

2. Country Report of Brunei Darussalam¹

2.1 Current Status of the ICT Sector of Brunei Darussalam

This report is the first of a three-part project entitled “Women's Economic Empowerment and ICT: Capacity Building for APEC Women Entrepreneurs in the Age of the 4th Industrial Revolution”, authorized by Asia Pacific Economic Cooperation (APEC) secretariat under the theme of 2017 APEC “Creating New Dynamism, Fostering a Shared Future”.

This report presents a brief background on the status of ICT technology and women entrepreneurs in Brunei and details an interview with a Brunei woman ICT entrepreneur on how she started her business, the characteristics, success factors, challenges faced and her recommendations and advice for women entrepreneurs and startups.

A Brief on Brunei

Brunei, or Negara Brunei Darussalam meaning ‘Abode of Peace’, is a sovereign country located on the north coast of the island of Borneo in Southeast Asia. With geographic coordinates 4.5353°N 114.7277° E, Brunei consists of four districts spanning over a total area of 5,765 square kilometers.

Brunei's population stood at 422,678 in 2016² with an annual growth of 1.4%, comprising 216,832 (51%) males and 205,846 (49%) females. The bulk of the population is at the most economically active age groups between 15 to 64 years old at 71.8% while 22.3% are below 14 years old and 5.9% are 65 years old and beyond. The male-female ratio is fairly distributed across all age groups. The majority of the population lives in the Brunei-Muara district where the capital, Bandar Seri Begawan, also lies.

The main ethnic groups are the Malays and Chinese. The Malays make up nearly two-thirds of the population (65.7%) which includes ethnic Malays and a number of indigenous groups, namely the Dusun, Belait, Kedayan, Murut and Bisaya. The Chinese make up about one-tenth of the population (10.3%) while the remaining 24% comprise other indigenous groups and temporary workers.

The official religion of Brunei is Islam and its official language is Malay. Its main exports are crude oil and liquefied natural gas which contribute around 52% to GDP followed by the services

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² <http://www.depdp.gov.bn/SitePages/Population.aspx>

industry, such as business, wholesale and retail trade, education, water transport and health services, at 42%³.

Brunei's Status on ICT/Smart Technology

Brunei continues to make improvements in the ICT sector in terms of infrastructure, use and skills. In the recent ITU measure of the 2017 ICT Development Index⁴, Brunei ranks 53 out of 176 economies. ICT contribution to GDP shot from 1.9% in 2015 to 3.5% in 2016 at BND\$291million, despite a slowing down of the overall economy of Brunei from -0.4% in 2015 to -2.5% in 2016⁵.

The ICT sector can be broken down, but not limited, to the following activities:

- Publishing activities, including publishing of books, periodicals and software publishing;
- Motion picture, video and television programme production, sound recording and music publishing activities;
- Broadcasting and Programming Activities including radio broadcasting, television broadcasting and subscription programming;
- Wired and Wireless telecommunication activities, satellite and other telecommunication activities;
- Computer programming, consultancy and related activities; and
- Information service activities including data processing, hosting, web portals, news agency activities.

In line with meeting the goals of Vision 2035, that is, to aim for a highly skilled society enjoying a high quality of life amidst a dynamic and sustainable growth structure, the need to leverage on ICT technologies to meet these goals become more important than ever before. The Brunei National ICT White Paper⁶ by the Authority for Info-communications Technology Industry (AITI) laid out the national digital strategy for 2016-2020 to harness on ICT for economic and social development of Brunei. AITI also formulated a National ICT Master Plan 2014⁷ which identified strategic goals as important proxies to the proposed strategic target of 1,800 additional jobs from 4200 to 6000 jobs by 2020: making ICT as an attractive career option for Bruneians; developing highly skilled ICT professionals with industry relevant competencies; and creating a vibrant ICT industry in Brunei Darussalam as a source of employment.

³ http://www.depd.gov.bn/DEPD%20Documents%20Library/DOS/BDSYB/BDSYB_2016.pdf (pp.xxix, xxx)

⁴ <http://www.itu.int/net4/ITU-D/idi/2017/index.html>

⁵ http://www.depd.gov.bn/DEPD%20Documents%20Library/DOS/GDP/2016/GDP_Q42016.pdf (p.8)

⁶ <https://www.aiti.gov.bn/downloadables/Downloadables%20Library/National%20ICT%20WhitePaper.pdf>

⁷ <https://www.aiti.gov.bn/downloadables/Downloadables%20Library/National%20ICT%20ManPower%20MasterPlan.pdf>

AITI, through its publication of the National ICT White Paper⁵ and ICT Household Survey 2016⁸, also provided a snapshot of the status of ICT/Smart technology in Brunei with the following indicators:

- Mobile penetration: 114%
- Mobile Internet penetration: 86%
- Fixed Broadband penetration: 46%
- ICT Development Index (2015): 71st place out of 167 countries
- Household with computers: 83%
- Household access to internet: 75%
- Households with both fixed and mobile broadband access: 9%
- Top 3 most popular social media applications used: Facebook, Instagram and Twitter
- Top 3 most popular messaging applications used: WhatsApp, Skype and Telegram

AITI is currently carrying out an e-Commerce survey⁹ to study consumer attitudes and behaviors towards e-Commerce in Brunei. With this study, it aims to formulate plans and regulatory framework to promote the effective use of the internet and e-Commerce, in particular to increase consumer confidence in making transactions, shopping and trading online.

