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## Who is coming from Vanuatu to New Zealand under the new Recognised Seasonal Employer (RSE) Program?

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*Centre for Research  
and Analysis  
of Migration*

**CR<sub>e</sub>AM**

## Discussion Paper Series

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*David McKenzie, Pilar Garcia Martinez and L. Alan Winters*

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### **Non-Technical Abstract**

New Zealand's new Recognised Seasonal Employer (RSE) program allows workers from the Pacific Islands to come to New Zealand for up to seven months to work in the horticulture and viticulture industries. One of the explicit objectives of the program is to encourage economic development in the Pacific. In this paper we report on the results of a baseline survey taken in Vanuatu, which allows us to examine who wants to participate in the program, and who is selected amongst those interested. We find the main participants are males in their late 20s to early 40s, most of whom are married and have children. Most workers are subsistence farmers in Vanuatu and have not completed more than 10 years of schooling. Such workers would be unlikely to be accepted under existing migration channels. Nevertheless, we find RSE workers from Vanuatu to come from wealthier households, and have better English literacy and health than individuals not applying for the program. Lack of knowledge about the policy and the costs of applying appear to be the main barriers preventing poorer individuals applying.

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**Abstract**

New Zealand's new Recognised Seasonal Employer (RSE) program allows workers from the Pacific Islands to come to New Zealand for up to seven months to work in the horticulture and viticulture industries. One of the explicit objectives of the program is to encourage economic development in the Pacific. In this paper we report on the results of a baseline survey taken in Vanuatu, which allows us to examine who wants to participate in the program, and who is selected amongst those interested. We find the main participants are males in their late 20s to early 40s, most of whom are married and have children. Most workers are subsistence farmers in Vanuatu and have not completed more than 10 years of schooling. Such workers would be unlikely to be accepted under existing migration channels. Nevertheless, we find RSE workers from Vanuatu to come from wealthier households, and have better English literacy and health than individuals not applying for the program. Lack of knowledge about the policy and the costs of applying appear to be the main barriers preventing poorer individuals applying.

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## **1. INTRODUCTION**

Temporary migration has come to be regarded by many as a way of squaring the policy circle around international migration.<sup>1</sup> It apparently offers many of the benefits – such as relieving labour shortages in developed countries and aiding development in developing countries - with few of the perceived costs - such as permanent losses of talent in developing countries, and social stresses, fiscal costs and irreversibility in developed countries. Much ink has been spilt making this case and debating how best to design such systems. A notable feature of this debate, however, is that it has been almost wholly based on a priori reasoning or casual empiricism. There is almost no formal empirical evidence about what works in temporary migration schemes or why it works. This paper and its companions seek to fill this lacuna, by conducting a formal evaluation of New Zealand's newly created Recognised Seasonal Employers scheme, which aims to accept up to five thousand unskilled horticultural workers per year, the majority from the Pacific Forum States. This paper studies Vanuatu, the largest supplier of labour in the first year, to explore the developmental impacts which the scheme may have.

The RSE scheme has been based on previous experience and analysis, and contains many of the features that constitute current ideas of best practice in seasonal worker schemes. But that does not remove the need for an in-depth evaluation, which will both aid future fine-tuning (and possibly extension) in New Zealand and help other countries contemplating the introduction of similar schemes. Australia, under new Prime Minister Rudd, has just announced its own similar pilot scheme, which will also take workers from Vanuatu.

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<sup>1</sup> See, for example, Winters (2003), GCIM(2005), World Bank (2006a, b), Pritchett (2006).

The evaluation has several phases over several years designed to see who takes advantage of the scheme, how it affects them, and their families', economic decisions and outcomes and how it impacts on their communities and nation. The first step, which this paper describes, was a base-line survey conducted in late 2007 and early 2008, designed to record living standards prior to the introduction of the scheme, the knowledge and access that potential workers have to the scheme and the characteristics of those who seek to take it up. Respondents included workers who had been selected to go to New Zealand, those who aspired to do so but had not yet been selected and those who were not interested, along with their community leaders, recruitment agents and certain members of the Vanuatu government. The survey was conducted on three of Vanuatu's islands – Efate (where the capital, Port Vila is located), Tanna, and Ambrym. Subsequent surveys of both the workers and their families will allow us to identify the scheme's effects on the lives and prospects of the residents of Vanuatu in a formal and rigorous way.

The initial survey is useful mainly as a base-line for future analysis, but it also contains useful and interesting information in its own right. Ultimately the development impact of the program will depend in large part on who (and how many) of the Ni-Vanuatu participate. Our baseline survey allows us to detect early on the characteristics of the participants, and to start to infer whether any differences between them and non-participants are due to the differences in the decision to apply for the program, or to the selection process among applicants. Part of this is to see how broadly and precisely knowledge of the scheme has spread and whether its workers are drawn from among the poorer or better-off sections of society. We find the main participants in the program to be males in their late 20s to early 40s, who are literate in English, do not have schooling

beyond Form 4 (10 years of schooling), who are in relatively better health and drink kava or alcohol less frequently than non-participants.

## **2. THE RSE PROGRAM IN VANUATU**

Vanuatu is an archipelago of 83 islands located 1,750 kilometers east from Australia. It has a population of around 215,000. Purchasing power adjusted GDP per capita in 2005 was 3,225 (PPP US\$), compared to New Zealand's 24,996 (PPP US\$) (UNDP, 2007). Most is rural, with around 20% of the population living in the two urban centres of Port Vila (the capital with more than 30,000 people) and Luganville. Formerly known as the New Hebrides and administered under joint British-French jurisdiction, Vanuatu became independent in 1980. The inhabitants of Vanuatu, Ni-Vanuatu, are of Melanesian descent and form the vast majority (98.5%) of the population; collectively they speak about 110 different local languages, although the three official languages are Bislama (the most widely spoken), English and French. In common with much of Melanesia, Vanuatu has never been a country of emigrants; only around 1.5% of its population live abroad (World Bank, 2008).

### **2.1 The Recognised Seasonal Employer (RSE) program**

On 16 October 2006, the New Zealand Cabinet agreed to a temporary seasonal work policy called the Recognised Seasonal Employer (RSE) work policy which aims to match seasonal labour shortages in the New Zealand horticulture and viticulture industries with the excess supply of unskilled workers in some Pacific nations. One of the explicit objectives of the RSE is to “encourage economic development, regional integration and good governance within the Pacific, by allowing preferential access to

workers who are citizens of eligible Pacific countries” (New Zealand Department of Labour, 2007). All Pacific Forum countries (other than Fiji whose participation was suspended) are eligible for this scheme in principle, but five were selected for so-called kick-start status which entailed deliberate and expedited efforts to launch it: Kiribati, Samoa, Tonga, Tuvalu and Vanuatu.

The policy was launched on 30 April 2007, with a limit of 5,000 seasonal workers set each year. Predicated upon assumption that New Zealanders should still have preferred access to New Zealand job vacancies, the RSE scheme is based on a three step process: 1) employers in the horticulture and viticulture industries apply to become Recognised Seasonal Employers (RSEs) in New Zealand; 2) employers with RSE status obtain an Agreement to Recruit (ATR) which enables them to employ overseas workers if no New Zealanders are available; 3) workers with employment offers linked to an ATR apply for Seasonal Work Visas for a maximum of seven months (nine months for Kiribati and Tuvalu) per eleven month period. In subsequent years, subject to satisfactory performance and a continuing need for labour, employers’ RSE status will be extended and new Agreements to Recruit approved and previous seasonal workers may return to New Zealand. In Vanuatu individuals must be 21 years or older, and not hold a university level degree or other professional qualification, or work for the Government. Visa applicants must supply a passport, a temporary entry chest x-ray certificate (used to screen for tuberculosis), a medical certificate, a copy of their employment agreement with a Recognised Seasonal Employer, and their return air ticket. They are also required to meet a character requirement, which requires them not to have a criminal record and to not have been deported from any country.



