The Napil Rural Training Centre, Tanna Vanuatu

AN EVALUATION REPORT

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Acronyms

CATD	the Centre for Appropriate Technology and Technology (Fiji)
FIGSEA	Facilitating Income Generation from Self-Employment in Agriculture
FSA	Farm Support Association
PAP	SPC/EU Pacific Agricultural Policy (PAP) Project
MFAT	New Zealand Ministry of Foreign Affairs and Trade
NRTC	Napil Rural Training Centre
PIFON	Pacific Island Farm Organisation Network
SMRTC	St. Martin's Rural Training Centre (Solomon Islands)
TRTC	Tutu Rural Training Centre
VNTC	Vanuatu National Training Council
VRDTCA	Vanuatu Rural Development and Training Centres Association
VYFDC	Vanuatu Young Farmers Development Course

A dedication to Geoff Bamford (1927-2014)

Rene Dumont (1904-2001), the French ecologist and agricultural economist, when reflecting on the obstacles to rural development in emerging economies, went to the heart of the problem. Rural development, he wrote, desperately needs educators gifted with "a great deal of devotion… [But] how to teach devotion!"

I myself have been involved in rural non formal education for 42 years in the Solomon Islands and in Fiji, and Geoff would have to be one the most devoted and significant resource persons with practical grounded experience in the South Pacific that I have encountered.

Many Pacific Islanders that Geoff taught, inspired, enthused, and gifted, benefited from his personal and material help. He championed rural training centres and was dedicated to assisting them become more organised in their service of rural people. Never one to give up due to difficulties, he used his own money in many of these endeavours.

He worked at the level of 'the little people' and was totally dedicated to help them inch forward. He also worked of course at the higher structural level with Fiji Government, in Navuso (Fiji) which still looks back on the Bamford years as the 'golden years', in ILO and in helping governments in Kiribati, Vanuatu, Fiji and the Solomon Islands restructure their programmes.

He personally assisted us here in Tutu with regular visits over the years. The headings we still use in our financial reporting to government were given to us by Geoff in the early 1970's. In more recent years he was part of the team that did the significant FAO report on Tutu and subsequently brought selected Pacific Islanders to Tutu on study tours. One of these was Peter Kaoh who has been very instrumental in translating the oscillation principle into the Napil Rural Training Centre. When news came of Geoff's death, one of our staff said "Well……he was an enthusiast to the end. We will surely miss him."

Fr Michael McVerry sm.

Tutu Rural Training Centre,

Waiyevo, Taveuni, Fiji.

Summary

Increasing the productivity of traditional farming systems in rural areas such Middle Bush on Tanna, Vanuatu will require concerted extension and training effort. The situation found at Middle Bush is seen as the 'face of the future' for much of rural Melanesia. Efforts to increase productivity need to be undertaken with a clear understanding of the local context. Innovative, more appropriate and cost effective approaches need to be adopted. One such approach being trialled by the Vanuatu Farm Support Association (FSA) is the Napil Rural Training Centre (NRTC) located at Middle Bush. This non-formal adult education approach is based on the 'Tutu model' that was developed at Marist Tutu Rural Training Centre on Taveuni, Fiji.

The Napil pilot, through the Vanuatu Young Farmers Development Course (VYFDC) is the first concerted effort to replicate the Tutu Rural Training Centre (TRTC) model in the Pacific island region. The promoters of the Napil pilot have understood the key principles of the Tutu model. Under difficult circumstances and with limited funding, a successful start-up has been made in applying these principles to the particular situation found in Middle Bush, Tanna. The arrangements established in Napil are seen as pioneering for Vanuatu in terms of the involvement of village based youth in commercial agriculture – particularly with respect to young women.

The Napil RTC has done well in the start-up piloting the Tutu model on a small scale. The achievements made now need to be consolidated for the benefit of the people living in this densely populated location. The benefits accruing to Middle Bush alone would fully justify the effort and expenditure made. Beyond Middle Bush, lessons from the Napil experience can make a significant contribution to future rural and economic development for Vanuatu and the wider Pacific islands region. However, for this to be realised the Napil pilot will need to receive ongoing technical and financial support.

The specific outputs from the Napil pilot have been:

- The design of a course focussed on youth self-employment in agriculture in the Middle Bush area of Tanna. In common with other areas in Melanesia, this location has fertile soil and favourable climatic conditions – but faces high population and environmental pressures.
- Securing dedicated and competent staff from the community, and strong community support for the initiative.
- Enrolling thirty three (33) young farmers, of which eleven (11) are women.
- All young farmers have obtained written consent from their parents and village chief that gives them access to land for the duration of the course.
- All participants have opened saving accounts in which the proceeds from the sale produce from their Napil Centre blocks have been deposited.
- Quality fresh vegetables are now being produced and sold on local Tanna markets - providing cash income and enhancing nutrition.
- Market opportunities in Port Vila have been identified for high value onions for which Middle Bush has a comparative advantage.
- A Young Farmer has secured a contract to supply vegetables to a local tourism operator.
- The use of vegetable and kava seedling nurseries has been introduced in to Middle Bush farming systems.
- Middle Bush farmers now have access to vegetable seeds and other nursery supplies at a reasonably affordable price.
- Village farmers have been introduced to farming systems that enhance productivity and land use sustainability. This provides an important demonstration for farmers in other locations facing similar problems.

The outputs to date have been achieved with a modest investment of just over 5 million VT (USD 50,000) in private and donor funds over three years. As was the case with Tutu RTC, the Napil RTC will require continued external funding for the foreseeable future. Such funding can expect to generate significant economic, social and environmental benefits.

While recognising the need for ongoing external funding, increasing financial self-sufficiency should be a priority objective of Napil. Increased financial self-sufficiency will enhance the independence of the Centre and reduce the risk of disruption to existing training programs. An appropriate income earning opportunity for Napil is the

continued development of the farm input supply business and in particular vegetable seed and seedling supply. The supply of inputs for poultry enterprises also provides an excellent income earning opportunity.

A more favourable staff/trainee ratio needs to be established to avoid staff being over-loaded. There needs to be a continuation of the processing of developing promising new core staff from the ranks of Napil trainees. A priority area would seem to be the recruitment of 1 x full time personnel responsible for finance and administration. Cost effective methods need to be found for incorporating more specialised and/or technical skills into the VYFD Course curriculum, without deviating from the core agricultural management focus of the training program. Human development is identified as one such area. It is suggested that this be done through incorporating teaching 'slots' utilising suitably-qualified outside resources, when available.

