), 2011, p. 21). The universal old-age pension (Pencen Umur Tua) of \$250 Brunei dollars (BND) a month has been available to Brunei citizens and permanent residents aged 60 years and above since 1st October 2006<sup>3</sup> (Chambers, 2017,

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<sup>1</sup> Brunei has a life expectancy rate amongst the highest in the Southeast Asia (Oxford Business Group, 2013)

<sup>2</sup> Brunei's fertility rate dropped to 1.7 in 2018, compared to 1.8 in 2017, 2016, and 2015 respectively (Othman, 2020b)

<sup>3</sup> Pensions were previously lower, starting at \$20 BND when first introduced in 1955 (Department of Community Development Brunei Darussalam, 2015)



p. 18; JAPEM, 2018). Brunei citizens and permanent residents employed during the working-ages of 18-60 are eligible for the following pension and saving schemes. A government pension scheme is given to those who began government service before 1st January 1993<sup>4</sup>. Private and public sector workers, and those self-employed on or after 1st January 1993 receive a pension through a provident fund<sup>5</sup>. Upon retirement, a lump sum of the provident fund plus accrued interest is paid, with a supplementary pension of at least \$150 BND a month for up to 20 years.

It is an advantage for those who are able to be employed during their working-age to have such saving schemes. Otherwise, for older adults, Brunei's policy strategy has an ethos to alleviate "financial burdens" and "dependence on welfare benefits" (Ministry of Culture, Youth and Sports (Brunei), 2011, p. 20). Similarly, in Indonesia, it is intended that older adults should be empowered to have active roles in community, nation and state (Rahardjo et al., 2009, p. 285). For Brunei, the 2006 micro-financing Self- Reliance Scheme, is to initiate or expand small-scale businesses (Ministry of Culture, Youth and Sports (Brunei), 2011, p. 20). The 2011 Empowerment Program was introduced for business management and entrepreneurship. Brunei provides assistance in daily activities with the Home Care model, using trained volunteers (ASEAN Representative of Brunei Darussalam, 2013, p. 5). A Health Promotion Committee promotes healthy lifestyles and active ageing at a community level (ASEAN Representative of Brunei Darussalam, 2013, p. 1). Four Senior Citizens Activity Centres for community-supported recreational and sports activities are located in each of Brunei's districts (Ministry of Culture, Youth and Sports (Brunei), 2014, p. 3-4).

Conforming to alleviating dependence on welfare benefits, the extended family system is the main strategy for care and support, as "looking after the elderly is still part of the country's tradition with extended families still in place" and Brunei "... strongly advocates the concept of family institution where family are expected to care for the older adults" (Social Affairs Services Unit Brunei Darussalam, 1994, p. 2; ASEAN Representative of Brunei Darussalam, 2013, p. 2). Much like Brunei's neighbouring countries, families are thought of as the solution to what is regarded as a population ageing problem (Wong and Verbrugge, 2009, p. 211; Lii Teh, Tey and Ng, 2014). This is reinforced by the Minister of Culture, Youth and Sports saying that "in Brunei Darussalam the family institution underpins its social fabric and therefore, it is crucial for the family institution to be strengthened and preserved as part of a social protection policy, while learning new solutions to provide effective platforms for Brunei's ageing population to lead active, healthy and contributing lifestyles" (Kon, 2019). This indicates the significance of Brunei's strategy to strengthen the family institution and provide opportunities for the ageing population to be active contributors.

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<sup>4</sup> This pension scheme is still provided for those employed in the Royal Brunei Police Force, Prison officers, and Royal Brunei Armed Forces.

<sup>5</sup> 5% of their monthly salary is contributed, and the employer also contributes 3.5% of the monthly salary. Employer's and self-employed people's minimum contribution is \$17.50 BND (Tabung Amanah Pekerja, 2018)

The argument is that a family-dependent strategy gets increasingly vulnerable as Brunei's extended family system becomes affected by modernisation (ASEAN, 2010; Haji Saim, 2010, p. 131; Ministry of Culture, Youth and Sports (Brunei), 2013). Likewise in Malaysia, families have the responsibility to care for elders, and socio-demographic changes are thought to erode family unity (Lii Teh, Tey and Ng, 2014, p. 9). With these viewpoints and strategies in place, how sufficient is a family-dependent strategy to begin with? Will strengthening the institution of the family, which is arguably affected by modernisation, be appropriate in addressing Brunei's rapidly ageing population?

Conclusively, there are gaps in Brunei's strategies noted above. This is studied in two parts, the contributions of the older adult, and addressing the strategy of advocating the family institution.