Employers are required to pay for half of the return airfare between New Zealand and the worker's country of residence and comply with employment law in New Zealand. The "per hour" rate must be the typical rate a New Zealand citizen would be paid for equivalent work. Employers are also required to make available appropriate "pastoral care" for workers, including arranging suitable accommodation, internal transportation, access to personal banking services, provision of protective equipment, and opportunities for recreation and religious observance.<sup>2</sup> The minimum remuneration in employment agreements of six weeks or longer is the greater of 240 hours at the "per hour" rate regardless of the actual availability of work, and payment for an average of 30 hours per week at the "per hour" rate for the period worked.

The Inter-Agency Understanding between New Zealand and Vanuatu requires that all workers should attend a pre-departure orientation seminar before their departure to New Zealand, covering matters such as climate, clothing and footwear requirements, taxation, insurance, health and wellbeing, accident compensation, banking and remitting, budget advice and travel arrangements. Agents (or if direct recruitment, employers themselves) are responsible for the delivery of these seminars while the Vanuatu Department of Labour maintains an oversight role.<sup>3</sup>

## **2.2 How do New Zealand employers select Ni-Vanuatu workers?**

The inter-agency understanding between the New Zealand Department of Labour and the Vanuatu Ministry of Internal Affairs specifies two recruitment options for New Zealand employers to recruit from Vanuatu. The first option is to use a licensed agent to

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<sup>2</sup> See New Zealand Department of Labour (2007) for further details.

<sup>3</sup> By law the agent must inform the Vanuatu Department of Labour of the date and time of their pre-departure briefing so that the Department of Labour can participate and/or monitor.

undertake recruitment on their behalf. Agents are paid by the employer and are prohibited from seeking compensation from workers.<sup>4</sup> The second option is for the employer to recruit workers directly, after obtaining a permit from the Vanuatu Commissioner of Labour. In practice it is difficult to separate these two options completely, because even direct recruiters have made some use of agents.

Direct recruiting was carried out by one of the first and largest recruiters. Seasonal Solutions, which had employed 45 Ni-Vanuatu workers in early 2007 under a prior immigration policy<sup>5</sup>, recruited 230 workers to begin work in New Zealand in late October 2007. The 45 workers recruited in early 2007 were from the islands of Tanna and Ambrym. These workers were invited back, and those from Tanna were also asked to bring two others along to recruitment interviews. Seasonal Solutions had originally selected 15 workers from North Ambrym, and asked for 30 workers to come as part of this 230. Selection in North Ambrym was done through the Lolihor Development Council, an association of 12 villages in the area. The development council selected workers on the basis of their ability to work hard, listen and follow instructions, lack dependency on kava, cigarettes or alcohol, and ability to leave family behind as well as trying to select workers from each of the ‘extended families’ which make up the villages. These workers were expected to contribute to a community pool for a microcredit program for women upon return and a separate scholarship fund for education and training. Local advertising and contacts through licensed agents were also used by Seasonal Solutions to select other workers. The other large recruiter using direct

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<sup>4</sup> The fee charged by the agent who placed the second most workers was \$NZD100 per worker for new workers, and \$NZD50 for returnees, with bulk discounts possible for large numbers being recruited.

<sup>5</sup> These workers came to New Zealand under the Approval in Principle (AIP) policy, and were facilitated by the World Bank as a “pilot” of what may be feasible under the RSE.

recruiting was Big Toe, a “New Zealand based private sector organization with a focus on community development in Third World”, which served as a link between Vanuatu and employers in the Bay of Plenty region of New Zealand. Big Toe worked closely with World Vision in Vanuatu to target areas in Vanuatu with limited employment or income generating opportunities to recruit workers from. Tanna was identified as one such location, and some other smaller island groups, with the ‘shortfall’ of workers recruited from other areas, mainly Port Vila and its surrounding area.

Direct recruitment is facilitated by the Vanuatu Department of Labour (VDoL), which maintains a pool of about 1,000 ‘work ready’ workers from ‘walk ins’ who have registered directly with the VDoL and people who have registered following the ‘Road Show’ (community consultations) conducted by the Public Relations Officer in Vanuatu. These ‘work ready’ workers have all their papers in order, so that if an employer asks the VDoL for assistance, names and contact information may be given immediately from the pool. Employers then interview workers and VDoL does a final screening during the visa application process. If there is any remaining doubt about the worker’s background or character his or her community leader is asked for a final assessment on whether or not the person is fit to work in New Zealand.

As of April 2008, there were 22 licensed RSE agents in Vanuatu, with ten securing places for Ni-Vanuatu workers. Many of these agents have secured workers with Seasonal Solutions or Big Toe. One agent has placed workers directly with smaller seasonal employers, and has placed 272 workers in total. He requires potential workers to complete application forms, interviews them, and then checks their character and abilities by asking community leaders. Initially the performance of some agents has raised

concern, especially over the quality of their scrutiny of candidates, and there have been suggestions that in some cases, this might endanger the renewal of their licenses. For example, contrary to explicit intentions some groups of workers have been dispatched without a single adequate English speaker to handle their communication in New Zealand, and some workers have complained that, despite being explicitly forbidden, some agents have tried to charge an additional fee to workers for their services. Moreover, it seems that some agents have not had the capital and resources necessary to market their services and make themselves known in New Zealand.

The role of agents continues to evolve, and their worth in the second year remains to be seen. It is likely that many employers will re-employ workers from the first year, and ask trusted workers to recommend others from their villages. Along with direct recruiting from larger employers, this will limit the space available for agents to add value. The area where some agents are still likely to retain business is in recruiting for smaller employers, especially first-time employers. However, they will face competition from co-operatives such as Seasonal Solutions and Big Toe. We will continue to study the evolving role of agents in our follow-up work.

In general communities and community leaders have played a somewhat limited formal role in the selection process, with many applicants coming forward on their own initiative. This is particularly the case in urban areas, with a greater role for chiefs in deciding how many workers should go and who should go in rural areas. More direct community involvement occurred in employer recruitment of husbands and wives from the island of Epi, and community decision-making in Ambrym and some communities in Tanna. In most cases the employer doing direct recruiting has established a geographic

area to work with, based on advice, connections, or affinity with particular islands, and then engaged the communities there, with the communities nominating candidates who then go through the employer's selection process.

As of May 22, 2008, 1,698 Ni-Vanuatu workers had been approved to come to New Zealand through the RSE.<sup>6</sup> As of April 19, 2008, twenty-one different employers had recruited from Vanuatu, although this includes five employers where the recruitment was carried out by Big Toe. Agents had been involved in recruiting 1055 workers by April 2008, with 10 of the 22 licensed agents having succeeded in sending workers. The first employers recruited no women: Between October 2007 and January 2008, when the first 321 workers arrived in New Zealand, all were male. However, between one quarter and one third of those arriving between February and May 2008 were female. Out of the 1,698 workers recruited by May 22, 22.3 percent (379 workers) were female. A final point of interest from the official statistics is that only a minority of workers were recruited for the full seven months: as of May 2008, approximately 28 percent of RSE workers had been recruited for seven months, 28 percent for six months, 16 percent for four to four and a half months, and the remaining 27 percent for periods of two and a half to three and a half months.