The use of well-designed exchanges would be an effective way to upskill core staff. It is suggested that that the opportunity for an outstanding female trainee in the VYFD Course attend the 6-month Tutu Young Women's course be explored. The expectation is that she would return to Napil as a lead trainer. To enhance the involvement of parents, consideration should be given to establishing a parents' short course as part of the VYFDC program.

Napil trainees grow vegetables, taro, kava, coffee and sandalwood on their home farms. It is recommended that consideration be given to adding vanilla to the enterprise list. Middle Bush offers proven agronomic conditions for vanilla and a technical support/market structure is already in place through the FSA Spices Network/Venui Vanilla.

As the reputation of the VYFD Course grows and the demand for places increases it is recommended that the course entry requirements become more stringent. Three particular adjustments in entry requirements are suggested:

- having quantifiable pre-entry planting targets;
- removing exceptions to the upper age limit for entry; and
- extending the signed land access agreements to the trainees beyond the duration of the course.

To reduce the constraint of the small amount of land available at the Napil Centre consideration should be given to:

- reducing the duration of the VYFD Course from three (3) years to two (2) years; and,
- establishing satellite student blocks that come under the umbrella of the main Napil Centre.

A particularly good opportunity has been identified for onions. To take advantage of this opportunity will require the introduction of tropical varieties with better shelf life properties, together with improved curing and storage techniques. Technical exchange opportunities have been identified through the Pacific Island Farm Organisation Network (PIFON).

Conventional third-party accreditation criteria are not appropriate for non-formal adult education training institutions such as Napil and Tutu. Considerable effort is required to explain what these types of training institutions are about and their importance for rural development. This is seen as role for Tutu and FSA and the wider PIFON network.

In the short term, ongoing involvement of and oversight by FSA will be required for if the Napil VYFD Course is to be sustained. Inevitably, in the longer term the involvement and interest of a Vila based NGO sponsor can be expected to wane. A high level of community involvement will be necessary to compensate in the longer term for absence of an organisation such as the Society of Mary, which underpins the Tutu RTC. In this respect current apparent level of community ownership and commitment at Napil is encouraging and needs to be continually cultivated.

Background

Vanuatu faces a huge development challenge with the population projected to double by 2050. Between the last two census periods ending in 2009, the urban population grew annually by 3.5% (Asian Development Bank 2012 p, 24)). At this rate, the population of Port Vila can expect to double in the next 20 years. The high rate of outmigration from rural areas has resulted in rising unemployment, an increasing number of people living in squatter settlements and deepening urban poverty with its attendant environmental and social problems. Such a situation lays the seeds for future political instability. These problems are compounded by Vanuatu's particularly young population - with a median age of 20.6 years, compared with 26.2 for Fiji and 37.3 for New Zealand (World Bank World Development Indicators 2013).

Middle Bush on the southern island of Tanna is one of the most fertile, but densely populated areas of Vanuatu. The total area of Middle Bush is 76.5 km^2 with a population of nearly 5,000 people living in 67 villages and 846 households (Vanuatu National Statistics Office 2014). At a latitude of 19°30'S and altitude of 400-600 metres above sea level (masl), the Middle Bush area experiences average monthly cool season minimum of 11-12°C. The climate means subtropical and temperate crops can be grown. The area also offers excellent agronomic conditions for Arabica coffee. Such crops can't be produced efficiently elsewhere in Vanuatu, and thus provide good income earning opportunities to farmers. The area is also subject to high rainfall (average annual rainfall of 3500 mm) and occasional acid rain from the Yasur volcano.

The situation found at Middle Bush, Tanna is seen as the 'face of the future' for much of rural Melanesia. . Faced with population pressure and climate change, the productivity of traditional farming systems in such areas will need to significantly increase. As Kaoh et.al., 2014 note, this will require a substantial extension training and applied research effort.

Efforts to increase productivity need to be undertaken with an understanding of the local context and, accordingly, how innovations can be sustainably introduced. The government's traditional agricultural extension and research services are poorly suited to this role, even if they could be adequately funded. Innovative, more appropriate and cost effective approaches need to be adopted. One such approach being trialled by the Vanuatu Farm Support Association (FSA) is the Napil Rural Training Centre (NRTC) located at Middle Bush. This non-formal adult education approach is based on the 'Tutu model' that was developed at Marist Tutu Rural Training Centre on Taveuni, Fiji. A three (3) year Vanuatu Young Farmers Development Course (VYFD) Course with the motto "Turning Farm into Business", commenced at Napil in March 2013. The VYFD Course endeavoured to adapt and apply the basic principles of the Tutu model to the situation found in Middle Bush.

FSA, through its membership of the Pacific Islands Farmer Organisation Network (PIFON) requested that a review of the Napil VYFD Course be undertaken utilising the services of Andrew McGregor and Fr. Petero Matairatu s.m. Andrew McGregor was the lead author of the 2011 FAO funded Report: "The Tutu Rural Training Centre: Lessons in Non-Formal Adult Education for Self Employment in Agriculture". Fr. Petero is a Tutu Rural Training Centre staff member. Fr. Petero's services were provided by Tutu as part of the Centre's regional outreach program. The team were assisted in undertaking the Review by Peter Kaoh the FSA Manager. Funding was provided by the SPC/EU-funded Pacific Agricultural Policy (PAP) Project.

The Terms of Reference for the Review were:

- Visit the Napil Rural Training Centre on Tanna.
- Undertake an assessment of how the "Tutu" Model has been applied at Napil pilot in terms of providing self-employment in agriculture and the lessons learnt from this experience.
- Make recommendations for scaling up the NRTC and replicating it at other locations in Vanuatu, with due consideration being given to funding and staffing requirements.
- Provide a report to FSA and PIFON on the assessment and recommendations.
- Assist FSA in the preparation of a funding proposal for the scaling up of the Napil pilot and replicating the approach elsewhere in Vanuatu.
- Assist SPC to prepare a video on the Napil Rural Training Centre.

The Napil Rural Training Centre

In 2011 the FSA Manager, Peter Kaoh, and the Napil Rural Training Centre Lead Trainer, Tom Iotil, visited the Tutu Rural Training Centre as part of a regional rural training centre study tour.[1] Representatives from the Santo based Navota Farm and Malo based Vaiduhu Rural Training Centre also participated in this visit to Tutu. As a result of this visit, Peter identified the Tutu training model as applicable to Vanuatu's rural youth seeking remunerative self-employment utilising their own land resources. He saw the model being particularly relevant to his home island of Tanna. As a consequence FSA designed a pilot 'Tutu-type' youth in farming training program to be located at the existing, but largely underutilised, Napil Rural Training Centre (NRTC) in Middle Bush Tanna.

