Identifying the demand for middle-skill occupations in Fiji

Richard Curtain

Development Policy Centre
The Australian National University
Canberra

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1. Introduction

The focus of this paper is on Fiji's middle-skill occupations. The paper makes use of previously unpublished data to identify Fiji's skills stock for middle-skill occupations, based on the number of jobholders in relevant occupations and their educational profile. The survey results show that workers and employers have different skill levels within one occupation, reflecting the specific demands of the work they are doing. This has implications for assessing the potential demand for APTC graduates in trade-based occupations from Fiji. These results also imply that the numbers of middle-skill jobholders willing and able to seek skilled work in Australia or New Zealand may be far fewer than the size of these occupations suggests.

Data sources used

This paper makes use of the results of Fiji's 2010-11 and 2015-16 Employment and Unemployment Surveys (EUS) which are both based on large samples of the formal economy. The large size of the samples covering the formal economy in Fiji provides sufficient data to report occupations at the four-digit level. This level of disaggregation identifies the names of occupations that correspond to VET qualifications. So, this makes it possible, for example, to see how many carpenters and cooks are employed in the economy. From this information, training providers can see whether they are training too few or too many graduates to respond to demand.

The 2015-16 EUS is based on a national representative sample of 5,000 households surveyed over the course of 12 months. The results represent the situation in an estimated 186,236 conventional households in Fiji where 856,325 persons live.[1] This survey provides recent data on the stock of skills for middle-skill occupations, showing the numbers employed in each detailed middle-skill occupation and proportion of job holders in that occupation with a post-school qualification. The 2010-2011 EUS was based on a national representative sample survey of 4,000 households.[2]

Brief outline of the paper

Section 2 explains how Fiji's middle-skill occupations are defined and recognised. Section 3 presents overview data on the Fiji labour force. Section 4 identifies Fiji's existing skills stock, based on the number of jobholders in skills-based occupations and education profile of the jobholders. Section 5 looks in detail at two occupations: carpenters and cooks to identify different education levels and two types of skill demand they serve. Section 6 uses APTC Graduate Tracer Survey results to assess the demand for APTC middle-skill qualifications. Section 7 concludes the analysis.

2. How middle-skill occupations are defined and recognised

Middle-skill occupations can be defined as occupations whose average wages place them in the middle of the wage distribution (OECD 2020: 222). An alternative definition for middle-skills occupations are those occupations where a VET qualification is usually needed to get a job in the open labour market (OECD 2020: 263). However, this latter definition is not detailed enough because it lacks information about the type of pathway taken to acquire a VET qualification.

[1] Fiji Bureau of Statistics, 2017, '2015-16 Employment and Unemployment Survey- Preliminary Findings Release', FBOS Release No 34, 7 August.

[2] The details of the 2015-2016 and 2010-2011 surveys can be found on the ILO data catalogue here and here. The survey results were provided to the author in response to special requests to the Fiji Bureau of Statistics for the EUS 2010-11 data and to the SPC Statistics for Development Division (SDD) for the 2015-16 EUS data.

Three education pathways

There are three different pathways internationally that exist to obtain a VET qualification. The ILO's International Standard Classification of Occupations (ISCO-08), which underpins both the Fiji and Pacific occupation classification systems (PACSCO 2016), outlines three pathways for medium skill occupations which includes craft and related trades workers (ILO 2012, para 56, p 12).

The first pathway is to complete the first stage of secondary education which includes vocational or technical education in a particular occupation or trade. This pathway leads to the successful completion of a recognised vocational qualification (ISCED-97, para 59). The second pathway is to obtain at least an upper-secondary, specialised vocational education qualification, which may include some on-the-job training. The third pathway is to obtain a post-secondary non-tertiary education qualification, based on a mix of formal training and on-the-job learning (often called an apprenticeship) (ILO 2012: para 56, p 12).

How middle-level skills are recognised in the labour market

Within any one country, the relative importance of each pathway depends on employer recognition of the vocational qualification because in the final instance it is the employer who decides whom to hire. However, the employer's decision to hire workers with or without a VET qualification or what level of VET qualification will be strongly influenced by a range of factors. These can include the pressure from government regulation, such as an occupational license or a national building code. Market expectations can be also applied, for example, by prime contract specifications on large construction projects or by the requirements of a prime contractor for subcontractors. The pressure can also include the influence of occupationally-based unions applying pressure on employers through support for an apprenticeship system for their trade based on a junior wage (Curtain 1987).