### **3. SURVEY DATA AND DETERMINANTS OF MIGRATION**

#### **3.1 Survey design**

One of the objectives of the RSE is to improve development outcomes within the sending countries. In order to evaluate the impact of the RSE program on Vanuatu, the

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<sup>6</sup> Official statistics were supplied by the New Zealand Department of Labour and the Vanuatu Department of Labour.

World Bank partnered with the New Zealand Department of Labour and the University of Waikato, New Zealand to design a research study. The aim of the study is to survey households and individuals in Vanuatu before RSE workers leave for New Zealand, survey these same households once RSE workers have been in New Zealand for three to six months, and then survey the households again upon return of the workers. The study aims to survey participants in the RSE, individuals and households wishing to participate in the RSE who have not been selected, and individuals not wanting to apply for the RSE. At the village or community level, the survey also aimed to cover both communities with households participating in the RSE, and communities where no household had an RSE worker. In addition to a household survey, up to three community leaders (chiefs, church leaders, and teachers or youth representatives) in each community were administered a short community survey. This paper is based on the baseline survey, conducted between 9 October 2007 and 2 April 2008.

Several factors complicated the design of the survey. The most important was that approvals of ATRs to recruit in Vanuatu occurred on a rolling basis, as did their recruitment of workers. Once workers were selected for recruitment, there was often only two to three weeks before they left for New Zealand. The RSE program as a whole had a quota of 5,000 workers for the first year, with an effort to ensure at least half came from Pacific Island countries. However, there were no explicit quotas across kick-start nations (and the only implicit quota seems to have been an effort to ensure each kick-start nation got to send *some* workers). Therefore it was not possible *ex ante* to know how many workers from Vanuatu would participate in the RSE, or when they would be recruited.

Within Vanuatu, it was also not clear from which islands or communities RSE workers would be drawn.

Vanuatu's rugged geography and high transportation costs made it infeasible to survey in all islands, and so a decision was made to limit the evaluation to three islands where we believed there was a high ex ante chance of workers coming from. These islands were Efate (population 50,000), where the capital city Port Vila is located; and Ambrym (population 10,000) and Tanna (population 20,000), where workers from the initial Seasonal Solutions pilot had been drawn. The sample contains 190 households from Ambrym, 106 from Tanna, and 176 from Port Vila and the rest of Efate.

Interviewing began in early October 2007 with workers recruited by Seasonal Solutions, with interviewing taking place after the briefing sessions organized by Seasonal Solutions and prior to the workers departure at the airport. Interviewing in Ambrym began in November 2007. The sample was selected based on the proportion of population in the three Area Councils (North, West and South East) and within these areas villages were selected at random to represent the whole North region. The North area was expected to have higher numbers of RSE migrants than the other areas because of the prior participation of communities in this area in the pilot. In the West, communities were selected based on their proximity to the main settlement on the premise that RSE rates would be higher near this main centre and would decrease with distance. Communities in the remote South East were selected based on economic activity (for instance, a community with kava farming was selected because leaders have stated that they have sufficient income from kava and do not need schemes like RSE) and

remoteness (a small inland village was selected to see if they were aware of the RSE scheme). Within communities, households were selected at random.

Interviewing in Tanna occurred in November and December 2007. The Tanna field manager visited three of the major RSE agents operating in the island, who gave lists of all RSE workers and applicants, which allowed identification of communities and individuals with RSE workers. The island was divided into six areas (West, Middle Bush, North, South West, South, and Whitesands) for surveying of communities and households without RSE workers. The lower cost and higher population in Efate and Port Vila, led to staggered sampling from this area, with the last sampling of Big Toe workers occurring in late March and early April 2008. Sample locations in Efate were selected using the location of households from the pre-departure interviews, geographic location in rural areas and areas representative of different socio economic groups in Port Vila.

### **3.2 Classification of Households and Individuals**

We follow common survey practice in defining a *household* as a group of people sharing expenses and living together. Mean household size is 4.7 individuals. Sixty-four percent of households in our sample are nuclear households, consisting of a head, spouse, and children only. The majority of the remaining households also contain either a parent or sibling of the household head.

We classify households and individuals into three groups according to the extent of their involvement in the RSE program. An individual is classified as a *Selected RSE Worker* if he or she has been selected to work in New Zealand under the RSE program. At the time of interview, 60 percent of the RSE Workers had just left for New Zealand,



while the remaining 40 percent were in Vanuatu getting ready to leave. An individual is classified as an *Unselected RSE Applicant* if he or she has tried to participate in the RSE program, but has not yet been selected as a worker. Subsequent survey rounds will identify the unselected applicants who went on to become RSE workers. Together the selected RSE workers and unselected RSE applicants form the group of *RSE Applicants*. Finally, an individual is classified as a *RSE Non-applicant* if he or she has not tried to participate in the RSE program. A household is defined as a RSE Selected Worker household if at least one member is a Selected RSE Worker, a RSE Unselected Applicant household if at least one member is an Unselected RSE Applicant and no members are Selected RSE Workers, and as a RSE Non-applicant household if everyone in the household is a RSE Non-applicant.

Under these definitions, our sample of 472 households contains 170 RSE Selected Worker households, 97 RSE Unselected Applicant households, and 205 RSE Non-applicant households, and the 2,229 individuals consist of 208 Selected RSE Workers, 118 Unselected RSE Applicants, and 1,903 RSE Non-applicants. Table 1 summarizes household-level characteristics and Table 2 individual-level characteristics across the three groups and reports the results of two-sample t-tests for the difference in means.

### **3.3 Differences between RSE Workers, Unselected Applicants, and Non-applicants**

Table 1 shows that the RSE Selected Worker households tend to be better off in terms of infrastructure, household durable assets<sup>7</sup>, weekly food expenditure, total monthly expenditure per capita, and household income compared to the RSE Unselected Applicant and Non-applicant households. Total household income is measured as the sum

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<sup>7</sup> The asset index is the first principal component of indicators of ownership of 24 durable goods, such as televisions, radios, cameras, kerosene cookers, generators, canoes, motors, bicycles, and forestry equipment. It is scaled to have mean zero.

of cash income from agricultural sales and from wage and salary work; cash income from pensions, interest, and rents; the value of food produced by the household for its own consumption; and net domestic transfers. Mean weekly income per capita in the RSE Selected Worker households is 3,694 Vatu (approximately USD40 or NZD52), compared to 2,458 Vatu in the RSE Unselected Applicant sample and 2,729 Vatu in the RSE Non-applicant sample.<sup>8</sup> Mean (median) monthly total expenditure per capita is 8,852 Vatu (5,030 Vatu) in the RSE Selected Worker households, almost twice that of the 4,732 (2,250) in the RSE Non-applicant sample. Only 28 percent of the RSE Selected Worker households have piped water, 22 percent have a flush toilet, 44 percent have electric lighting, and 38 percent have a telephone. RSE Selected Worker households have somewhat higher incomes from own production. A surprisingly high share of households have bank accounts: 62 percent of RSE Selected Worker households compared to 37 percent of RSE Non-applicant households. It is likely that most of the higher bank account usage among RSE Selected Worker households is the result of households just obtaining bank accounts prior to leaving for New Zealand. Indeed our fieldwork team had difficulty interviewing some Selected RSE workers after the pre-departure training as many had gone straight to open bank accounts after receiving the pre-departure training.