The NRTC was first established in 1999 to offer vocational training in areas such as carpentry, mechanics and sewing as well as agriculture. The Centre is based on 2.5 ha of arable land allocated by two Middle Bush tribes (Naliawne and Iaurne)[2]. Napil had basic infrastructure in the form of a class room and some staff housing – but does not have dormitories. NRTC was a member of the Vanuatu Rural Development and Training Centres Association (VRDTCA) network.

Figure 1: The Napil class room

The youth in farming program was designed in collaboration with the two tribes that had allocated land to the Centre. The focus was a three (3) year Vanuatu Young Farmers Development (VYFD) Course. The VYFD Course, commenced in April 2012, with an initial intake of eight (8) participants. There has been a further two intakes. The course now has a total enrolment of thirty three (33) trainees, of which eleven (11) are women.

Geoff Bamford provided the funding to establish the pilot VYFD Course, with some additional funding being provided by MFAT New Zealand via Oxfam (NZ). All the funding was channelled through FSA, who was responsible for the overall management. The total funding from these two sources has been 5.2 million VT (approx. USD 50,000).

[1] The study tour was organised and funded by Geoff Bamford. Geoff was a former Principal of the Navuso Rural Training Centre in Fiji and served as the ILO/UNDP Pacific Rural Training Advisor.
[2] There are a total of thirteen (13) communities (tribes or nakamals) in the Middle Bush area.

Figure 2: Entry to Napil – "Turning Farm into Business"

Figure 3: The Napil RTC catchment

The Vanuatu Young Farmers Development Course (VYFDC)

The initial specified age range for course participants was 19 – 25 years, which was subsequently extended to 30 years to accommodate a number of promising applicants.

All but three (3) of the participants are from the two foundation communities that allocated land to the Centre. Most of the participants only have primary school level of formal education. A key condition for entry into the VYFD Course is a signed agreement from the participant's parents and the village chief that land in their home situation will be allocated to them for a period of at least three (3) years (see annex 1 for an example of this signed agreement). The area of village owned land that has been allocated to the VYFD Course participants has ranged from a ¼ to ½ a hectare. Such land arrangements are seen as pioneering in terms of the involvement of village based youth in commercial agriculture, particularly with respect to young women.

The stated aim of the VYFD Course is to: "***To form, train and establish young ni-Vanuatu young farmers on their own land back in their villages to have viable livelihoods, sustainable management over their own land, with the ability to plan and respond to climate and economic changes for productive and environmentally sustainable agricultural sector in Vanuatu*** " (FSA 2012). In short, the Course is about forming, training then starting participants to practise farming as a business on their own land to help improve their lives.

The specified objectives for participants graduating from the course are (FSA 2012):

- a certificate in farming as a business;
- a personal savings account with a balance over vt 100,000
- over 150 stems of 2-year kava on their own land;
- over 150 stems of 1-year kava on their own land;
- over 150 stem of less than 1 year kava on their own land; and,

- a two year plan to build a permanent house.

The Napil trainees are on a two-week oscillation program between the Centre and their home. Two weeks are spent at Napil, where they spend three (3) days working on their project and two (2) days on a Napil-owned project. Participants then spend two (2) weeks at their home where they spend three (3) days a week on their own village project, one (1) day working on a community project and one (1) day on a family project. In contrast to Tutu, Napil has no residential facilities. Thus, the participants return to their own home every evening. Nevertheless, the key Tutu oscillation principle between the Centre and the trainees own land is adhered to.

The training and farming undertaken by the VYFDC participants at the Napil Centre

The area of arable land available at the NRTC is relatively small (estimated 2.5 ha). Trainees drawn from the two Napil communities are each allocated two plots of land at the Napil Centre where they grow short term vegetable crops (cabbage, carrots, onions, tomatoes) and medium term crops (taro). The vegetable plots average a little less than 100 m3, while the taro plots are around 200 m3. Thus, allowing for a minimal fallow period, the maximum carrying capacity of a trainee using the Centre is around thirty (30). The Centre is already approaching its capacity. Those participants that come from other Middle Bush communities are not allocated their own blocks at the Centre.

Napil has two (2) full time and one (1) part-time trainer. They provide training at the Centre and visit the home farms of the participants. The trainers are drawn from the two Napil communities and are active farmers in their own right. Lead trainer, Tom Iotil, has served as the agricultural trainer at Napil since its inception in 1999. FSA staff also provide ad hoc training inputs during their occasional visits to Tanna.

A main focus of the program is on the participants growing their own vegetable seedlings. The Napil Centre provides the vegetable seeds for the participants, which are sourced through the FSA's partner organisation Syndicat Agricole et Pastoral de Vanuatu (SAPV). Vegetable seeds are provided free to the trainees in their first year, at 50% of cost in their second year and at full cost recovery in their final year. A small seedling nursery is maintained at the Centre for use by the course participants. Napil seeds and seedlings are also available for purchase by other farmers on Tanna. The availability of seeds and seedlings has made a significant contribution to the recent increase in fresh vegetable supplies on Tanna.

The Centre markets the crops grown by the trainees at the Centre. These are sold to traders at the Lenakel market or directly to consumers. Initially, the proceeds from vegetable sales were divided equally amongst trainees. However, this was subsequently changed to be proportional to the volume supplied by each trainee. All of the proceeds are paid into the trainee's saving bank accounts – which were opened at the beginning of the Course. The joint signatories to the saving accounts are the Principal Trainer and the trainee. As of June 2014, there was an overall total of 290,000vt in trainee savings accounts.

Figure 4 VYFD Course taro – introducing the practice of mulching

Figure 5: Napil seedling nursery

The VYFD Course curriculum covers:

- **Human development** –the stated message is for the Young Farmers "*to accept who they are and to work to toward their dream through the utilisation of their own land".*
- **Land management**.
    - The importance of land - with the main message being *"we are the users of the land and our livelihood depends on it*"
    - How land naturally improves itself – the role of big trees and legume trees in maintaining soil fertility
    - The challenges we farmers face as land users, with topics covered including: available land is finite and the only resource for most Vanuatu people; population pressure on land is already very high; the nutrient mining of land; our descendants will need the land after us; the impact of climate change; the access to land for girls.
    - The challenges to improving our land, with topics covered including: big trees being cut down for gardens, timber and infrastructure with no replanting; disease and natural disasters killing big trees; animal grazing and people giving beneficial small trees; farmers not planting legume plants; natural fallows becoming shorter. The main message being *"to know the challenges we face as users of the land."*
    - Farming techniques we should use to take care of the land, with topics covered including: use of glyricidia in alley cropping; use of erythrina or glyricidia as fallow improvement; use of muccuna bean as a cover crop; making and using compost; accepting existing creeping legumes as a cover crops; practicing crop rotation; appropriate cropping combinations for soil health. The main message being *"there are practical farming techniques that we can use to help rebuild our land*."
    - The need to combine short term (vegetable), medium term (taro), longer term (kava, coffee, vanilla) and long term (sandalwood) crops for best land utilisation.
- **Water management**
    - The importance of water in our lives – for plants, drinking, cooking and washing
    - The challenge we farmers face as water users, with topics covered including: scarcity, conservation, consequences and cost.