Mid-skill occupations defined for purposes of migrant entry

The other way middle-level skill is defined and recognised is through a national government's migration regime, based on the entry requirements to access jobs in its domestic economy. In Australia's case, vocational skill for migration purposes is not defined solely by an attained qualification level. ANZSCO Skill Level 3, which covers trade occupations, is the skill level threshold for the temporary and permanent skilled migrant work visas. ANZSCO defines Skill Level 3 not only in terms of a Certificate level but also in terms of relevant on-the job training. The definition used is: 'Skill Level 3 is commensurate with a Certificate IV or III (including at least 2 years on-the-job training)'.[3]

However, the Australian skill migrant entry process for unlicensed and licensed trades requires a longer duration of on-the-job training for the definition of a Skill Level 3 vocational skill. The migration regime requirement is for at least three years employment experience in that occupation with relevant formal training or, if without formal training, five years employment experience in that occupation. The migrant entry requirements also include a skills assessment process. This compares the national training standards of the migrant's country of training with the range of competencies required for a trade certificate for that occupation in Australia.[4]

This paper makes use of both the Fijian TVET pathways and Australian migration regime's definitions of middle-skill to explore the skills stock of the occupations with the largest number

[3] See Australian Government Labour Market information Portal -Skill Level projections – five years to November 2025 (Excel) (24.5KB).

[4] See VETASSESS Trade Occupations, Skills Assessment for Migration. See Fact Sheet for a trade occupation and the Stage 2 Assessment Guide.

of job holders.

Three VET pathways in Fiji

These three different pathways to vocational qualifications exist in Fiji (see ADB and ILO 2015, pp 47-57, Maglen, Weston Hall and Rokovunisei 2014, pp 55-89). The focus of the following analysis is to identify the stock of trade occupations by taking into account the share of jobholders in the occupation with different levels of education including a VET qualification.

As noted above, they may want to require their workers to have VET qualifications to meet government requirements or the market expectations that their workers are qualified to do the job they are asked to do. As well as government regulation, Alternatively, employers may simply decide to hire workers with little or no prior training, and either train them on the job or just hope they will learn what to do by doing what they are directed to do.

Fiji's two education-based pathways

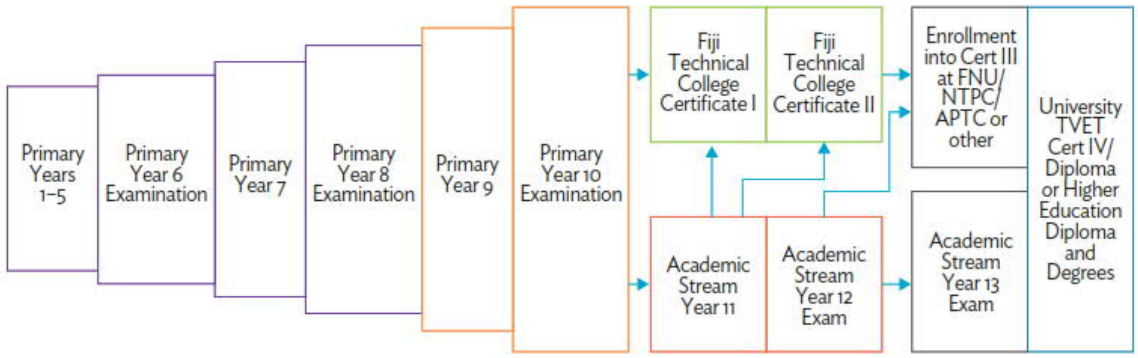
The first pathway follows completion of lower secondary education. The Basic Employment Skills Training (BEST) Program introduced TVET into the upper secondary education system for Years 11, 12 and 13 alongside the normal academic secondary school curriculum ((ADB and ILO 2015, p 54). Students complete nine one-week modules, one per term, over three years, to complete a Level 2 qualification in one of 14 trades (Maglen, Weston Hall and Rokovunisei 2014, p 63).[5] Some 48 upper secondary schools offered vocational training programs under a franchise from the Ministry of Education or the Fiji National University (FNU) (ADB and ILO 2015, p 51).