- **Contributions of Older Adults**

Due to Brunei being a majority Malay country, the literature from countries with significant Malay populations, which are Singapore, Malaysia and Indonesia, are used. The literature shows that a gap which has not been addressed is that older adults in Malay societies contribute to adult children more so than received and that a return of support is not obligatory (Mehta, 1999; Beard and Kunharibowo, 2001; Schröder-Butterfill, 2004; Kreager and Schröder-Butterfill, 2007;2008; Arifin and Ananta, 2009). Intergenerational support is defined as the support given or received between generations of people (Panel on a Research Agenda and New Data for an Aging World, 2001, p. 171-172; Silverstein *et al.*, 2002).

For Malays, the literature shows this is balanced, or unequal with continued support flowing downward to adult children beyond the older adult's retirement age. The thinking that population ageing absorbs the resources of younger generations and of government welfare does not address the fact that older adults have been active in making significant contributions throughout their lifetime to the youth and working age population. The findings from the literature points toward the growing evidence supporting alternative perspectives.

- **The Brunei-Malay Family System and the Effects of Socio-Demographic and Economic Change**

The second gap is the perspective that modernisation disrupts the family institution. Malay families in rapid socio-demographic and economic change are more adaptable than assumed, with families engaging in domestic help, adoption and fosterage, patronage, quasi-coresiding, wider support networks, and mitigating distances with technology and visits (Schröder-Butterfill, 2005; van Eeuwijk, 2006; Abdul Aziz and Yusoooff, 2012; Thang, 2013; Kee, 2014).

These allow for familial connection, support flows and reciprocity.

This concerns family systems, the “normative manner in which family processes unfold” in inheritance, preferences and living arrangements (Skinner, 1997, p. 54). Living arrangements, the process and manner of residence, is swayed by the type of family system, in which different parts of the world have different systems, norms and obligations (Hashimoto, 1991, p. 363; Knodel, Saengtienchai and Sittitrai, 1995, p. 83; Knodel and Saengtienchai, 1999, p. 202-203; Schröder-Butterfill, 2004, p. 506; Zhang, 2006, p. 261; Natividad, 2008, p. 163; Sibinda, 2011, p. 483; Dykstra *et al.*, 2013, p. 21). Bilateral, patrilineal and matrilineal kinship systems classify how living arrangements, descent, and support arrangements are made (Farber, 1966, p. 34).

For Brunei, the extended family system is defined by the government as a multigenerational household; in reality, Brunei Malays practice a nuclear and bilateral family system (Brown, 1970; Leake, 1989, p. 90; Social Affairs Services Unit Brunei Darussalam, 1994, p. 2). This is consistently evident amongst Malays in Southeast Asia (Li, 1989; Beard and Kunharibowo, 2001, p. 19; Kreager and Schröder-Butterfill, 2008). Brunei Malays temporarily reside with either partner’s parents, the couple forming their own household when they have enough savings (Brown, 1970; Leake, 1989). Malays, at first, need to establish a stable union between husband and wife, due to traditionally predominant divorce rates (Carsten, 1997, p. 68-69). This questions Brunei’s strategy of multigenerational household as a form of support to older adults. Ethnographic work on Malays shows that coresiding with multiple families, such as married siblings, is a cause for conflict rather than unity and is preferably avoided (Carsten, 1997, p. 66).

Furthermore, there are different meanings of family and obligation, such as filial piety for Chinese families and the patrilineal joint family systems of Indian families (Chan and DaVanzo, 1996; Arifin and Ananta, 2009, p. 4). For Brunei Malays this is Malay kinship, where Adat is the foundation of society, as “it is the custom of Malays for kinsmen to help one another” (Djamour, 1959, p. 48). At the same time, society is set within the framework of the continuation, fluidity and shifts of Brunei’s Adat, Islam, and Malay culture (Haji Abdul Samad, 2019, p. 9-10). In line with Carsten’s (1997, p. 54-55) and Djamour’s studies, “one cannot say there were three clear-cut principles... Muslim law and Adat law were duly recognized and differentiated by the people themselves” (Djamour, 1959, p. 48). Norms which navigate Malay families are more fluid in order to accommodate to external factors (Kling, 1995, p. 64-65).

In conclusion, the nuclear household is a significant component for Brunei Malays, and the family institution is more flexible than fragile in the face of changes.

### 3.0 Methodology and Research Setting

A description of the data collection<sup>6</sup> and data analysis process will now be presented. The study aims to capture components of socio-demographic change, extent of support, ascertain who are vulnerable to a lack of support. Consequently, the findings of ethnographic fieldwork are used.

As a majority Malay country, Kampong Ayer was chosen due to its being an established site for Brunei's heritage and history, a "quintessential Brunei-Malay community" (Leake, 1989, p. 87; Abdullah, 2016, p. 87). As migration out of Kampong Ayer accelerated in the 1980s, this had a negative effect on its local economy, with few fishermen remaining in Kampong Ayer (Horton, 1995, p. 8; Yunus, 2009; Zul Hamdi, Abdullah and Narudin, 2017, p. 14). Younger populations leaving these this occupation to seek office work were not always successful (Leake Jr., 1989, p. 86). Although Kampong Ayer cannot be entirely representative of the country, it can represent general trends occurring.