- Appropriate water usage and management for plants and animals, with topics covered including: watering early in the morning and late in the afternoon; measuring water usage for different farming applications; use bucket drip irrigation for vegetables; use of mulch to reduce water loss; the need to quickly repair broken tanks, pipes and taps; how to repair broken tanks, pipes and taps, the cost of supplying water. The main message being "*to use water wisely to increase productivity and to reduce costs."*

- **Crop management – vegetables**
  - Vegetable seed management, with topics covered including: best time to grow vegetables; types of seeds; planning (when to plant and where to source); avoiding seed wastage (seed storage, sowing techniques and timing); use of vegetable trays; soil sterilisation.
  - Siting and building your seedling nursery
  - Seedling management in the nursery, with topics covered including: watering; weed control; pest and disease control.
  - Management of vegetable plants in the field, with topics covered including: site identification; land preparation requirement; transplanting (seeding selection, timing, correct spacing, planting in a line; watering requirements; weed control (hand weeding, use of hoes); pest and disease control (identifying pests, physical control measures, use of Dipel); requirements for off season production with more pest and disease problems.
- **Crop management – taro**
  - Management in the field, with topics covered including: best time of year to plant; variety selection (yield, market -boil, roast, laplap); land preparation; planting (spacing, planting in a line); mulching to control taro beetle.
- **Crop management – kava**
  - Management in the nursery, with topics covered including: importance of healthy planting material, benefits from first planting kava in the nursery; timing and ways of planting; watering; selection of varieties (market preference, productivity)
  - Management of plants in the field, topics covered including: timing of planting; land preparation; planting (correct spacing, planting in a line); mixed cropping with taro; weeding; use of muccuna bean; time of harvesting.
- **Weed management**
  - Topics covered including: weed identification and impact on crops; main requirements for plant growth (air, sun light and nutrients in the soil); the timing of weeding; the need for regular weeding; the use of hoes.
- **Pest and disease management**
  - Pest and diseases in vegetables
  - Pest and diseases in taro
  - Pest and diseases in kava
- **Time management**
  - The challenges and opportunities of being self-employed instead of working for somebody else
  - The need to start work on time
  - The need for a work plan - weekly, monthly and annual.
- **Marketing**
  - Identify your markets and buyers
  - Importance of quality – customers won't buy poor quality products
  - Seasonality and markets
  - Prices – the concept of supply and demand
  - Importance of post-harvest handling; post-harvest handling requirements
  - Using a scale
  - The costs involved in marketing products
- **Finance management**
  - The importance of money in the modern world
  - Setting realistic financial goals and working to achieving these goals
  - The importance of financial discipline
  - Simple budgeting for financial management – for the farm, for the household

    - Use of savings and investing back in your farm and into a good permanent house for your family.
- **Record keeping**
    - The importance of record keeping
    - Records needed for successful farm management – number of plants planted, date of planting, labour used (including own); purchased inputs, crop quantities sold and prices received, cost incurred in marketing, qualities of crops consumed at home.
    - Types of record books – labour and work book, crop book (seedlings planted and plants harvested, timing, crop production, crop losses etc.), financial book (sales, purchases)
- **Health and workforce management**
    - Healthy labour is productive labour
    - The importance of good nutrition for a healthy work force – the need to eat nutritious locally grown food.
    - The adverse impact of over consumption of kava and beer and the adverse consequence of smoking and smoking marijuana.
- **Risk and risk management**
    - Natural disasters (excess rain, drought, cyclones, volcanic ash) – consequences and reducing the impact.
    - Climate change – what can we expect and how we farmers can adapt.

The instructions to the trainers are to make the training as practical and as "hands on" as possible. "It's best to spend less time in theory, and spend more time in doing practicals and field visits" (FSA 2012).

The training and the farming undertaken by the VYFDC participants on their home farms.

All the VYFDC participants maintain a home farm on their own village land. Each time that they spend 2 weeks at their home, they spend three (3) days a week on their own farm enterprises, one (1) day working on a community project and one (1) day on a family project. The VFYDC promotes cropping systems involving combinations of short term, medium term and long term crops. The home farm cropping enterprises include: vegetables (onions, carrots, cabbage and tomatoes), taro, kava, coffee and sandalwood. A few of the participants have a poultry enterprise, while several were planning to establish poultry enterprises in the future.

The trainees are entirely responsible for marketing the products grown on their home farms. One of the trainees has entered into a contract to supply vegetables to the Tanna Evergreen Resorts and Tours. He attributes this achievement to his involvement in the VYFD Course.

All the participants' home farms are within walking distance of the Napil Centre. The staff are expected to visit trainees on their home farms on a regular basis.

Figure 6: Young farmer with his home farm vegetables

Figure 7: Young farmer with her home farm coffee

Figure 9: Young farmer with his home form nursery

Figure 8: Young farmer with his home farm kava and taro

Figure 11: Young farmers with their sweet potato, taro and corn

Figure 10: Young farmer with his onions

Applying to Tutu model to the Napil RTC

It is apparent that the Napil RTC has done well in piloting the Tutu model, albeit on a much smaller scale. These achievements now need to be consolidated for the benefit of the people living in this densely populated location. The benefits accruing to Middle Bush alone would fully justify the effort and expenditure required. Beyond Middle Bush, lessons from the Napil experience can make a significant contribution to future rural and economic development for Vanuatu and the wider Pacific islands region. However, for this to be realised the Napil pilot will need to be nurtured and adequately supported.

Similarities and differences between the Napil RTC and the Tutu RTC

The Tutu model is defined by a number of key principles (McGregor *et.al* 2011). These are:

- the training is for a specific geographical area;
- the training is **not** for "drop outs" but for participants seeking remunerative self-employment from their own resources;
- the participants have demonstrated access to their own land;
- the training centre is a partnership between the sponsors, community and the funding agencies;
- the training requires a continuous oscillation between the training centre and the participants' own farms; and,
- the focus is on management - providing flexible and innovative courses that meet the needs of the participants.