The oldest Selected RSE worker in our sample is 58, while 21 is the lower age limit for participation in the RSE. Figure 1 plots the age distribution of Selected RSE workers in our sample. It is not the case that the workers are mainly young men in their 20's. The median age is 35, and there are almost as many workers in their 40's as in their 20's. A similar pattern is seen in Figure 2, which plots the age distribution of all 1698

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<sup>8</sup> 1USD = 91.80 Vatu, 1NZD = 71.3 Vatu (April 2008). Source: [www.xe.com/ucc](http://www.xe.com/ucc).

RSE workers approved by May 22, 2008. The median age for the overall sample is 33, and only 18 percent are aged below 25, whereas 25 percent are over 40.

We compare 21 to 58 year olds by RSE status in Table 2. 82 percent of the Selected RSE workers in our sample (and 78 percent of all ni-Vanuatu RSE workers recruited by May 22, 2008) are male, and so we separate the non-applicant group into males and females. The mean RSE worker is 36 years old with 7.2 years of education. 78 percent of the workers are married, and 61 percent have children. Thus for the majority of workers, participation in the RSE program will involve leaving a spouse and children behind in Vanuatu while they work in New Zealand. 64 percent of the workers have primary schooling (6 years of education) or less, and only 6 percent have schooling beyond Form 4 (Year 10). Ninety percent claim to be literate in English.

The collection of data on RSE workers, unselected applicants and non-applicants allows us to make two interesting comparisons. Comparing the selected RSE workers with unselected RSE applicants gives us a handle on the selection process conducted by firms, agents and community leaders. Comparing all RSE applicants with the non-applicants, on the other hand, reveals information about the self-selection of potential RSE recruits. Taking the former first, we see that the RSE workers are significantly more likely to have worked or studied overseas before<sup>9</sup>, are more likely to be literate in English, less likely to have had a health complaint in the last 6 months, have worked more in the last week and are somewhat more likely to have ever had a paid job. These

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<sup>9</sup> The survey asked whether any household members had ever worked or studied abroad for one month or more, and if so, which country. Individuals recruited under the previous AIP policy would have had this experience. However, it also seems that some households which were interviewed just after their household member had left for New Zealand as part of the RSE reported yes to this question on the basis of the current RSE experience. We therefore believe this variable overstates the level of prior work experience abroad among the RSE worker group.

statistics suggest that the selection process is fairly accurate at identifying workers with better working histories and prospects in New Zealand. Interestingly, however, the two ‘character’ variables – consumption of kava and alcohol, and tobacco – do not differ between selected and not selected workers, but do differ between male applicants and male non-applicants – i.e. show signs of self-selection.

When we compare all applicants to non-applicants, we see some self-selection of both males and females. Males who apply for the RSE have higher English literacy than those who do not apply, are less likely to have drunk kava or alcohol in the last month than non-applicants. The small group of non-applicants who work for pay have higher hours worked and earnings than the group of applicants who work for pay. This is consistent with the view that those with the best earning opportunities in Vanuatu are less likely to apply (and with those with university level degrees and professional qualifications not being allowed to apply). Among females, we see those who apply are less likely to be married, are more literate in English, have higher schooling, more experience working for pay, and less health complaints than the non-applicants.

The natures of the two types of selection criteria – self and employer – are interesting in their own rights, but they will become critical in future rounds of this research for they will help to eliminate the biases commonly found in studies of the effects of migration. When we observe that migrant families do better, say, than non-migrant families, we do not know from that observation whether that is because they managed to migrate or because they wanted to migrate. In our sample, however, we hope to separate the two effects, the former by comparing workers with (non-selected) applicants, and the latter by comparing workers and applicants with non-applicants. The

study that makes this distinction most effectively is McKenzie, Gibson and Stillman (2006) where workers were selected by lottery from among the full set of applicants, which provides a very clean estimate of the effect of migration per se. In our case, by modeling the employers' selection process we hope to be able to construct comparable sub-samples of workers and (non-selected) applicants and from differences in their histories identify the effects of migration per se.

The differences in Tables 1 and 2 are unconditional differences. In Table 3 we further investigate the determinants of applying for the RSE, and of being selected conditional on applying, via probit estimation. These results allow us to see the marginal impact of each variable, controlling for the other variables present. Column 1 shows the results for applying for the RSE for the full sample of 21 to 58 year olds, while columns 2 and 3 separate the analysis by gender. The large gender difference continues to hold after controlling for other variables which might differ across genders and also influence the likelihood of applying for the RSE: males are 37 percentage points more likely to apply for the RSE than females. The likelihood of applying for the RSE is increasing and then decreasing with age: the turning point is at age 41. An individual is significantly more likely to apply if they are not married, are literate in English, do not have more than Form 4 schooling, have not had a health complaint in the last 6 months, do not drink kava or alcohol frequently, come from a smaller household and have a relative in New Zealand. There are more applicants among our Tanna sample than the samples from Ambrym and Efate/Port Vila. Most of these effects continue to hold when we look separately by gender. However, being married only reduces the likelihood of applying for women, and not men. Since there are far fewer female RSE applicants, we find fewer variables

significant in this case, and that having more than primary education, rather than English literacy, is significantly associated with being an applicant. Women from richer households (those with higher per capita income and more cattle) are less likely to apply.

Column 4 of Table 3 examines selection of workers among the group of RSE applicants in our sample, while column 5 considers selection among male applicants. There are too few female applicants and workers to consider selection separately among females. We see males are more likely to be selected than females, conditional on other observable characteristics. Those with relatives in New Zealand are more likely to be selected, while few applicants from Ambrym had been selected at the time of our survey there. Individuals from households with more assets are marginally more likely to be selected, as are males with lower schooling levels, and males who do not regularly consume kava or alcohol. The point estimate on English literacy is large and positive, but not statistically significant.

### **3.4 What Jobs were the RSE workers doing?**

Most households in Vanuatu engage in subsistence farming, and the RSE selected worker households are no exception. Ninety-nine percent of them produce their own food, with the mean (median) share of total income coming from own production equal to 51% (41%). Fifty-four percent of households also sell agricultural products in the market, although the mean (median) share of total income from agricultural sales is only 11% (0.5%). Combining own production and agricultural sales, we find that 65 percent of households earn at least half of their total income from agriculture, and 50 percent earn at least 90 percent of all their income from this source. Table 4 summarizes the main crops and meat products produced by RSE selected worker households for home consumption.

The most common crops are bananas, which 87 percent of households produce, coconuts (81%), island cabbage (73%), taro (67%), cassava (61%), and paw-paw (60%). These crops are completely different from the apples, pipfruit, and grapes that workers will work with in New Zealand, suggesting natural limitations to the extent to which some of the skills learned in New Zealand can be applied to home crop production.