Ageing societies show complex dynamics through the life-course perspective (Panel on a Research Agenda and New Data for an Aging World, 2001; Bengtson, Elder and Putney, 2005; Bengtson et al., 2009; Evandrou et al., 2018). This means the patterns of change surrounding individual life events and between generations (Silverstein *et al.*, 2002; Silverstein, Gans and Yang, 2006). This is adopted through life histories of older adults. Kinship networks were drawn to interpret relationships and support flows over time (Panel on a Research Agenda and New Data for an Aging World, 2001; Kreager and Schröder- Butterfill, 2007). Kinship networks defined proximate kin, meaning kin who older adults had provided significant support to, to immediate kin, meaning kin older adults can rely on for support (Kreager and Schröder-Butterfill, 2004). These created visuals of changing networks. Wider networks of support are included as those not part of the immediate family, but which have a cultivated relationship or form of alternative support.

A snowball-sampling method was used through participation with a host family for up to six months. This resulted in a total of 135 repeat in-depth interviews, conversations and observations, in one-on-one or group settings, with twenty mainly older adult respondents<sup>7</sup>, their kinship networks, neighbours, key people and other older adults in the community. Signed and verbal consents<sup>8</sup> were obtained. Field notes were taken and recorded interviews were transcribed. This led to nine case-study reports, with supplementary summaries of five other older adult's life histories, kinship networks and support flows.

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<sup>6</sup> The research uses 2017-2018 data collection for a thesis by the author

<sup>7</sup> Older adult respondents are 60 years old and above, following Brunei's definition (Attorney General's Chambers, 2017).

<sup>8</sup> Data collection aimed to adhere to strict ethics guidelines set in 2017 by the University of Southampton, Faculty of Social Sciences, UK

Support was categorised as material, this included monetary, paying of bills, stocking up the kitchen or gifts, and practical, which included daily assistance, house chores, transport, or caring for grandchildren. Relationships between kin, motivations and patterns of support were also investigated. Living arrangements were based on the residence of or proximity to family members (Beard and Kunharibowo, 2001; Knodel and Ofstedal, 2003; Tomassini *et al.*, 2004). The data collection took into account inter- and intra-household support flows, and quasi-coresidence, meaning those who participated in household activities and support flows, though they may not coreside permanently (Knodel and Saengtienchai, 1999).

For the case-study analysis, themes and patterns were detected, and support flows summarised as an aggregated interpretation of accounts. It is not a strictly quantitative process. A case study of downward support flows with some reciprocity, captures the majority of an older adult's current situation. The case-study analysis also takes into account past occurrences of support flows, and support flows are analysed firstly within the case before comparisons are made.

#### **4.0 Results**

For the results, I firstly state the interdependence of support flows between older adults and their adult children. Next, a summary of intergenerational support flows of 20 older adults within 14 case studies is presented in Figure 1. This categorises older adults in terms of socio-economic status (SES), not the adequacy or extent of the support, or complexities of support between kinship network members. It does not suggest overall older adult dependency, or show the contributions of older adults throughout the lifecourse. Figure 1 signifies current support flows at the time of fieldwork, and how this differs between SES groups. Following this, three summarised case studies are shown as examples of further in-depth analysis.

Spending and saving occurred interdependently between a married couple and with some intergenerational support flows occurring independently. Men would give their wife money to spend for the household, which she would make decisions on (Carsten, 1997). Women were more in charge of spending for the kitchen and other household necessities. They stated “when it comes to this house, he [husband] wouldn’t know, like the day to day of this house he wouldn’t know” (“*kalau anu di rumah ani nada pulang ia tau tu, macam behari-harian di rumah ani nada ia tau tu*”). Older adult men corroborated this, “things for the kitchen, I never knew about those” (“*barang dapur mana ku pernah tau*”). In some cases, married older adult women, would use their own pension to secretly pay for their coresident adult children if their adult children were not able to pay for any house bills. Larger decisions on spending would be made together, such as on buying a house or weddings.

Older adult women who said they had “stayed at home”, did have successful businesses throughout the lifecourse. They had choices in spending, similarly in pension years with their pension and money given. This aligned with ethnographic work on Malays that “sometimes a married woman earned money by working... she had exclusive right to the earnings” (Djamour, 1959, p. 42), although during the fieldwork, earnings were referred to as coupled; “Both our old age pension that’s all we have, we don’t have any other income” (*“pencen tua nganya kami dua orang ani, nada pendapatan lain”*).