There have been a number of important lessons learnt from the experience of the Tutu RTC's four decades of operation (McGregor *et.al* 2011). These lessons are:

- the focus audience is 19 to 23 year olds who live in their own village;

- the course entry requirements must be specific and demanding;
- an intensive and prolonged extension and follow-up effort is required from staff to support the training;
- the successful management of a rural training centre requires a high level of expertise;
- staff should be selected on the basis of a proven track record in using their own resources;
- training must be in the local vernacular;
- farming enterprises for the trainees need to be based on crops that have well established marketing systems in place;
- the courses need to provide a mechanism to accumulate savings for investment;
- in lieu of fees, there needs to be a significant contribution of in kind/voluntary work;
- parental participation in the training program is essential;
- the training program needs to start small and evolve with staff capacity and in response to the needs of the rural community;
- there should be sufficient flexibility to respond to the needs of the constituents;
- there needs to be the freedom to innovate;
- the demand for the courses is the main source of inbuilt accountability; and,
- successful course participants can earn incomes well in excess of their peers who have migrated to urban areas and who are in wage employment.

The non-adherence to some of these key principles has led to failure in applying the so-called Tutu "model" in other locations. Such an example is Saint Martins in the Solomon Islands. The St. Martin's Rural Training Centre (SMRT), as with the Tutu RTC, was an initiative of the Society of Mary of the Catholic Church and had access to a significant area of land. The Centre, located on 46 hectares on the Guadalcanal Plains, was established in response to the lack of practical, informal village training for young men, particularly those migrating from the village to urban centres. The training was intended to provide the opportunity for young men to be productive by utilizing the skills they learned to improve village life.

An evaluation conducted in 2009 concluded that the Tutu model did not work at St. Martin (Kalisto and Vouza 2009). The reviewers concluded that the course that covered agriculture, carpentry, mechanics, joinery and life-skills was relevant to the trainees' needs. However, it is their view the Tutu "model" did not work at St Martins. They concluded: "The concept itself is relevant and it works in Fiji, however it does not operate like that in the Solomon Islands unless it is reviewed to meet the conditions of the Solomon Islands." It seems that those who designed the St Martin's Young Farmers Course based on the Tutu "model" had a poor understanding of the key oscillation principle. This is reflected in the comments of the Kalisto and Vouza review:

> Two years of training is appropriate for a rural training centre. The first year, students often takes time to adjust, and often it is at a time where most of the trainees are beginning to adjust to a life very different from the village life they come from. It is only in the 2nd year that students are beginning to acquire understanding and put into place the knowledge they learned in the first year. Again, these two years are only spent at the Centre, but they go back to their village in their 2nd year in June to undertake home projects. According to some of the trainees, they said that "when they go home to embark on new projects, it does not work". The time frame from June – November is too short to initiate home projects. The projects that may be made available to them in that time only belong to their immediate family such as a piggery and poultry. These projects are not initiated by the students, but by their families. …….The Tutu Model that was adopted by the Centre does not work because individuals who live by the Centre are interested to go to other Provinces to experience a different environment. The Tutu Model is restricted and does not allow students to expose to other cultures and to engage with other people (2009).

The Tutu model is exactly about enabling the trainees to focus on their home environment to achieve a remunerative and satisfying lifestyle. In contrast, it is clear that the designers of the Napil VYFD Course fully understood this. These key principles and lesson learnt are elaborated briefly below with respect to Tutu and consideration is given to how they have been applied at Napil.

The key principles of the Tutu "model"

The training is for a specific geographical area

Rural training centres in the Pacific are usually national centres that accept students from the entire country. Prominent examples are the Navuso RTC in Fiji and St. Martins RTC in the Solomon Islands. The Tutu in contrast, until very recently only served the Province of Cakaudrove where the Centre is located. Recently the Tutu catchment has been extended to parts of the adjacent provinces of Bua and Macauata – which are culturally and agronomically similar.

The reason for the narrow geographic focus is that it facilitates the return of trainees to farm their own land. The focus on a narrow geographic area means similar crops to be grown at the Centre and on the trainees' home farms. It also allows for frequent and cost effective: oscillation between the Centre and the trainees' home farms; and participant home farm visitations by staff before, during and after the course.

The catchment area for the participants also needs to be geographically limited so that elders/parents/landowners can benefit from short courses so they can provide necessary support for the young participants.

The Napil RTC even more closely meets this geographic area condition than Tutu itself. The Napil Centre is situated in a culturally/linguistically homogenous area, where farmers grow the same crops and face similar environmental and population pressure challenges. The home farms of the trainees are within realistic walking distance from the Centre. This close proximity brings with it some major advantages in terms of:

- minimising the overhead costs of building and maintaining residential dormitories;
- significantly reducing the financial and supervisory cost of oscillation between the Centre and participants' home farms; and,
- enabling young men and young women to participate in the same course at the same time.

Close proximity, however, brings with it potential down sides that need to considered and appropriately managed where necessary. A key stated objective of the Tutu RTC is to form and train young people "to be autonomous, responsible and mature young adults, who are principle-led decision makers, who are able to take control of their own lives and choosing freely to live as farmers on their own land, accept their call to be of the village, and be able to live in the service of others in their society". The forming of this autonomy and independence would appear to be made more difficult when the course participants return to the house of their parents on a daily basis.

With such a narrow catchment area there is also an increased risk of Napil RTC becoming an excessively insular and parochial training institution. This is an issue that Tutu had had to deal with over the years and important lessons have been learned that are applicable to Napil. Measures taken involve staff training and exchanges and the utilization of suitable outside expertise in training 'slots'. However, this needs to be done in such a way that doesn't undermine the essential character and focus of the training institution to train young people to farm their own land.

A consequence of the Tutu model being only applicable to a confined geographical area is that the cost of scaling up and replication tends to be much higher than it is for the standard nationally oriented rural training centre. However, as the Tutu experience has shown, the benefits of a successful application of this locally orientated approach can far outweigh the costs.