The second pathway consists of 14 vocational programs delivered by 10 technical colleges formed in 2014 for students who had completed lower secondary school. Most of these vocational programs were based on previous curricula and offered certificates 1 and 2. The technical colleges aimed to attract school dropouts and school leavers and to improve the quality of TVET training in upper secondary education system (ADB and ILO 2015, pp 48-49).

The graduates of the technical colleges and those completing the academic stream in upper secondary education system can then proceed to enrolling in Certificate III courses and above at the post-secondary TVET institutions such as the Fiji National University and the APTC, or other TVET providers. The available TVET qualifications range from Certificate 3 to advanced diplomas. Figure 3.1, (p 39) from the ADB and ILO report Creating Quality Jobs shows this education pathway.

[5] The 14 BEST trades covered: automotive, electrical, electronics, industrial automation, refrigeration and air conditioning, welding and fabrication, block laying and tiling, plumbing, furniture construction, carpentry, CAD, seafaring, clothes design, and baking and patisserie.

Figure 3.1: Pathways through Primary and Secondary School



Note: The Ministry of Education reviewed its policy in 2015 to allow students completing Year 12 to also enter into vocational programs offering Certificates I and II.
APTC = Australia–Pacific Technical College, CERT = certificate, FNU = Fiji National University, NTPC = National Training Productivity Centre, TVET = technical and vocational education and training.
Source: Fiji National University. Technical and Vocational Education and Training Division.

Apprenticeships as an employment-based pathway

The third pathway to a vocational qualification in Fiji is via the National Apprenticeship Scheme, which has operated since 1963. This pathway is notably different to the other two pathways because it is employment-based, with a combination of formal classroom training and learning on-the-job as a productive employee. The number of apprentices is limited because an apprenticeship can only be offered by an employer in a limited range of occupations that have an agreed structured training program tied to employment.

The National Apprenticeship Scheme includes 22 trades and five technician training programmes.[6] In March 2021, 35 companies had taken on 275 apprentices who are registered in 20 different trades. Some 49 new apprentices had start by March 2021 and it was hoped that a further 150 apprentices would also commence during 2021.[7] The duration of apprenticeship training ranges from three to four years, depending on the trade. The requirements for becoming an apprentice are to be 18 years of age and above and have at least a pass in Year 12 (English 50%).[8]

3. Fiji's Labour Force

Fiji has a labour force estimated by the census to be 356,000 people in 2017. However, if only those who earn an income are counted, excluding subsistence farmers and those working for family or the community without pay, the number is some 263,000, based on the 2015-16 EUS results (Fiji BoS 2017, p 1). The number of wage and salary earners is difficult to ascertain. One estimate for 2015-2016 is 199,515 (Fiji BoS and ILO 2018, Table 5.1, Reserve Bank of Fiji 2019a, Table 63). An earlier Bureau of Statistics report on the EUS 2015-16 gives a figure of 170,124 formal sector jobs (Fiji BoS 2017, Table 2.0). This is the basis for the statistics presented in Figure 2 below. Background information on Fiji's population and basic statistics on the labour

[6] The Fiji Country Report on Research into the Financing of Technical and Vocational Education and Training (TVET) in the Pacific (2014) lists the 22 trade training programmes as follows: aircraft maintenance, automotive electrical, automotive mechanical, boiler making, carpentry, cook, electrical fitter, mechanic, electronics fitting and machining, heavy commercial vehicle mechanic, heavy mobile plant mechanic, industrial sewing machine mechanic, joinery and cabinet making, marine engineering, navigation and seamanship, panel beating, printing, refrigeration and air-conditioning, saw doctor, shipwright, welding and fabrication. Only five technician training programmes are listed: automotive engineering, electrical engineering, mechanical engineering, plant engineering and telecommunication engineering. Leo Maglen, Mark Weston Wall, & Manaini Rokovunisei, 2014, p 61-62

[7] National Training and Productivity Centre, 2021, Newsletter Issue 2, March, p 2.

[8] National Training and Productivity Centre, 2021, Newsletter Issue 1, p 3

market can be found in Attachment 1 to this report.

Employment in Fiji's formal economy

Employment numbers in each of Fiji's main industry sectors are presented in Figure 2 below, based on the 2015-16 Employment and Unemployment Survey (EUS). The main private sector groupings are as follows. The wholesale & retail trade sector has the most wage earners with close to 33,000. Manufacturing is the second most important sector with 18,671 employees, followed by accommodation & food service with 16,702, transportation & storage with 12,730 employees and construction with 12,590 employees. Also important are the administrative & support services sector with 8,166 employees and the agriculture, forestry & fishing sector, with 6,848 paid employees.