Older adult men were more knowledgeable about water and electricity bills compared to other household necessities. Payment of bills had varied arrangements with coresident and non-coresident adult children. For widowed older adult women, payment of bills was done with their consent. Those who did not have sufficient monetary support would use their own pension to pay for bills. Generally, low-income coresident adult children did not consistently pay bills, this was dependent on the adequacy of their income and their spending choices “if [son-in-law] has monthly income, if not then they can’t [pay for bills]” (*“kalau ada terima, kalau nada mana jua ulah”*).

Multigenerational living benefited more married adult children who were not obliged to contribute to the household. There were no defined rules; “People say give and take; you can’t just rely on one person” (*“bertolak ansur nya orang. Jangan harapkan sorang saja membal”*). Ability of the individual to contribute was a significant factor. Unmarried coresident adult children were less obliged to pay for bills, especially if older adult parents had a high SES, or if they had sufficient support flows from other adult children who contributed to pay housing bills. This was also shown with Malay Singaporeans and Indonesians, unmarried adult children received more so received downward support flows from high SES older adult parents (Mehta, 1999, p. 115; Schröder-Butterfill, 2004).

Older adults categorised as low SES older adults depend solely on the \$250 universal old-age pension. Their businesses halted or were not doing well: “It’s been two years and four months since we were able to find extra money”. They compare themselves to others: “Well what is there to do, we don’t work like everyone else, sometimes we are able to have a catch sometimes no, only when fuel is enough then we will go fishing”... “We here don’t have money. Well there is for spending on food” (*“kita ni inda beduit. Ada jua untuk pemakanan belanja”*)... “We don’t have money, we aren’t like the business people” (*“kami nada duit, bukan macam orang pandai business”*).

Low SES older adults had challenges, lack of adoption in new technologies, changes in the fishing industry, and low-income adult children who needed their support. They fished, did

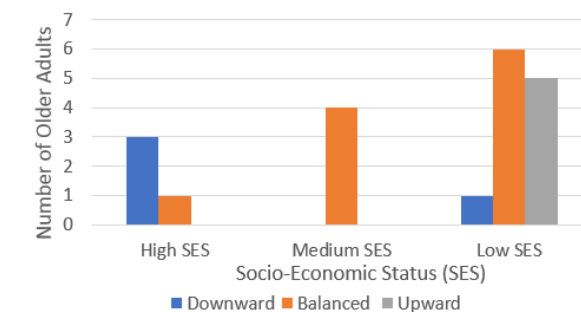


odd jobs or sold things, but this provided minimal income, for example, inconsistently earning \$15- or \$30-dollars some days, just enough to “buy the model for it” (*“membeli modal apa nya tu”*). Low SES older adults who were unable to have a small business voiced their desire to participate: “We can’t get as much fish as we used to, but we keep trying”. In recent years, a maximum of \$200 to 300 BND a month was earned but only if they went fishing often. They also needed to fix torn nets, and pay for fuel for the boat. Generally, these older adults recently reduced these business activities due to ill health, or lack of money to keep the business model going.

Older adults in the medium SES group have business ventures that were more successful than those in the low SES group. Older adults in the high SES group would either have a government pension, be formally employed or have a more expansive business such as a larger shop, shops on land or on land clients.

*Figure 1.*

**Intergenerational Support Flows of Older Adults from Three Villages in Kampong Ayer, Brunei**



Source: Ethnographic fieldwork by author (2017-2018)

These results show that older adults who have downward support flows are predominantly in the high SES group. These high SES older parents provided material support to unmarried adult children or adult children in higher education, at times also providing material and practical support to grandchildren, in a skipped generation household, or to other adult children and grandchildren during the weekend. Any return of support from adult children did not balance or outweigh older adult contributions. Older adults with high SES have the resources to continue to provide to their adult children, further building their opportunities with higher education.

The majority of balanced support flows are in the low SES group, either iterations of frequent intergenerational exchanges or independent living with occasional gifts or transfers. The majority of older adults who have upward support flows are also in low SES group. This is paralleled in the latest Brunei Household Expenditure Survey, 2015-2016, where 23% of the household

income of the lowest household income group was from transferred income (Department of Economic Development and Planning, 2018). Less than half, 43%, of the household income of this group was from employment income (ibid). The findings from the fieldwork showed that the majority of low SES older adults have adult children who either provide practical or material support through the extent to which this is true varies, with inadequate support at times.

One reason for these results is the different needs and availability of support from adult children. Secondly, as previously established, there is no obligation for reciprocated support with the Malay family system. This was also evident here, “if they give, they give”, “I wouldn’t ask”. Much like other studies, there is a tendency for interdependency, but with downward intergenerational support flows throughout the lifecourse that is not reciprocated. The findings show some families achieve the ideal balanced reciprocity, whilst others are unable to. Thirdly, there is the lack of social mobility, leading to socioeconomic marginalisation. These three reasons are challenges to how older adults and families adapt to gaps of support, and socio-demographic changes.