The training is not for "drop outs" but for participants seeking remunerative self-employment utilising their own resources

Tutu is quite different from most other educational institutions operating in the Pacific islands. High schools, colleges and universities are formal educational institutions that offer a fixed curriculum (usually externally approved) and provide a certificate/diploma/degree indicating the trainee has successfully completed the program. Success at such institutions is measured through exams and other such measures. The certificate is used to secure formal wage earning employment or to obtain entry into other educational institutions. The Tutu RTC is quite different. Tutu, and similarly Napil, are non-formal training institutions that train young people for self-employment using their own resources. For Tutu the minimum requirements for entry are high but are not based on formal educational qualifications. The trainees are not required to pass formal examinations and at

Tutu they do receive a certificate at the completion of the course. The non-formal nature of the training makes accreditation difficult through conventional accreditation systems and standards.

Rural training centres throughout the Pacific islands are usually seen as second level training institutions designed for "drop outs" from the formal education system who are unable to secure wage employment. This is not the case with Tutu, which is designed to make young Fijians successful farmers of their own land. The Napil VYFD Course was designed with exactly the same objective.

Most entrants into Tutu have a relatively low level of formal education achievement – although this level has tended to increase over the years. The formal education level of the Napil trainees is even lower. In the early years of Tutu the trainees were usually perceived as "drop outs" by their family and village and it can be expected that initially Napil trainees will be perceived in the same way. The perception of Tutu trainees and graduates has changed significantly over the years. Entry into Tutu courses is highly competitive and being a Tutu graduate brings with it considerable prestige. This can be attributed to the demonstration effect of the incomes and livelihoods of Tutu graduates. It can be expected that community perceptions of the Napil trainees will also change over time for the same reason.

The participants have demonstrated access to their own land

Tutu has been successful in developing proactive approaches to the sensitive issue of accessing land for young people. There is a consensus among the Young Farmer Course graduates that the facilitation of access to their clan (*mataqali*) land was a critical factor in their success at Tutu. To gain entry into the Tutu Young Farmer Course a village youth needs to have planted at least 1,000 kava plants (or equivalent). The quantifiable and transparent criterion demonstrates two main determinates of success as a farmer: access to land on which to plant; and, commitment to be a farmer. Also required for entry is a signed agreement from their parents and clan head that gives them access to the land they are farming.

Such demanding, quantifiable and transparent entry requirements based on crops planted are not yet in place at Napil. In the earlier years of Tutu they were also not in place. Napil, however, from the outset has put into place the entry requirement of a signed agreement from their parents and the village chief that gives access to land for the duration of the course. For Vanuatu, such a formal land access agreement is seen as a path breaking development for the involvement of youth, particularly girls, in agriculture.

The training centre is a partnership between the sponsors, community and the funders

Tutu could not have succeeded without the partnership between the sponsor (the Society of Mary of the Catholic Church), the community (the Province and people of Cakaudrove) and the main funding entity (the Government). The Society of Mary, apart from providing a sizable amount of high quality land, supplied the people with the enthusiasm and the long term commitment to establish and run the Centre. In case of the Napil VYFD Course the promoter is the long established local NGO, the Farm Support Association (FSA) and in particular FSA's manager Peter Kaoh who originates from Tanna. FSA has a well-deserved reputation for effective low cost project management appropriate for the conditions found in rural Vanuatu. The active involvement and oversight of FSA will be required for some years yet if the VYFD Course is to be sustained. Inevitably, in the longer term, the involvement and interest of a Vila based NGO sponsor will wane. A high level of community involvement will be necessary to compensate in the longer term for absence of a faith based organisation which underpins the Tutu RTC. In this respect current apparent level of community ownership and commitment at Napil is encouraging and needs to be continually cultivated.

It is unlikely that a successful rural training centre in the Pacific can ever be fully financially self-sufficient. Thus, ongoing public funding support is critical – be this through the government and/or aid donors. This has been the case for Tutu, which has had long term financial support from the Fiji Government and more recently from aid donors and international catholic NGOs. Tutu has embarked on a concerted income generation program to increase the Centre's independence – however it is unlikely that financial self-sufficiency can achieved for at least several decades.

The initial funding for the start-up for Napil VYFD Course came from a private benefactor followed by donor funding channelled through an international NGO (Oxfam) to a local NGO (FSA). Napil, unlike Tutu, has very

little land of its own. This limits the Centre's income generating capability – although some income generating opportunities have been identified. Napil will require continued outside funding, of the order of 2 million vatu (around USD 20,000) annually for the foreseeable future[3]. This level of modest public funding could be expected to generate significant benefits.

The training requires a continuous oscillation between the training centre and the participants' own farms

The ultimate value of a training course which is directed at self-employment in agriculture, is what happens in the participants' home situation. The regular oscillation between the trainee's home farm and the training centre is a necessary key component of the Tutu model. Oscillation allows the trainee to put into practice and to test the principles they learn at the training centre on an ongoing basis. The adjustments that need to be made in the trainee's life style back in the village are made in an incremental manageable manner. The expectation is that as result of this oscillation during the course the young farmer is able to make a relatively seamless transition from life as a trainee to a self-employed farmer on their own land. In the case of Tutu, the Principal Fr McVerry notes:

> For the young farmers they are able to actually establish themselves during the course, e.g. build their own houses, make their own furniture, buy farming and household equipment etc. so that at the end of the course there is no major change of direction but simply carry on with what they have already been doing. Their course is actually living out a 5-year plan that Tutu has drawn out for them including the years prior coming to Tutu, and they leave with own five year plan they have clearly articulated and accepted by their parents …… . It gives staff the opportunity to visit the participants during their home period and see, experience and reflect with them on obstacles and difficulties. In the case of the youth, staff are able to encourage parents who co-operate with the participants program and confront parents who are un-cooperative (cf parent's course).

At the training centre course participants receive positive peer support from the other trainees who are facing the same set of challenges. This is in contrast to the situation faced by trainees from more conventional rural training centres who usually only try to return to their village situation to farm at the completion of the course. These graduates simultaneously face the challenge of adjusting back to village life and applying their newly acquired skills from the training centre. Not least of the challenges is obtaining the necessary access to land for their farming enterprise and obtaining the full support of their parents. This they are required to do in isolation without the support of the training centre and probably without any accumulated financial assets. The magnitude of this challenge can be overwhelming and, unlike Tutu, there is usually no second chance to succeed. If the home farming enterprise is not established as expected – the ex-trainee either succumbs to the routine of village life or leaves or seeks wage employment elsewhere.

For Tutu Young Farmers the oscillation involves 5-weeks at the Centre and 5-weeks back at their own farms. This means that if they initially fail in their home period and targets etc. they are able to come back: re-evaluate with staff on a personal level, then have another crack in 5-weeks' time. In learning from past mistakes, Young Farmers go through this process twenty times in their four year course and so many who initially do not cope well alone, are able to finally get on top of it. For Napil, the oscillation is considerably shorter and does not involve living at the Centre.