Figure 2: Formal employment in Fiji's main industry sectors, 2015-16

Source: Fiji Bureau of Statistics Release No 98, 2017, Table 2.0

Over a six-year period, there has been very little growth over time in lower skilled 'wage' jobs (ie paid on a weekly basis) but significant growth in higher skilled 'salaried' employment (ie paid on a monthly basis). Between 2010-11 and 2015-16, the number of formal sector wage jobs only increased by only 1,167 from 129,412 to 130,339. This includes a decrease of 1,798 jobs for male wage earners but an increase of 2,966 for female wage earners (Fiji BoS and ILO 2018, Table 5.1). Salaried jobs, however, increased by 20,734 from 48,201 to 68,935 jobs, with broadly equal numbers for male and female salary earners (Fiji BoS and ILO 2018, Table 5.1).

The number of employers increased from 4,106 in 2010-11 to 5,645 in 2015-16, with female employers increasing their numbers (893) more than male employers (646) (Fiji BoS and ILO 2018, Table 5.1). The informal sector lost jobs during the same period. The number of self-employed fell over the five years from 59,861 to 44,863, a loss of 37,406 informal sector jobs (Fiji BoS and ILO 2018, Table 5.1).

An overview of employment by industry group

Occupation and industry data from census and large sample surveys are usually or only presented in a highly aggregated form. Table 2 shows the broad picture of Fiji's formal sector workforce by nine major occupation groups and three broad industry sectors, using the results of the 2015-2016 EUS. The following sections look deeper into the available data to provide a more detailed picture of the stock of Fiji's middle-skills base.

Table 1: Formal sector employment by major occupation and broad industry group

Major Occupation Groups	Total			
	Total	Agricul-ture	Industry	Service
Managers	13,382	179	1,850	11,354
Professionals	25,997	223	1,599	24,175
Technicians and Associate Professionals	15,095	201	2,246	12,648
Clerical Support	21,392	181	2,742	18,469
Services and Sales	34,526	1,898	1,932	30,696
Skilled Agricultural, Forestry and Fishery	4,720	1,227	764	2,729
Craft and Related Trades	22,427	294	13,696	8,436
Plant and Machine Operators and Assemblers	17,090	780	5,307	11,003
Elementary Occupations	15,496	1,865	5,706	7,924
Total	**170,124**	**6,848**	**35,842**	**127,434**
Percent	**100.0**	**4.0**	**21.1**	**74.9**

Note: Totals may not add up due to rounding errors.

Source: Fiji Bureau of Statistics, 2017, 2015-16 Employment and Unemployment Survey Release 2: Money Work, Formal and Informal Sector Employment, FBoS Release No 98, 29 December, Table 4.0

4. Identifying Fiji's stock of middle-skill occupations

As noted above, large sample surveys in an economy such as Fiji's with a large formal sector can generate enough data on occupations to provide reliable data on key middle-skill occupations. These data provide an important starting point for any skills analysis of a country skills pool.

Using EUS data, the skills stock refers to a snapshot of the number of workers in their main occupation engaged in economic activity over the previous 12 months. It also includes information on the proportion in each skills-based occupation with post-school qualifications. As also noted above, the preferred level of detail for a skills analysis of occupations is the four-digit ISCO code. It is at this level that training providers can see which occupation a specific qualification is aimed at. To be of value, this snapshot needs to be based on recent data. However, the earlier survey results help to confirm or modify the results of the most recent survey.

Table 2: The number of jobholders in mid-skill occupations and the distribution of their attained education level, per cent, Fiji, 2015-2016

Fiji code	Four-digit occupation	Below Form 4	Form 4 & 5	Certificate Fiji School Leaving	University entrance	Certificate/Diploma[a]	Total	N
7115	Building Carpenter, Carpenter, Joiner	43.2	25.0	14.7	3.5	13.6	100	11,029
7232	Automotive Mechanic	28.1	31.5	7.9	0.8	31.7	100	4,187
7128	Electrician, electrician supervisor	3.7	7.8	12.5	6.0	70.0	100	2,253
5123	Chef	8.7	12.2	23.4	4.1	51.6	100	2,013
7213	Welder	17.2	25.1	11.2	0.0	46.4	100	1,778
7127	Plumber & pipe fitter	16.7	14.0	17.5	3.4	48.4	100	1,180
7434	Tailor	15.0	40.8	34.7	2.4	7.0	100	1,083
7413	Baker & Pastry chef	12.8	16.0	26.0	10.0	35.2	100	1,055
7234	Fitter and mechanic	10.8	18.5	18.5	15.0	55.7	100	1,019
5123	Cook	18.0	26.8	47.7	0.0	7.5	100	949