One difference between SES groups is that high SES adult children required only child care, compared to low SES adult children who additionally required support in bills, car loans and housing. The case studies showed that these adult children offered practical as well as some material support, such as restocking the kitchen, but not to the extent of high SES adult children who contributed to housing bills and gave consistent monetary support. Consistent monetary support is exemplified by case study 1.

### **Case study 1: Hajah Delima**

Delima is a widow in her sixties, coresiding with two unmarried adult children, and one married adult daughter, Nisha, and her husband, who are childless. They live in a house that is more modern than their neighbours, matched by modern cookware for a catering business. Both unmarried coresiding children have recently graduated with university degrees. One planned to continue studying. Her seven other children are married and live on land, with good incomes. All of her non-coresident adult children give approximately \$100-200 BND a month, Delima jokingly noting it is “like earning a salary” (*“macam begaji”*). She does not oblige them to provide, “whatever is left over they would give me” ... “follow circumstance” (*“ikut keadaan”*). The monetary support is used to pay for the water and electricity bills. Delima’s unmarried coresident adult children contribute to the household, they “follow the spending in this house” (*“ikut belanja sini rumah”*). They do not depend on Delima for support, but they are dependent on each other. They implicitly provide Delima with transport, companionship and material support. They would go to town daily, buy ingredients or stock up the pantry. They and her



coresiding married daughter Nisha, would stock the kitchen with “whatever is needed for the kitchen, I don’t need to buy anymore” (*“keperluan dapur apa mana ku bali lagi”*). Hajah spends on ingredients for catering, “I only buy [ingredients] for catering” (*“untuk katering ku ganya bali”*).

Non-coresident adult children visit every weekend, almost like a second home where they leisurely sail and fish. Delima’s fourth youngest, Nina, had recently moved on land. Nina lived with Delima for a few years after marrying her husband and raising her young children. Nina continues to send her children and her domestic helper to stay over during the weekend. Nina’s domestic helper helps with taking care of Delima’s grandchildren, assisting with household chores.

These arrangements of quasi-coresiding and oscillating movements of families on land to Kampong Ayer adapt to migration. Delima does not want to move to on-land housing to reside with her adult children, “for as long as I can stay here”. Delima’s independence and her own home are important to her; “I wouldn’t want to move, I don’t take or ask” (*“mana ku mau pindah, mana ku meambil minta”*). She can rely on her children to help her, so prolonging separate independent living was more preferable: “All my children have their own homes, they take me on-land whenever I want to”.

This is an ideal case of intergenerational support flows. Support flowed mostly upwards, with some reciprocity occurring. There was a level of self-sufficiency, interdependence, and continued connection to adult children. For one, ideally adapting to migration, adult children quasi-coresided during the weekends, and contributed to household amenities. This, along with adult children having a good income, was a circumstance that made it possible to materially support their older parent.

Secondly, there is implicit exchange with Nina, who had the security of leaving her children with Delima. Delima is not relied on and has a returned support with the domestic helper taking care of the grandchildren, and assisting with chores. Brunei’s increasing labour participation of women in formal work meant (International Labour Organisation, 2020), in Nina’s case, adapting by hiring domestic help, and utilising the security of Delima’s home. Increasing labour participation, taking into consideration daughters of other cases, are indicative of a wider trend, hiring of domestic helpers who indirectly or directly assisted older parents, showing women’s labour participation to be a benefit to older adults rather than a hindrance to the family overall. Daughters of older adults were not only contributors of practical support, but material as well, as an older adult man proudly stated “women are now winning” (*“bini-bini pulang manang”*) looking at his daughter’s educational and career successes.

Socio-demographic change in similar ideal circumstances had benefited from economic opportunity. For Delima, there is also family solidarity despite migration. This fits with the pattern of ideal case studies, where an arrangement of quasi-coresidence and interdependence, caring for grandchildren or utilising the Kampong Ayer home, to an extent benefited both parties. Older adults felt the difference, compared to growing up in Kampong Ayer, when adult children only moved within the water village. Though ideal cases miss how families lived near each other, they had their adult children adapt to the migration, which they were proud of.

This situation showed that despite having contributed to a number of kin in her network, none of them had reciprocated when needed. The interdependent relationship between her and her eldest daughter has given upward support flows. At the same time, Wani relied on wider networks, via her neighbour as an alternative. This was deemed appropriate due to being portrayed to others as being distant relatives. The reality was, their relationship was not appropriate or with a close enough relation to enable a secure place of residence. Upon close inspection, this was a temporary act of charity and not ideal, often referred to as “pitied” (*“kesian”*). Hence, low SES older adults may acquire upward support flows, but the situation was not the most appropriate or sufficient.