Only 48 percent of the selected RSE workers have ever held a paid job before and only 39 percent worked in the first half of 2007, meaning that for many workers the seasonal worker program will be their first experience of working for an employer. Among those who worked in the first half of 2007, the most common jobs were cleaner (13% of those with wage jobs), retail sales worker (12%), builder or carpenter (12%), security (12%) and driver (10%). Most of these jobs have highly variable hours, with 90 percent of workers saying their hours vary a lot month by month. Approximately 10 percent of the selected RSE worker group with wage jobs work in white collar jobs, such as managers, accountants, and teachers. Workers were asked whether the job they currently have would be available in 7 months time. Only 37 percent said yes, 45 percent said no, and the remaining 18 percent weren't sure. When asked what they planned on doing upon return from the RSE, only 21 percent of wage workers planned to return to their old job, and 57 percent said they would look for a new job.

#### **4. KNOWLEDGE OF THE RSE**

The RSE program attracted a significant amount of media attention in Vanuatu, with the local newspapers and radio covering the launch of the program, and the recruiting efforts of the large New Zealand employers. The Vanuatu Department of

Labour “RSE Road Show” conducted seminars on the islands of Tanna, Malekula, Santo, Torres, and Efate, with support from the New Zealand Ministry of Foreign Affairs and Trade. However, many communities are geographically isolated: only 17 percent of the communities in our sample receive a daily newspaper<sup>10</sup>, and only 41 percent receive weekly mail. It is therefore of interest to see the extent to which RSE applicants and non-applicants have the correct information about the RSE with which to make an informed decision, and to see the main sources of this information.

The main sources of information used by RSE selected workers were family or friends (68%), village leaders (51%), radio (49%), newspapers (33%), an NGO such as World Vision (28%), the Vanuatu government (26%), and television (23%). Less than 5% received information from family or friends in New Zealand, and only 1% obtained information on the internet.

Table 5 reports on the knowledge which selected RSE workers, unselected RSE applicants, non-applicants, and community leaders have on the RSE program. They were first asked whether they had heard about the possibility of going to New Zealand to work under the RSE program, and then conditional on answering yes, were asked about specific conditions of the program. Both RSE non-applicants and community leaders in communities without selected RSE workers have low knowledge of the RSE. Only 27 percent of the non-applicants and 39 percent of the community leaders in non-RSE communities had even heard of the RSE. Knowledge of most conditions for those who have heard of the RSE is quite good. Most know that workers can return in subsequent years, that they can not apply for permanent residence while in New Zealand, and that the

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<sup>10</sup> There is only one daily paper, which is published in Port Vila and is not distributed widely to the other islands.



spouse and children can not accompany the worker. The majority know that the maximum number of months a RSE worker can work in New Zealand is seven, although three months and six months were also somewhat common answers. The one question for which knowledge is low was a question which asked about the obligations of employers to pay for half the airfare, pay for at least 240 hours of work, and ensure that hours of work average at least 30 hours per week. Most knew about the airfare requirement, but not the conditions on hours of work.

## **5. THE APPLICATION AND SELECTION PROCESS IN PRACTICE**

### **5.1 Application**

The survey also provides information on how applicants, non-applicants, and community leaders view the RSE program operating in practice. RSE applicants were first asked an open-ended question about what they considered the most difficult and burdensome part of applying. The main answers given were the time and cost in applying for a passport and visa, the time and cost of the medical check-up, and difficulties with English language in filling out the application forms. Only three individuals gave answers relating to the recruiting itself.

Community leaders were asked whether they thought the selection process was suitable, and the reasons why or why not. Two-thirds believed it was, with the reasons given including the fact that anyone can apply and selection is fair, with no favoritism, and that the selection criteria do not depend on qualifications. Among those who didn't think the selection criteria were suitable or didn't know whether it was, the main qualm was that women weren't having the opportunity to participate to the same extent as men.

Community leaders in communities without RSE workers said that the main reasons the community did not have a RSE worker was that people didn't know about the system, or that they couldn't afford the costs of applying.

Table 6 reports the different costs experienced by selected RSE workers in applying for the RSE. The largest cost is the airfare to New Zealand, reported as costing 50,000 to 64,000 Vatu. This appears to be the full cost of the airfare – of which half is paid by the employer. The second largest expenses are the costs of obtaining a passport and visa. The official visa fee is 14,760 Vatu, but workers using agents were sometimes charged more. A passport costs 5,000 Vatu, which is higher than the median world passport price of \$38USD (McKenzie, 2007). Some workers paid 7,000 Vatu to get the “urgent” passport in one week rather than one month. Workers from the outer islands face additional transport costs in traveling to Port Vila to obtain the passport, visa, undergo police clearance, and get the chest x-ray done for the health check. Workers either made multiple trips for this purpose, or spent a couple of weeks in Port Vila. Combining all costs, the application process cost the median RSE worker 58,000 Vatu, and the median RSE worker from the outer islands of Tanna and Ambrym 69,000 Vatu. These costs are certainly non-trivial for Vanuatu households, given total weekly household cash income for the households in our sample is only 8,700 Vatu (Table 1).

How then did workers meet these costs? In many cases through loans. Seasonal Solutions offered loans to their workers for the worker share of the airfare, and for the visa, which workers then had to pay back during their first six weeks in New Zealand. Seasonal Solutions has also asked returning workers to keep NZ\$1,000 in their New Zealand bank accounts to pay for their airfare in the next season. Some of the agents and

other employers used a bank package to finance the worker half of the airfare, clothing, footwear, and other expenses. The National Bank of Vanuatu began offering loans in January 2008, of up to 160,000 Vatu to be repaid over 4 months with a flat interest rate of 16 percent. These loans had to be guaranteed by the agent or employer.

## **5.2 Selection according to Workers, Applicants, and Community Leaders**

According to the RSE applicants, for some it was the village chief and counsel who decided who should apply, for others the church leaders, and for others still it was a household or individual decision. Returning workers from the 45 person pilot helped refer friends and family to Seasonal Solutions for its recruitment. World Vision was the local partner in Tanna for the Big Toe recruitment there and worked closely with community leaders in the selection process. The characteristics believed to be used by the village or church in deciding who to send were whether or not the individual was strong, hardworking, obedient, healthy, spoke English, and was not an alcoholic. Agents were believed to use similar criteria, and also require a recommendation from a chief or pastor in many cases. Community leaders gave similar criteria when asked how people were chosen in their community: they said the community sought strong, healthy, well-behaved people who could speak English in cases where the community chose, but that in many cases there was no selection at the community level. These cases of community selection are consistent with the idea that communities were trying to send very good workers in their initial recruiting, to signal the quality of their members and to build reputation for future recruitment.

### **5.3 The Pre-departure orientation**

73 percent of RSE migrant workers had attended at the time of interview. They report sessions lasting between one and three hours. When asked what the most useful piece of information they learned was, the most frequent specific responses were learning that you can not drink alcohol during working hours, learning about the weather in New Zealand and the clothing required, and learning that you must wash hands after going to the toilet. When asked how the presentation could improve, many expressed appreciation for the video clips shown, and asked for more information to be presented in this format.

## **6. REASONS FOR APPLYING OR NOT APPLYING AND EXPECTATIONS**

The survey only provides baseline data, and as such, can not inform us of the development impact of the RSE program. Nevertheless, using the survey and supporting information, we can examine the motives given by the selected RSE workers for applying, and the expectations of individuals and community leaders about the potential benefits and costs of the program.

### **6.1 Reasons Given for Applying or Not applying**

RSE applicants were asked to assess the importance of different factors for their decision to apply to participate in the RSE program. Table 7 reports the results. The most important motives are to earn money to pay for school fees, house improvement, and businesses, which 80 percent or more of RSE applicants say are very important reasons for applying. In addition to the monetary rewards, 64 percent say the chance to improve their English is a very important reason for applying, 61 percent say the chance to gain

working skills is a very important reason, and 36 percent say the chance to experience a different lifestyle is a very important reason. Only 31 percent say that the fact that their community or church asked them to go was a very important reason, which is consistent with the previous evidence suggesting that for most workers it was an individual or with the decision as to whether to apply being largely made at the household level.