Source: Fiji, 2015-2016 EUS

Identifying the size of key middle-skill occupations, for 2015-2016 and 2010-2011

Table 2 above presents a listing of Fiji's main middle-skill occupations from the 2015-2016 EUS results, ranked by the number of workers saying this is their main occupation. The table also provides data on the education profile of the job incumbents in each of the listed occupations.

Carpenters, including building carpenters, and joiners, are the largest middle-skill trade occupation, with an estimated 11,029 workers stating it is their main occupation. This number compares with an estimated total of 10,772 carpenters recorded in the 2010-11 EUS, showing a slight increase in numbers. More importantly, however, the closeness of the two numbers confirms that the sample estimates reflect the reality on the ground.

Automotive mechanics account for the next largest mid-skill occupation group, with an estimated 4,187 workers. This compares with the 2010-11 EUS results of an estimated 4,952 listed as a range of mechanics, not just automotive.

Cook and chefs, if combined as they are in the Fiji Occupational Code, account for 2,962 job holders, third in importance after automotive mechanics. The 2010-2011 EUS count for this occupation was similar at 3,070 jobholders. However, the two job titles are reported separately because they have different education profiles, discussed below.

The number of electricians is an estimated 2,253. This compares with an estimated number of 2,141 in 2010-2011 EUS. Chefs and cooks combined account for an estimated 2,961 workers,

which is very close to the estimated 3,070 workers in this occupation recorded in the 2010-11 EUS.

Next in size are welders with 1,778 workers in this occupation, compared with an estimated 1,763 workers recorded in the 2010-2011 EUS. Tailors also are a significant craft occupation, with an estimated 1,083 workers, compared with an estimated 1,103 tailors in 2010-2011. Baker and pastry chef both combined account for an estimated 1,055 workers in those occupations. In 2010-2011, this combined occupation grouping had 1,093 workers.

The occupation of fitter and mechanic covering fitter machinists, diesel fitters and heavy vehicle mechanics and other related skills sets has 1,019 job holders. This compares with 451 recorded for this occupation in 2010-2011.

The lack of post-school qualifications in key occupations

Table 3 below shows the proportion of workers in each main trade occupation with post-school vocational or technical training. The 2015-2016 EUS not only asked respondents for the highest level of education they had attained. Respondents who had completed a post-school qualification of a certificate and above, were also asked what they considered was the most important sort of training they had received, with nine options listed including vocational/technical.[9]

Merely working as a carpenter or other middle-skill occupation is not sufficient to identify the underlying skills stock. Those with little education may be carpenters working in the informal sector, using skills that are most likely to be basic.

Table 3: Number and proportion of the main trade occupations with post-school vocational/technical training, 2025-2016

Fiji code	Main occupation	Vocational/ technical training	Total	Per cent with post school TVET training
7234	Fitter and mechanic	364	1,057	34.4
7128	Electrician	677	2,146	31.5
7127	Plumber	489	1,595	30.6
7213	Welder	446	1,778	25.1
7232	Automotive mechanic	796	4,060	19.6
7434	Tailor	182	1,042	17.4
7214	Fabricator, metal etc	170	1,036	16.4
7132	Painter	87	756	11.5
7217	Diver	65	677	9.6
7115	Carpenter	995	11,542	8.6
7412	Butcher	34	516	6.6
7435	Garment cutter		467	0

[9] The other options listed were teacher training, nursing and mid-wifery, religious training, IT training tourism-related training, caregiving training, health care training, and sports training.

Table 2 above shows that nearly half of the self-identified carpenters had below Form 4 education. Only 13.6 had a post-school certificate or diploma. However, Table 3 above shows that only 8.6 per cent of carpenters had post-school vocational/technical training. This means that in 2015-2016 only 995 carpenters had post-school vocational or technical training.