Despite Malay families’ downward support flows throughout the lifecourse, as parents providing to children, raising children to be independent adults, forms of negotiation were needed in order to receive support in later ages. This occurs if it was beneficial for the adult children to continue to receive support, in extended coresidence or child care, or for the sake of reputation or the hope that they have done their duty: “A child’s love and care toward older people, that’s our duty is it not?” (*“kasih sayang anak kepada orang tua tu yang wajib kitani di anukan kan?”*). The reality is married adult children’s time and resources were split between their own children and in-laws: “Attention is with our parents, and attention is with our in-laws too”. Support from adult children, as shown, is not guaranteed or obliged. It also depends on whether adult children were able to provide care.

Adult children who were able to provide support, generally combined efforts between their siblings. This had advantages and disadvantages depending on the circumstances of the adult children and older adults. Adult children who were more able to split their time and resources more equally between a number of their siblings to provide adequate support to their older parent had an arrangement that worked. This included taking turns providing transport, paying for bills, and medicine. Usually, only a select few siblings had a role within the support arrangement.

For other cases, this was more complex. For example, in the balanced support flows depicted in Figure 1 for low SES older adults, support to older parents was implicitly divided between adult

children to make up for those who required continued downward support from the older parent. For some this was not sufficient as the older parent continued to work for extra income despite failing health. For others, relying on one sibling to provide practical or material support was an added financial pressure, and time consuming for that sibling. This was even if there were more than ten capable siblings with some living nearby: “It’s just me here everyday”, as exemplified from one case of assisting the daily living of an ill older parent. This disregards the notion that the more children an older parent has, the more support is acquired. The findings showed this was situational.

More adult children of high SES older adults were in higher education compared to adult children of low SES older adults. Although low SES older adults had more upward support flows than in high SES, low SES older adults had inconsistent and inadequate support because their adult children were underemployed and did not adapt to a competitive job market. Intergenerational low-income families and the lack of social mobility was thematic, and a stark difference between the SES groups.

Coresidence was a factor in this, high SES older adults coresiding with unmarried adult children who were in higher education. Low SES older adults coresided with married adult children who were waiting to get their own home and were not financially stable enough to attain this. This led to inconsistent support flows to older parents they coresided with. The inconsistency was also in contributed downward support flows throughout the lifetime, which was not reciprocated later in life. An example of this is Hajah Wani.

## **Case Study 2: Hajah Wani**

Wani’s case is an example of low SES older adults and families who have adapted to their circumstances, but have gaps in support. Wani is a widow in poor health in her seventies, with two children. Wani lives with her married adult daughter, Humaira, and Humaira’s husband, who have four children, three of them coresiding. Humaira doesn’t work and Humaira’s husband works odd jobs around the village, he “works for himself” putting them in the low SES group. Wani’s second daughter Hana lives on-land and with good monthly earnings. She lives in her own home with her husband, and visits Wani for a few days throughout the week. Wani does not visit Hana’s home and does not remember where or what it looks like.

Wani and Humaira’s living arrangement the past two decades was erratic, as they had to move a number of times due to fires. They had previously temporarily moved into Humairah’s in-laws house within the village, but this was overcrowded, since there were other married sibling-in-laws living under the same roof. This led to Wani currently living with an older adult neighbour,

others justifying it as appropriate because they are “distant relatives” (*“saudara jauh”*) and “everyone in this village here is related anyway” (*“semua orang di kampung ani saudara jua”*).

They share what is technically two houses joined as one, with two entrances and separate electricity meters, her neighbour stating “it is one house actually”. The bills of the house are separated, as is their cooking, though both use the same kitchen “for them, I wouldn’t know, for [paying electricity] that is their own business” (*“durang atu inda ku tau eh anu hal tu ia sendiri”*)... “they pay for their own , I pay too and they also pay”. Wani has been living there for a few years, but the temporary nature of the living arrangement worries her. Wani’s section of the house is promised as an inheritance for the neighbour’s eldest son. She would like her own home, even on land government housing, “if I can get my own house”. This is in contrast to Hana who lives on land. Hana is a source of monetary support but not a source of support for living arrangements, showing that multigenerational living is not as practiced a prescribed strategy for old-age support, even in crisis, and even between parent and child.

This situation is in contrast to Wani’s siblings, whose on land houses were said to be spacious, an unattainable opportunity for Wani. Wani contributed to the raising of her siblings from a young age, and is the only one of her siblings not to attend school. This was not due to being a young girl, because even her younger sisters would attend school. Her parents raised Wani to be at the parental level; Wani jokingly refers to this as “adult school” (*“sekolah dewasa”*). She learnt her mother’s craft, helped her sell items, did household chores, and “when [siblings were] young I would take care of them”. Wani’s parents entrusted her to take care of the house finances as time went on. Her father would pass her money he had earned for the day as a water taxi driver, “he got ill and I really did keep their money for them”... “they didn’t want anyone else even when my siblings were around”. Her siblings married and lived on land, whilst Wani took care of her older parents in later years. During this time, her siblings rarely visited, and her older parents continued to depend on her, “none of my siblings would help with their eating and drinking” (*“makan minumnya nadatu adi beradi ku”*). Despite her life of providing downward and upward support flows, she has been unable to attain reciprocated support or the same opportunities her siblings had.