The consistent and exceptionally high return rate to farming is what makes the Tutu RTC stand out, in comparison to other farmer training programs. Since 1983, 224 young men have completed the Young Farmer Course. Of these, 206 (92%) are still farming as their source of livelihood, of which 200 (89%) are farming their own mataqali land (McGregor et.al 2011). In this respect, it is useful to make a comparison with the Navuso Agricultural School operated by the Methodist Church. In the 1970s Navuso was regarded as the premier farmer training institution in the Pacific islands. Navuso's trainees came from all over Fiji – thus regular oscillation between the Centre and home farms was not feasible. The best return rate to farming achieved by the Navuso Student Farmer Scheme was some 50% return of its graduates to farming (Bamford 2001).

[3] In recent years the Tutu RTC has received an annual government grant of between FJD 440,000 to 550,000 (approx. USD 226,000 to 276,000).

While the oscillation principle is a necessary requirement of the Tutu model, it does bring with it disadvantages and limitations. For Tutu these have included:

- **The established discipline and flow of the course is interrupted and has to be re-established when the trainees return from their time in the village**. For Napil with such a short oscillation period there is little or no such interruption in course flow. However, at Napil the short oscillation period limits the opportunity to establish work discipline at the Centre.
- **Problems, hurts, disillusionments' suffered during the village situation come back with the trainees** as baggage that remains a negative distraction unless debriefed properly by staff. For Napil such problems are likely to be accentuated with daily village and home problems returning to the Centre with the trainee.
- **Frequent return to the home village brings with it significant financial cost for trainees** in terms of travel costs. This is another reason why the Tutu model can only be applied within the confines of a limited geographical area. For Napil this is not an issue as the trainees walk between the Centre and their home.
- **Extended absences from the Centre limits the types of projects that trainees can undertake at the Centre**. Small livestock (poultry and piggery) and vegetable growing projects tend not to be feasible because they require constant attention. In the past Tutu Young Farmers had piggery and poultry projects that were looked after by staff in absence of the trainees. This proved too demanding in terms of staff time and these projects have now been dropped. For Napil this is not an issue, and offers an important advantage compared with Tutu. Napil has been able to successfully have vegetable projects as a major focus.
- **Crops grown at the home farm have to be those that are not unduly impacted by extended periods of absence.** This does not represent a constraint for the Napil VYFD Course participants.
- **Demands placed on staff**. Tutu staff are required to be frequently away from their own families and spend long working hours in village based consultations. Over time Tutu has been able to develop the dedicated and skilled staff required despite the relatively low salaries on offer. These staff have almost exclusively come through the Tutu course ranks and are not college graduates. It is already apparent that Napil is adopting the approach of identifying future staff from its trainees. The Napil staff will need to be equally dedicated and skilled. However, due to the close proximity of the trainees' home farms, it is not necessary for them to be frequently away from their families for extended periods.

Overall it would seem that Napil have adopted and adapted an oscillation system that is well suited to the particular situation found at Middle Bush Tanna. Napil, with no residential requirements, has made it easier to include young men and women in the same course. On the other hand a primary objective for the Tutu RTC is to develop autonomy and independence for the trainees. This would be more difficult to achieve with the Napil VYFD Course, with trainees returning to their family homes each evening.

The focus is on management - providing flexible and innovative courses that meet the needs of the participants.

Management is central to successful self-employment using your own resources. For those in wage employment in the formal sector, knowledge of management is useful, but not essential. Hence management in all its facets is at the core of Tutu's courses. Napil VYFD Course curriculum also suggests that management is also being afforded high priority.

Over the years, the Tutu RTC has been flexible and to some degree experimental in its approach to rural training. This has enabled the Centre to make changes in an effort to develop more effective programs to prepare youth for self-employment in response to the changing needs of rural Cakaudrove. The courses on offer today at the TRTC have evolved significantly over the years. There is now major emphasis on environmentally sustainable agriculture and its links with longer term commercial viability. This was a direct response to the acidification and declining fertility of Taveuni soils. A major focus of the Napil Young Farmer course has also been on sustainable farming practices that enhance soil fertility. This is a direct response to the high population pressure of the Middle Bush area of Tanna (Kaoh et.al 2014).

Some lessons learned from the Tutu experience

The focus audience for Young Farmers should be 19 to 23 year olds who live in their own village

The Tutu "model" is about character formation. It has been the Tutu experience that this is best achieved within the 19 to 23 age category. At that age, trainees still have youthful enthusiasm but have experienced the tribulations of village life. It is required that entrants into Tutu training program must have spent at least the last two years living in the village. Tutu does not cater for unemployed and disillusioned youth from urban areas who wish to return to live in rural areas. This group have particular needs that need to be addressed – but this is not provided by Tutu.

The initial prospectus for the Napil VYFD Course stated that the entry age of the trainees should 19 to 23 years – with course open to both men and women. However, subsequently, a number of keen young people approaching 30 were admitted to the Course. One of these older trainees has been particularly successful and has become a role model for the group. He is now being groomed as a Napil trainer.

At this early stage of developing the Napil program such flexibility in the upper age limit is understandable. The Tutu experience has shown that it takes time for such a course to prove itself and for demand for places to develop. However, as Napil's reputation grows and demand for places starts to outstrip availability there should be stricter adherence to the upper age limit. As noted by Fr. Petero Matiratu, "The current minimum age for recruiting is thirty years of age, I believe the age level should be lower down to (18-23) years as the older the people become the more dominant, they are in a bigger group. The result of this is that younger participants can't fully show their potential" (annex 2).

Course entry requirements must be specific, quantifiable and demanding

Entry into Tutu is not based on formal education qualifications. Nevertheless the requirements to enter a Tutu course are demanding, specific and quantifiable. A necessary, but not sufficient criterion, to gain entry into the Young Farmer Course is applicants to have planted at least 1,000 kava plants (or equivalent). This quantifiable criterion demonstrates two main factors that are critical for success at Tutu: 1) access to land on which to plant; and, 2) commitment to be a farmer.

Napil, similarly, does not use formal education qualifications as an entry requirement. The necessary requirements for entry are a signed land access agreement from parents and the village chief and a keen interest in farming as a career. Specific quantifiable planting targets are not yet used as selection criteria. It would be unrealistic to expect planting targets to be in place at this early stage of developing the training program. Tutu is now in a position to insist on such stringent entry requirements with the demand for trainee places far exceeding availability. It is expected that over time Napil will increasingly be in position to follow suit, and should do so.