The importance of different education levels applies to chefs and cooks. While half of chefs (52 percent) have a post-school qualification, only 8 per cent of cooks do. But only 25 per cent of chefs claim they have post-school vocational or technical training.

Table 2 shows that fitter and mechanic occupation covering fitter machinists, diesel fitters and heavy vehicle mechanics and other related skills sets has over half of its job holders with a post-school qualification (56 per cent) but only a third (34 per cent) claim they have received post-school vocational or technical training.

Two of the trade occupations with the highest share of jobholders with post-school vocational/technical training are what in Australia and New Zealand are called the licensed trades: electricians and plumbers.

A more precise identification of two of these licensed trades shows that 70 per cent of electricians have a post-school qualification but only half of plumbers (48 per cent) are so qualified. However, only one-in-three electricians (32 per cent) and three-in-ten plumbers (30 per cent) say they have post-school vocational training.

The EUS shows that there are few refrigeration and air conditioning (RAC) mechanics. The main occupation for work related to air conditioning and refrigeration is at the technician level. Of the 634 workers in this occupation, 84 per cent have a post-school qualification. However, only 38 per cent said they had post-school vocational/technical training.

Implications

At least four implications can be identified from these findings. First, the above analysis of the detailed occupation data from the 2015-2016 EUS, supplemented by reference to the same occupations reported in the 2010-2011 EUS, shows it is possible to identify the domestic stock of the largest middle-skill occupations for Fiji. The consistent results for the stock of the largest middle occupations shows the total number of formal and informal sector jobs for these occupations.

Second, there is considerable scope for skills upgrading, given the low proportion of jobholders in each major middle-skill occupation with a post-school VET qualification.

Third, the scope for skills upgrading by, for example, undertaking a qualification based on Australian or New Zealand competency standards is limited. This is because many job incumbents will not have sufficient basic education to be accepted for a course at APTC or an internationally accredited course at FNU.

Fourth, there may not be a strong desire by job incumbents to upgrade their skills, nor a strong employer demand for workers to have higher skill level for the job they are doing. The 2015-16 EUS asked respondents whether ‘in their opinion to what extent does your educational qualification correspond to the work you perform’. Of the 94 per cent who responded for the following occupations, between 74 and 96 believed that their education qualification was adequate. Only between 2 and 13 per cent said their education qualification was insufficient. The job holders more likely to say their qualification was insufficient were plumbers (13 per cent), building carpenters (12 per cent), automotive mechanics (11 per cent).

Table 4: Worker assessment of the adequacy of their middle-skill occupation: response to the question - 'in their opinion to what extent does your educational qualification correspond to the work you perform', per cent, EUS 2015-2016

Fiji ISCO code	Main occupation	Much higher	Adequate	Insufficient	Does not correspond	Total	N
5123	Cook	0	96	0	4	100	844
	Chef	7	80	8	5	100	1,790
7115	Carpenter	1	82	9	8	100	6,868
	Building Carpenter	0	85	12	3	100	1,048
7127	Plumber	13	74	13	0	100	1,032
7128	Electrician	6	86	2	5	100	1905
7232	Automotive Mechanic	1	82	11	6	100	3,838
7234	Total Fitter Mechanic	8	88	0	4	100	934

5. Different skill levels require different education levels

As noted above, a high proportion of workers in nearly all of the above middle-skill occupations believe their education qualification is adequate. All except one occupation, plumbers, have 80 or more per cent saying so. However, we also know from Table 2 that the workers' attained education level by middle-skill occupation varies greatly from minimal to a post-school qualification. By looking at how a worker's assessment of the adequacy of their educational qualification varies according to their level of education, it is possible to identify the demand for different skill levels within the one occupation.[10]

Carpenters' assessment of the adequacy of their education qualification

Table 5 below shows the responses of workers by education level on the adequacy of their education qualification who listed their job as simply 'carpenter'. This is the largest middle-skill trade occupation with enough to show the differences in response by the jobholder's broad education level.

The results reported in Table 5 suggest two distinct patterns of response by education level. Carpenters with Form 4 & 5 and those with a post-school qualification both have high proportions (95 and 96 per cent respectively) saying their educational qualifications are adequate. However, carpenters with less than Form 4 education, only 73 per cent say that their level of education is adequate for the job they are doing. Similarly, those with Form 6 or Form 7 also are less likely to say (80 per cent) they have an adequate education level.