Table 8 reports the reasons given by RSE non-applicants for not applying. The most important reason given is lack of information, which 55 percent say is very important, and 78 percent say is important or very important. This concurs with the lack of knowledge about the RSE program among non-applicants seen in Section 4. The next three most important reasons are that individuals are content in their home village, that they can not afford the costs of applying, and that they do not want to move away without their family. Thus the themes of information and cost barriers to participation identified in the previous section are echoed here.

## **6.2 Main benefits and costs perceived**

RSE workers were asked how much they expected to earn per week in New Zealand, and how much they expected to send or bring back to Vanuatu in total. The mean (median) income expected per week was 38,764 Vatu (35,000 Vatu), approximately NZD 490-530 per week. The interquartile range was 32,085 to 36,064 Vatu, suggesting many RSE workers shared similar beliefs about how much they could earn per week. The mean (median) total amount they expected to send or bring back to Vanuatu was 524,446 Vatu (500,000 Vatu), approximately NZD 7,000. The interquartile range was 300,000 to 600,000 Vatu. They expect to contribute from this a mean (median) of 68,965 Vatu (20,000 Vatu) to their community.

Single case studies reported in newspaper articles suggest that these expectations are in the right ballpark. Fruit pickers are said to be paid NZD12.10 per hour plus eight percent holiday pay (McDonald, 2008). For a 40 hour week, this would equate to NZD 522, between the mean and median income expected. However, one concern expressed by some workers has been the variability of hours of work. At the guaranteed 30 hours per week, weekly income would instead be NZD 392. Three reports of the amount saved or sent back are NZD 6,000 for four months strawberry picking (Corcoran, 2008), up to 500,000 Vatu (NZD 6,800) for five months work (Maclellan, 2008), and NZD 5,000 for seven months work (McDonald, 2008).

Community leaders were asked what they saw as the main possible benefits and costs of the RSE program for their community. They view the main benefits as the money for households and community projects, improving the standard of living in the community. The potential downsides envisioned included problems with separation of husbands and wives, not enough people left to do the community work, and potential concerns about lifestyles abroad coming to the home community.

In some cases communities have already received additional benefit at the community level. McDonald (2008) reports that the 32 workers from the Lolihor Development council in Ambrym raised more than NZD 10,000 busking with ukulele, tea-chest bass and voices outside Cromwell's bookshop and farmers' market at weekends, while rotary clubs and churches in the town raised more funds for village improvements.

These early reports suggest the potential for the RSE to have a significant development impact on the sending households and their communities. The overall

impact will however depend on how their remaining household members adjust to their absence. Our follow-up surveys and evaluation aim to measure this impact.

## **7. CONCLUSIONS**

Despite Vanuatu's geographical challenges and the evolving and slightly improvised character of the nomination process, recruitment to the RSE seems to have been relatively smooth and successful. Two-thirds of the community leaders thought selection had been fair and it appears to have coincided well with the specified criteria. Firms and agents generally appear to have selected carefully among the people who presented themselves, favoring those with better health records and more working and overseas experience, who have better English literacy. Interestingly there appears also to have been a high degree of self-selection in that applicants differ somewhat from the population at large – on average they have better English literacy, tend to be in the late 20s to early 40s, are more likely to have a relative in New Zealand, and the males are less likely to smoke or drink. Female applicants are less likely to be married than female non-applicants. Finally, the scheme has allowed more than 1,600 ni-Vanuatu to work in New Zealand by May 2008 – more than for any other eligible country.

Nonetheless, improvements are still conceivable. A lack of information appears to have discouraged some potential applicants and the cost of registering was reported as an important barrier to application by half our sample of non-applicants. Other reasons for not applying mostly reflected the conditions of the scheme and just showed that it was not for everyone. Women were certainly under-represented among applicants, although we do not know whether this reflects discrimination or inclination, and more women were seen to be leaving towards the end of the New Zealand agricultural season, when

the nature of the work became less physically demanding. For the future better dissemination and the greater involvement of community leaders and local agents may be useful.

The pre-departure orientations may need further refinement. Workers learn important things about working and living habits (no alcohol in working hours or washing hands after using toilets) but they did not know some important features of the RSE policy (such as the minimum number of hours of paid work they should receive). In future years it may be useful to involve returning workers in explaining the nature of work to be performed, and in helping explain what aspects of life in New Zealand prove most challenging.

Although in terms of averages, RSE workers' households tend to be better off than non-selected applicants' and non-applicants' and a larger number of workers had a previous paid job, neither of these variables appear to explain the propensity of people to become workers once other characteristics are taken into account. The likelihood of being a RSE worker increases with being male, middle age, being literate in English, not drinking kava or alcohol, not having had a health complaint in the last 6 months, and having relatives in New Zealand.

Despite the communal nature of Vanuatu society, RSE migration seems to be mainly an individual or household decision not a community one. Relatively few recruits were chosen by community leaders. This individualism is perhaps expected given that individuals or households profit most, and appears to be confirmed by the prevalence of financial motives and the desire to learn English among the reasons given for joining the RSE. Only in Lolihor did we find evidence that the community sought explicitly to



collect some of the benefits of the RSE, via an expectation that recruits made significant donations to community funds.

Differences in cultural, institutional and geographical factors limit the extent to which one might generalize research on Vanuatu's RSE experience to other countries and circumstances. However, the relatively rigorous nature of the research that we have been able to initiate in Vanuatu will surely contribute to the gradually extending knowledge-base on international migration in general and seasonal worker schemes in particular. It will be especially valuable given the difficulties that the replication of this effort is likely to face: such detailed research is very expensive, it requires forewarning of the policy change to be studied and it entails the active participation in evaluation of both of the national governments involved.

Looking forward, we hope to be able to assess the developmental impact of the RSE. We hope to conduct three future rounds of surveys over the next two years including many of the same households as covered here. These will allow us to assess the impact for a particular household of participating in the RSE, relative to a similar household that did not participate and relative to their previous circumstances, and also to start to answer questions about the broader societal benefits of the scheme. In the longer run we very much hope that someone will be able to revisit these households and communities after many years to gauge the longer run effects of access to labour markets abroad as a tool for the development of small, poor, isolated nations.