Due to Wani’s chronic back pain, she relies on Humaira and Humaira’s second eldest to cook for her, and to take her to doctor’s appointments. There is interdependency as Wani’s connections to her neighbour enabled them to find a temporary home, and Wani’s dependence to her daughter makes living together beneficial.

Adding to the complexity of balanced support flows was how multigenerational living to help older adults in ill health only occurred in time of crisis. In several cases when older adults

required hospitalisation, the older adults would move on land temporarily into their adult child's home. When they had recovered, they would move back to Kampong Ayer. Otherwise, an arrangement of support on land and Kampong Ayer was delicately maneuvered. It was not the custom that an adult child would move back into the older parent home to assist in daily living, or if the older parent was in ill health. An adult child would move back in if they themselves were divorced or required a home. An arrangement of taking turns between siblings to help, or if they had the resources, provide a domestic helper to live with the older parent, was made, thus, dispelling the notion that continued multigenerational living supports older adults as a showing of a strong family institution. Instead, separated nuclear households continued when ideal, and multigenerational living to support older adults occurred in crisis, and not as a continued norm throughout the lifecourse.

Case study 3 exemplifies intergenerational support flows between a widowed Hajah Rabiah and her underemployed son Hisham. Their troubles were to an extent mitigated through support from Rabiah's relatives who lived far away.

### **Case study 3: Hajah Rabiah**

Rabiah is in her sixth decade, in relatively good health. Her husband, Yahya, had passed away a few years previously. She lives together with her unmarried son, Hisham, who is in his mid to late twenties. He attained a high school diploma, went fishing with his father, worked as a water taxi driver, and applied for work through the government job centre. During the fieldwork, he had an irregular job, and earned approximately \$350 BND a month. Having been through several interviews and written tests, "probably ten times already", he continued to apply to find a better opportunity.

Years earlier, Yahya attained subsidised government housing (*rumah perumahan*), a gift for Hisham's future. Their arrangement was, upon marriage, Hisham was to travel "back and forth" ("*turun naik*") to Kampong Ayer. The loan was put under Hisham's name. Hisham was to pay the loan, and Yahya to pay for the daily sustenance for their current living. When Yahya passed away, it was revealed that a large sum of loan payments was overdue. Due to Hisham's underemployment, Hajah felt guilty that he had to continue paying the loan, and pay off the debt. Rabiah counted on her relatives living far away, she felt she had no choice. Rabiah could not count on help from in-laws living nearby, as the relationships were more strained than steady. After the debt was settled, Hisham continued to pay the monthly loan for the government house. Hisham also had to pay for a car loan, needed for work, travel, and hospital appointments. The financial burden fell on Rabiah, as her \$250 BND pension was used for their daily needs. On the day her pension was received, up to \$100 BND would be spent to stock up the pantry with

basics for the month. The remainder was used for household bills. At times, Hisham would ask for money for his phone bill. Thus, both their earnings were stretched.

Hisham rarely worked as a water taxi driver on top of his other job. Years earlier, Yahya had applied for daily-assistance welfare, but after his passing, they still had not received the welfare from the government. Rabiah notes she would like to continue her small-scale retail business. She used to be successful in it, but now she does not have the money to put into the business. Rabiah worries how Hisham will be independent, and how he would have enough to settle and get married. She states that the \$250 BND would be enough for her living alone.

Despite marriage being a celebrated union to expand the family network, and that for Malay's "balancing obligations to each partner's kin is a central aspect to marriage" (Carsten, 1997, p. 67), it was evident that the natal family was more dependable<sup>9</sup>. For Rabiah, a significant time of her married life was spent contributing support flows to her in-laws, who did not provide support in return when she needed it most. She instead relied on her natal family, her relatives living far away. Despite the distance, they would phone and visit each other every so often, bearing gifts signifying strong adaptable bonds despite distance, as reiterated in other studies (Abdul Aziz and Yusoooff, 2012).

## 5.0 Policy Implications of Continued Support from Older Adults

In conclusion, the results show that support from or availability of adult children and multigenerational living does not mean adequate support is guaranteed.

Older adults are the economic basis of the family network, far from only caring for grandchildren. They established adult children's wealth and independence. Adult children without adequate independent wealth required significant contributions from older parents to pass the life course events of marriage and having children, which would have ideally separated responsibilities of the nuclear households, "if married, eat separately" (*asal kahwin, becarai makan*). Nevertheless, multigenerational living blurred these lines of separation, and continued downward support flows were observed. There is still a risk that adult children who have independent sufficient wealth, would not contribute to older parents because other members of the network were doing so instead regardless of whether this was sufficient or not.