In terms of commerce, international indicators have also shown Brunei's improved standing. In the Ease of Doing Business index^{10,11}, Brunei now ranks 56th place worldwide where the World Bank's Doing Business 2018 Report names Brunei as the most improved economy in the world for the third consecutive year, in terms of making doing business in the country easier¹².

In terms of Global Competitive Index, the World Economic Forum (WEF) 2017-2018 Report¹³ positions Brunei at 46 out of 137 economies and is considered the most improved in ASEAN after jumping 12 places to enter the top 50 of Global Competitiveness Index^{14,15}. Competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of an economy, which in turn sets the level of prosperity that the economy can achieve. It is measured by the twelve pillars which capture concepts that matter for productivity and long-term prosperity

⁸ <https://www.aiti.gov.bn/downloadables/Downloadables%20Library/Household%20ICT%20Survey%202016%20Report.pdf.pdf>

⁹ <https://docs.google.com/forms/d/e/1FAIpQLSdK3BkKszse86UQBfRVvI4iFqZCv13o-keptpvH6qPtIk7Qw/viewform>

¹⁰ <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB2018-Full-Report.pdf>

¹¹ <http://www.doingbusiness.org/data/exploreconomies;brunei>

¹² <http://business.gov.bn/SitePages/The%20Ease%20of%20Doing%20Business.aspx>

¹³ <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%20E2%80%932018.pdf>

¹⁴ <http://www.bizbrunei.com/brunei-jumps-12-places-enter-top-50-global-competitiveness-index-wef/>

¹⁵ <https://borneobulletin.com.bn/brunei-jumps-12-places-in-global-index/>

such as institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation.

To help address the gaps and improve the business ecosystem, DARe (or Darussalam Enterprise)¹⁶ was set up in 2016 as a lead agency in Brunei for the development of micro-, small- and medium-sized enterprises (MSMEs). DARe works closely with the Ease of Doing Business (EODB) Unit under the Energy and Industry, Department at the Prime Minister's Office to help improve Brunei's performance for the World Bank's Ease of Doing Business Index. It supports entrepreneurs by providing training and development to build capacity of local MSMEs, access to financing and markets for MSME growth, quality & ready-built facilities for business expansion and advisory services via their Business Support Centre. DARe has identified the following as the main challenges faced by Brunei aspiring entrepreneurs:

- Access to financing;
- Access to affordable commercial sites;
- Lack of business knowledge;
- Lack of capable manpower; and
- Access to markets locally, regionally and internationally.

A step towards understanding the business climate in Brunei was the setting up of an Online Business Reporting¹⁷ platform where all companies in Brunei are required to channel their business data and performance reports through the portal. This initiative is a collaboration between the Energy and Industry Department, Prime Minister Office (EIDPMO) with the Department of Economic Planning and Development, E-Government National Centre and Darussalam Enterprise (DARE) with the support from the other Government agencies.

¹⁶ <http://www.dare.gov.bn>

¹⁷ <http://www.business.gov.bn/SitePages/OBR.aspx>

Table 1. Brunei Workforce by Sector, Gender, Job Type (Owner, Full-time, Part-time) 2011

INDUSTRY GROUP	OWNER			FULL-TIME WORKER			PART-TIME WORKER			% of Female Owners	% of Female Full-Time Workers	% of Female Part-Time Workers
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Agriculture, Forestry and Fishery	110	52	162	1,267	204	1,471	71	50	121	32%	14%	41%
Mining and Quarrying	16	10	26	3,997	1,227	5,224	22	5	27	38%	23%	19%
Manufacturing	305	224	529	4,545	2,532	7,077	395	186	581	42%	36%	32%
Electricity, Gas, Water Supply and Other Industrial Activities	11	6	17	241	8	249	14	3	17	35%	3%	18%
Construction	673	186	859	18,450	1,682	20,132	1,659	69	1,728	22%	8%	4%
Wholesale and Retail Trade	1,185	641	1,826	12,444	7,497	19,941	493	490	983	35%	38%	50%
Accommodation and Food Service Activities	215	183	398	4,707	3,989	8,696	200	269	469	46%	46%	57%
Transportation and Storage	133	38	171	3,374	1,206	4,580	149	72	221	22%	26%	33%
Information and Communication	55	23	78	1,271	868	2,139	100	28	128	29%	41%	22%
Financial and Insurance Activities	55	31	86	1,203	1,886	3,089	54	139	193	36%	61%	72%
Real Estate Activities	27	18	45	328	238	566	37	27	64	40%	42%	42%
Professional, Technical, Administrative and Support Services	334	142	476	8,004	2,464	10,468	188	102	290	30%	24%	35%
Education	52	61	113	679	2,073	2,752	77	184	261	54%	75%	70%
Human Health and Social Work Activities	34	8	42	150	435	585	15	22	37	19%	74%	59%
Other Services Activities	129	107	236	1,159	1,195	2,354	61	39	100	45%	51%	39%
	3,334	1,730	5,064	61,819	27,504	89,323	3,535	1,685	5,220	34%	31%	32%

Source: 2011 Economic Census of Business Enterprises by the Brunei Economic Planning and Development Department (JPKE)