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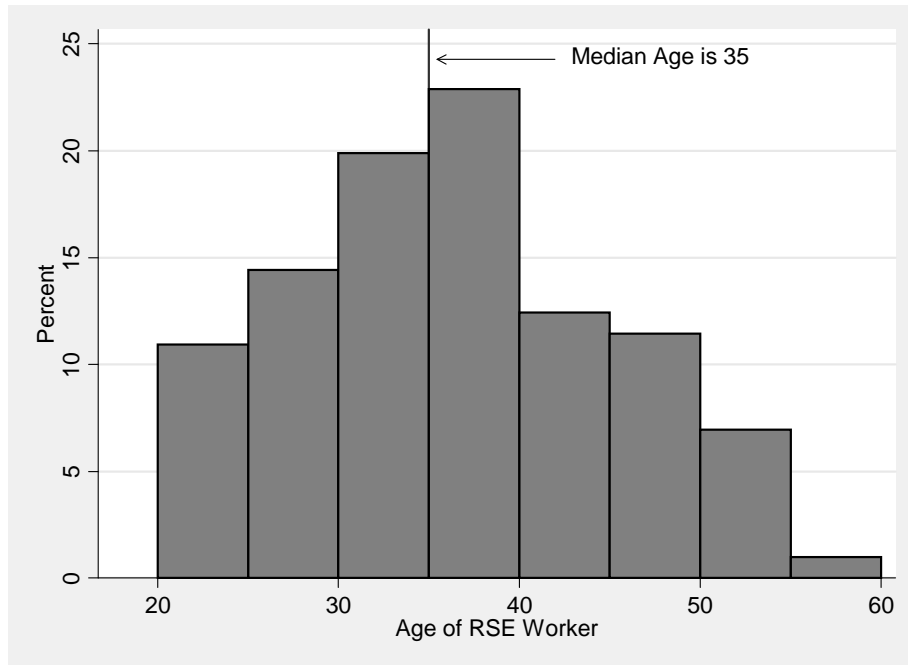


Figure 1: Age Distribution of RSE Workers in Sample.

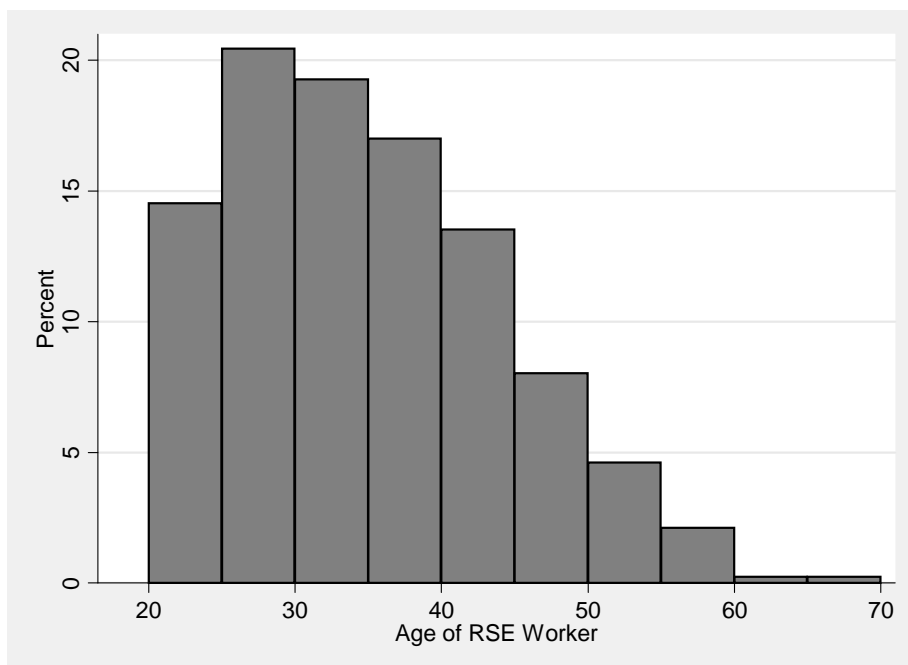


Figure 2: Age Distribution of all RSE Workers approved by May 22, 2008.

**Table 1: Characteristics of Households by RSE Status**

	Full Sample		Selected RSE Worker Households	Unselected RSE Applicant Households	Non-Applicant Households
	Mean	Std dev.	Mean	Mean	Mean
<i>Household Characteristics</i>					
<i>Proportion with:</i>					
Piped Water	0.29		0.28	0.21	0.34 <sup>+</sup>
Flush Toilet	0.17		0.22	0.08***	0.17
Electric Light	0.26		0.44	0.07***	0.20***, ++
Telephone	0.24		0.38	0.11***	0.19***, ++
Motor vehicle	0.10		0.14	0.04**	0.10
Bank account	0.49		0.62	0.51*	0.37***, ++
ATM card	0.27		0.42	0.18***	0.18***, ++
Receive overseas remittances	0.18		0.15	0.29***	0.16
Receive some cash income	0.87		0.84	0.89	0.84
Have relative in New Zealand	0.07		0.11	0.07	0.02***, ++
<i>Quantities</i>					
Household Size	4.73	2.01	4.55	5.13**	4.69
Asset index	0.00	2.41	0.87	-0.81***	-0.34***, ++
Number of pigs	3.54	5.65	3.07	3.80	3.82
Number of chickens	11.72	15.27	8.48	14.85***	13.02***
Number of cattle	1.64	4.33	0.69	2.48***	2.06***, +
Household Weekly cash income (Vatu)	8724	15408	9434	7957	8497
Household Weekly own production (Vatu)	4309	7554	5235	4245	3571***, +
Weekly total income per head (Vatu)	3020	3756	3694	2458**	2729**
Household Weekly Food expenditure (Vatu)	2455	2998	3383	1665***	2059***, ++
Monthly Total Expenditure per head (Vatu)	5921	8678	8852	3295***	4732***, ++
<i>Median weekly total income per head (Vatu)</i>	1529		2382	1337***	1343***, ++
<i>Median weekly food expenditure (Vatu)</i>	1000		2000	1000***	1000**
<i>Median monthly total expenditure per head (Vatu)</i>	2445		5030	1714***	2250***
<b>Sample Size</b>	<b>472</b>		<b>170</b>	<b>97</b>	<b>205</b>

**Notes:**

\*, \*\*, and \*\*\* and +, ++, and +++ denote t-test shows significantly different from the RSE Worker household sample (\*'s) and the RSE applicants (+'s) at the 10%, 5% and 1% levels respectively.

Difference in medians carried out using a non-parametric two-sample test for equality of medians.

**Table 2: Characteristics of 21 to 58 year olds by RSE status**

	RSE Selected Worker	RSE Unselected Applicant	RSE Non-applicant	
			Males	Females
Male	0.82	0.87	1	0
Age	35.9	35.9	35.3	34.6
Married/De-facto	0.78	0.78	0.75	0.87**
Have a child	0.61	0.63	0.64	0.72
Ever worked or studied in NZ	0.16	0.02***	0.02***	0.00*
Ever worked or studied overseas	0.21	0.04***	0.09***	0.00*
Literate in English	0.90	0.81*	0.74***	0.71*
Has primary schooling or less	0.64	0.66	0.64	0.72**
Has schooling past Form 4 (Year 10)	0.06	0.05	0.09	0.05
Years of Education	7.22	6.70	7.48	6.66
Ever held a paid job	0.48	0.36**	0.43	0.20***
Worked for pay in 2007	0.39	0.34	0.38	0.17***
Average hours worked in last week, if work	37.74	14.86***	36.80***	35.60
Wages last week (Vatu), if work	8710	6055	10970**	7761
Had a health complaint in last 6 months	0.05	0.15***	0.11	0.10*
Number of days of hard physical labor per week	3.62	3.74	3.81	3.41
Currently smokes	0.39	0.38	0.52	0.02
Has consumed kava or alcohol in last month	0.45	0.48	0.64***	0.04
<b>Sample Size</b>	201	97	316	447

Notes:

\*, \*\*, and \*\*\* indicate significantly different at the 10, 5, and 1 percent levels respectively.

T-tests for Unselected RSE applicants compare means to Selected RSE workers

T-tests for Non-applicants compare means to RSE applicants of the same gender.