Families adapt to changes such as higher costs of living, migration for economic opportunities, increased female labour participation, time spent in education, and change from agricultural to blue- and white- collar forms of work. This however, negatively affected vulnerable older adults, who were financially unstable as they and their adult children have been unable to attain

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<sup>9</sup> There were gender differences in the findings regarding this. Older adult sisters or older adult sister-brother pairings had more continued and interwoven intragenerational support relationship than between older adult brothers.



middle-income advantages. Older adults who are vulnerable adapt by utilising wider support networks to fill in gaps of support, but there is a limit to the availability and stability of these networks. Vulnerable families did not have the capacity to provide support; therefore, more is needed to strengthen their opportunity to adapt to changes and have the chance of financial security.

A degree of long-term reciprocity is necessary to maintain relationships for older adults (Silverstein et al., 2002). This is for when care is needed in older ages, otherwise the fabric of familial ties is inherently unreliable. Complete self-reliance and no flows between intergenerational members are not ideal. Thus, to strengthen families is to address socio-economic vulnerabilities<sup>10</sup>. A Brunei study stated that “to remain independent (self-reliant so as to not be a burden, good health) and at the same time, maintaining interdependence (being taken care of by children and social network) ... co-residences are good for elderly wellbeing as they have emotional, physical and generational support from their family members especially their grandchildren” (Jaidin, 2019, p. 29). However, arguing against this is that intense interdependence only worked if there were balanced support flows, which gave adequate support to the older adult. Furthermore, coresidence and support flows within and between households demonstrated the vulnerabilities of those in poor health, intergenerationally low SES families, and those lacking relationships with, or support from, adult children or wider networks of support.

Negotiation occurred through forms of implicit indirect reciprocity and a lack of obligation. These forms of negotiation occurred in the findings from past generations to now, and is reflected in the literature, signifying a pattern within Malay families in Southeast Asia. The policy implication is that modernisation is not breaking family stability, but that policy needs to address how these negotiations can be made easier. One suggestion is equalising opportunity for low SES groups, and socio-demographic impacts on vulnerable groups. Another suggestion is by empowering older adults and their families to care for themselves and each other. Families and older adults need to have access to technologies or medical assistance, to ease and empower physically challenged and older adults who are in poor health.

Technologies should also adapt to be inclusive for Brunei’s older adults who might have challenges in later life (Abdullah, 2019, p. 60). Singapore, for instance, has policies addressing the changing needs of older adults, such as increasing the retirement age, retraining programmes, inclusive working and health care environments, and tackling ageism in the workplace (Ministry of Health Singapore, 2016, p. 32-35). Although Brunei has recently introduced the Digital Skills Training programme for older adults, Brunei may need to consider the context of its youth unemployment, long-term unemployment, and ageism in the workplace, for example,

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<sup>10</sup> Strength of ties depend on wider circumstances; socio-economic strata and network organisation than ideals (Kreager and Schröder-Butterfill, 2008).

local opinions that “perhaps it is time to replace the old and uncaring officials with young and fresh faces” (Rizzo, Cheong and Chian, 2016, p. 104; Pengiran Haji Jumat, 2019; Authority for Info-Communications Technology Industry of Brunei Darussalam (AITI), 2020; Kon, 2020; Othman, 2020a). Other studies in Singapore show the need to create policies to address the risk of specific sub-groups in terms of economic status, living arrangements, and health status over time (Chan, 2005, p. 55; Gubhaju and Chan, 2016, p. 14). The findings in Kampong Ayer show that this is also an area of concern. Furthermore, the findings show these risks operate within a networked and integrated basis; therefore, providing training and employment for older adults may not address the asymmetry of support flows to financially unstable adult children.

These policy recommendations will not occur in a vacuum in the process of implementation and deliberation amongst policymakers. Hence, it is important for policymakers to consider a change of mindset towards Brunei’s family structures and older adults. Further investigation of policy recommendations and how these could be implemented can be a future area of research following this paper. It is important to set these in the Bruneian context, as country-specific settings and socio- demographic trends mean that regional policy innovations cannot be seamlessly incorporated, although research on the failures and successes of regional policies can provide important insights.

To conclude, the variation of cases recommends measuring intergenerational support flows, rather than assuming multigenerational coresidence means well-being. Though Brunei has a high standard of living, and is the second highest income country in ASEAN in 2018 (OECD/ERIA, 2018, p. 212), evidently there is socio-economic marginalisation. For Brunei to achieve Wawasan 2035 with social security for all, in a period when the population is ageing, these gaps in Brunei’s strategy need to be addressed.



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