[10] The idea for the analysis that follows comes from a 2003 analysis of Australian data on the education levels of tradesmen. See Elizabeth Webster & Kelly Jarvis (2003) 'The Occupational Career Paths of Australian Tradesmen', Labour & Industry: a journal of the social and economic relations of work, 14:2, 61-81, DOI: 10.1080/10301763.2003.10669288

Table 5: Carpenters' assessment of the adequacy of their middle-skill occupation by four broad education levels: response to the question - 'in their opinion to what extent does your educational qualification correspond to the work you perform', per cent, EUS 2015-2016

Carpenter only	Much higher	Adequate	Insufficient	Does not correspond	Total	N
Below Form 4	2.0	73.0	14.0	11.0	100	3,159
Form 4 & 5	0.0	95.3	2.1	2.6	100	1,553
Fiji School Leaving & Form VII	0.0	80.2	8.9	10.9	100	1,217
Post school Qual	0.0	96.4	3.6	0.0	100	939

These results suggest that there are varying types of carpentry work that make use of skill levels requiring different levels of education. For simplicity purposes, one stream of work could be called basic carpentry skills, which can be learned on the job. Most of the carpenters with Form 5 and below are likely to be employed in this type of work.

In this basic skills stream, nearly all of those with Form 4 & 5 (95 per cent) see themselves as having the education level needed to do the work they are doing. But carpenters with an education level below Form 4 are more likely to say that their education level is insufficient (14 per cent). However, it is important to note that most carpenters doing work that requires only basic skills think they have an adequate education level.

A second stream of carpentry work requires skills that are beyond basic skills, requiring levels of literacy and numeracy that enable the carpenter to read plans and make calculations. Carpenters with Form 6 or 7 are more likely than those with carpenters with post-school qualifications to say they have an insufficient level of education (11 per cent compared with 4 per cent).

The different skill levels of chefs and cooks

Table 4 also showed that jobholders in the closely related occupations of chefs and cooks too have widely different perceptions of the adequacy of their educational qualifications. Table 2 showed that while half of the chefs (52 per cent) had a post-school qualification, less than one in ten cooks had the same qualification level (8 per cent).

Table 6: Cooks and chefs' assessments of the adequacy of their middle-skill occupation by four broad education levels: response to the question - 'in their opinion to what extent does your educational qualification correspond to the work you perform', per cent, EUS 2015-2016

	Much higher	Adequate	Insufficient	Does not correspond	Total	N
Cooks						
Below Form 4		100		0	100	108
Form 4 & 5		86		14	100	255
Fiji School Leaving & Form VII		100		0	100	411
Post school qualification		100		0	100	71
Chefs						
Below Form 4	18	60	22	0	100	174
Form 4 & 5		81	0	19	100	246
Fiji School Leaving & Form VII	15	66	9	11	100	414
Post school qualification	3	89	8	0	100	956

Table 6 shows that Cooks at most education levels thought their education qualifications were adequate. Chefs on the other hand, there is difference by education level. Four out of five chefs in the three lower levels of education believe that their education level is adequate or higher than needed. However, for those with a post-school qualification, nine out of ten thought this level of education was adequate.

These results suggest that cooks have an education level they think is adequate for the skills they need to do their work, which for the lower education levels can be considered basic skills.

For chefs, a large proportion in with lower education levels also think their education is adequate or better than needed. These chefs may also be only using basic skills in their job. However, for the chefs with secondary school completed and a post-school qualification, it is likely that their work involves higher level skills.

Jobholder perceptions of the adequacy of their education levels for their work provide important additional information about the nature of demand for different skill levels in these three occupations.

6. Conclusion

Jobholder perceptions of the adequacy of their education levels for their work provide important additional information about the nature of demand for different skill levels in the above two occupations of carpenter and cook/chef. Many workers in the two large middle skill occupations of carpenters and cooks have low education levels but are satisfied with their education qualifications. However, other workers in the same occupation have higher levels of education up to post-school qualifications.

The evidence presented above about the jobholders' assessment by education level of the adequacy of the education qualification levels suggests that many carpenters and cooks in Fiji are locked into a low-pay, low-skill equilibrium while a small number of jobholders have the qualifications suited to higher paid work. One effect of these differences in the education levels of jobholders in the same occupation is that the pool of workers with the skill level eligible for a work visa in Australia or New Zealand is much smaller than the numbers in middle-skill occupations may suggest.

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