**Table 3: Probit estimation of determinants of being an RSE applicant, and of an applicant being selected**  
Marginal effects shown for probit estimation on 21 to 58 year olds

	Selection into Applying			Selection among Applicants	
	(1) All	(2) Males	(3) Females	(4) All	(5) Males
Male	0.368*** (0.032)			0.188** (0.089)	
Age	0.0337*** (0.012)	0.0233 (0.018)	0.0281*** (0.0086)	0.0301 (0.025)	0.0330 (0.029)
Age Squared	-0.000403** (0.00016)	-0.000304 (0.00024)	-0.000335*** (0.00011)	-0.000410 (0.00034)	-0.000519 (0.00038)
Married	-0.0864* (0.051)	0.0112 (0.066)	-0.113* (0.058)	-0.0591 (0.081)	-0.0346 (0.087)
Literate in English	0.146*** (0.030)	0.240*** (0.053)	0.0217 (0.020)	0.131 (0.099)	0.119 (0.099)
Has Primary schooling or Less	-0.0142 (0.034)	0.0524 (0.052)	-0.0624** (0.029)	0.0794 (0.086)	0.181* (0.098)
Has beyond Form 4 schooling	-0.101** (0.048)	-0.0877 (0.088)	-0.0418*** (0.015)	-0.0996 (0.15)	-0.135 (0.12)
Worked for pay in first half of 2007	0.0257 (0.036)	-0.0231 (0.056)	0.0424 (0.033)	0.0393 (0.058)	-0.0288 (0.068)
Had a health complaint in last 6 months	-0.0278 (0.052)	0.00323 (0.084)	-0.0435*** (0.015)	-0.176 (0.12)	-0.0812 (0.12)
Currently smokes	0.0254 (0.049)	0.0433 (0.060)		0.0635 (0.086)	0.0620 (0.089)
Drank Kava or Alcohol in last month	-0.0952** (0.043)	-0.137** (0.058)	-0.0318 (0.022)	-0.136 (0.085)	-0.155* (0.082)
Household Size	-0.0298*** (0.0067)	-0.0291*** (0.010)	-0.0154*** (0.0053)	-0.0196 (0.017)	-0.0248 (0.019)
Household Asset Index	-0.000229 (0.0072)	-0.00836 (0.011)	0.00329 (0.0039)	0.0385* (0.020)	0.0207 (0.022)
Log per capita weekly income	-0.00608 (0.015)	0.0200 (0.023)	-0.0167* (0.0091)	0.0254 (0.032)	0.0168 (0.034)
Number of Cattle	-0.00404 (0.0036)	-0.00336 (0.0053)	-0.0138** (0.0067)	-0.0149 (0.012)	-0.0167 (0.012)
Number of Chickens	-0.0000645 (0.0011)	0.000170 (0.0015)	0.000254 (0.00075)	-0.00357 (0.0023)	-0.00228 (0.0023)
Tanna	0.0886* (0.049)	0.111 (0.072)	0.0358 (0.032)	0.0772 (0.097)	-0.0538 (0.11)
Ambrym	-0.0641 (0.043)	-0.0444 (0.068)	-0.0448* (0.024)	-0.329*** (0.11)	-0.454*** (0.11)
Has a family member in New Zealand	0.143** (0.068)	0.159* (0.093)	0.0898* (0.055)	0.157* (0.091)	0.270*** (0.065)
Observations	969	517	445	277	229
Pseudo R-squared	0.198	0.073	0.239	0.259	0.304

Notes:

Robust standard errors in parentheses clustered at the household level, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

There are too few female applicants to look at selection among female applicants.

**Table 4: Share of RSE Worker Households Consuming Different Forms of Own Production in Past Week**

<b>Food</b>	<i>% of RSE worker households who consume this from own production in past week</i>
Banana	87
Coconut	81
Island Cabbage	73
Taro	67
Cassava/Manioc	61
Paw-paw	60
Fish, crabs and other seafood	37
Chicken	33
Mango	27
Sweet Potato (Kumala)	27
Pineapple	20
Beans	18
Eggs	13
Sweet pumpkin	13
Yam	10
Squash, tomatoes and other vegetables	10
Beef	10
Pork	9

**Table 5: Knowledge of the RSE Policy by RSE Status**

	RSE Selected Worker Households	RSE Unselected Applicant Households	RSE Non-applicant Households	Village Leaders in RSE communities	Village Leaders in non-RSE communities
Percent who have heard of the RSE	97	79	27	75	39
<i>Responses conditional on having heard about the possibility of RSE work</i>					
Know maximum number of months is seven	74	48	60	67	55
Know workers can return in subsequent years	92	75	96	84	100
Know workers can't apply for permanent residence while in New Zealand	80	92	84	87	100
Know spouse and children can't accompany the worker	91	90	89	89	73
Know employer obligations for hours and half airfare	23	17	24	49	0

**Table 6: Costs of Applying for the RSE**

<i>Item</i>	Cost in Vatu			
	All Workers		Ambrym/Tanna	
	<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>
Local transport (from home village to nearest port or airfield)	2783	1500	5418	3000
Boat fare to Port Vila	1737	0	5527	5000
Airfare to Port Vila	1309	0	4165	1000
Passport	5357	5000	6136	7000
Police Clearance	1229	1000	1545	1000
Medical check-up	3100	3000	2573	3000
Visa	16666	15000	16300	18000
Airfare to New Zealand	49563	64000	52000	55000
Other	259	0	273	0
<b>Total RSE Costs</b>	<b>82003</b>	<b>89900</b>	<b>93938</b>	<b>97500</b>
<b>Total RSE Costs Excluding Half Airfare</b>	<b>57221</b>	<b>57900</b>	<b>67938</b>	<b>69000</b>

Note: 1USD = 91.80 Vatu (April 2008).

**Table 7: RSE Applicant reasons given for Applying**

Reason	Percent saying that in their decision the reason was:	
	Very Important	Important or Very Important
To earn money for school fees	91	98
To earn money to build a better house in Vanuatu	89	99
To earn money to start a business in Vanuatu	80	98
I could work abroad but my children could stay in school at home	65	84
Improve my English	64	96
Gain working skills	61	98
To earn money to pay for social responsibilities in my village	53	89
I don't want to leave Vanuatu permanently, but this gives me some time in both Vanuatu and NZ	46	69
To earn higher wages	43	84
My family asked me to go	43	81
Other	41	51
Experience a different lifestyle	36	70
My community or church asked me to go	31	40
I have a health problem and wanted to consult a NZ doctor	24	41
As a way of getting links to NZ to give a path to permanent residence	23	57
I could still keep my job in Vanuatu	22	63
Less cultural restrictions on what I can and cannot do	21	56
Having family members already in New Zealand	12	28

**Table 8: RSE Non-applicants reasons given for not applying**

Reason	Percent saying that in their decision the reason was:	
	Very Important	Important or Very Important
I do not know what the requirements are	55	78
I am happy living in my home village	46	63
I can not afford the costs of applying for the RSE	44	65
I do not want to move away without my family	35	60
I have an on-going business I can not leave for 7 months	30	43
The seasonal work in New Zealand is too hard for me	29	42
I do not think the chances of getting selected are very high	29	55
I think I can earn more money staying in Vanuatu	27	47
I do not feel my English ability is good enough	24	51
Social obligations in my village that do not allow me to leave	21	43
I do not want to go temporarily, and will wait until a permanent option	16	39
I already have permission to work in NZ through another category	10	34