An intensive and prolonged extension and follow-up effort is required from staff to support the training

Successfully applying the Tutu model is particularly labour intensive in terms of staff time, both at Centre and on the home farms of the trainees. In the case of the Tutu Young Farmers Course this extension begins several years before the trainee enters Tutu, with village meetings with potential entrants and their parents, coaching applicants and young farmer groups, and evaluating applicants' capability to succeed at Tutu. Follow-up extension back on their home farms continues for several years after the completion of the course. The total time to complete the Young Farmer training process is around 10-years – even though the course proper is for 4-years.

Less than half of Young Farmer Course applicants are selected and go on to participate in the actual course – even though many meet the planting targets. These other young farmers are considered part of the Tutu program and continue to receive extension inputs from the Tutu staff.

During his actual time at Tutu, a Young Farmer will be visited at his home farm three times a year by staff. The visitation program involves:

- visiting the trainee's farm, where crops are counted and advice given;

- discussion with the trainees' parents and village heads;
- coaching of other young people who have applied for entry to Tutu; and,
- identifying changes that might be made at Tutu to make the courses more responsive to the needs of young people living in the village.

This staff intensive extension program mean that the staff trainee ratio at Tutu is much higher than that for formal education institutions. The Tutu RTC currently has 33 staff members, of which 16 are fulltime. There are around 40 to 60 trainees participating in courses at one time. Tutu staff tend to work long hours - not being constrained by civil service or wage worker regulations and attitudes.

The much closer proximity of the Napil trainees home farms to the Centre makes it somewhat easier for the Napil staff to provide extension services – but the demands on staff are still considerable. With currently 35 participants in the VYFD Course and 2.5 staff members – the staff/trainee ratio is significantly less favourable than the situation at Tutu. This will need to be addressed if the staff are not to be overloaded and their effectiveness undermined.

The value of short courses for elders/parents/landowners.

These short courses have proven to be highly beneficial in explaining the Tutu model and in securing the necessary home support for the young participants. A limited geographical catchment area for participants makes such parents' courses feasible.

A paradigm shift in the approach to rural training is required

The Tutu non-formal adult education methodology, now being applied at Napil, requires a paradigm shift in the approach to training. This training is focussed on providing the management skills for remunerative self-employment utilising the participants' own resources. The training is not to provide certifiable skills to secure outside wage employment. The process needs to be led by dedicated core staff who the trainees grow to respect and trust largely through the extension process. This approach builds an openness for change and to enable traditional farmers to change their habits and attitudes. Attitudinal change is slow, particularly in rural areas. The staff must be able to relate with young people and also be able to engender the trust of the older people whose support is also required for people working communally owned land. The designers of the Napil VYFD Course seem to have fully embraced this non formal approach to adult education with dedicated core staff fitting the Tutu mould.

Much of the necessary management skills of Tutu staff have been learnt on the job. At Tutu the role of staff is seen to be not so much as that of teacher, trainer, technician, etc. but more that of a "formator" of the management attitudes, values, and practices required for self-employment in agriculture. They work daily alongside the trainees as "formators".

Tutu's core staff have learnt their necessary management skills on the job – first as Tutu trainees, then as successful farmers in their own right and subsequently through a formation process as Tutu staff. Initially Tutu employed staff chosen from Tutu course participants, who had no formal qualifications simply because the Centre could not afford to employ so called 'qualified people'. The current Tutu Principal, Father McVerry relates to the situation that was faced, "We soon learned that these people were far more effective than the so called qualified people who often lacked rapport and credibility in their own persons. Rural people are in general often suspicious of people who come with theoretical answers and proposals, but more accepting of other farmers who have done it themselves and can talk with integrity from experience".

Non staff members can be utilised to provide supporting technical and specialist training inputs

A formal education alone would not be sufficient to equip people to manage a rural training centre such as Tutu and Napil. Formal education can, however, provide staff with valuable complementary skills in areas such as soil science, small engine mechanics and carpentry. Such skills can often be best provided in short term training inputs utilizing external resources. However, incorporating these inputs requires a degree of planning and some additional funding.

Tutu employs a cabinet maker, mechanic, book keeper, to support the program focussed on self-employment in agriculture. Various specialised technical inputs are also provided by people who are not staff members. For example, training in small engine repair is provided by an instructor from the Centre for Appropriate Technology and Technology (CATD) located on Viti Levu. In the past training in some technical aspects of agriculture has been provided by local Ministry of Agriculture staff, when suitable people were available. In more recent times, however, with increasing emphasis on sustainable agriculture practices, the Tutu staff have been more involved with training in areas of agronomy and soil science. The orientation of this training has remained "hands on" and practical. Experienced experts have been hired to 'train the trainers' in areas such as the running of Soil Schools, agroforestry and nursery management. These experts are paid modest fees, usually as part of a donor funded activity[4].

Over time cost effective ways need to be found for incorporating more specialised and/or technical skills into VYFD Course. Such areas would include: human development, health and nutrition, record keeping and basic numeracy. This is probably best achieved through incorporating short teaching "slots" utilising suitable outside expertise into the course program when it available. For example, presentations on health and nutrition could made by a local Health Department officer. As a government officer the expectation that there would be no payment for these short inputs other than possibly travel expenses.

Human development, rightly so, is prominent in the VYFD Course curriculum. Human development training requires particular skills and training. It would be unrealistic to expect that the existing core staff would have these skills. A local Marist priest, Fr. Antoine Tamaraka sm, is based in Middle Bush. Fr. Antoine has worked at Tutu and is trained in the area of human development. He has expressed willingness to present a human development "slot" at Napil at no financial cost to Napil. Careful consultation would be required with the Napil communities with regard to Fr Antoine's role to avoid confusion in the future. FSA staff visit Napil on a somewhat ad-hoc basis. There would seem to be opportunities to utilise FSA staff in a more formal systematic way. Record keeping and administration are seen as priority areas. Funding to cover travel expenses would be required.

Staff should be selected on the basis of a proven track record in using their own resources

All Tutu staff are chosen on the basis of a proven track record in using their own resources. Most are graduates of the Tutu system and will return to farming their own land when they have completed their service at Tutu. These staff are ideally placed to be role models for the village youth they seek to mentor and mould. Few have academic qualifications – although most have been exposed to a variety of short term externally run courses, and this is encouraged. Napil core staff would also benefit greatly from appropriate external short term courses and exchanges.

The demand for the courses is the main source of inbuilt accountability

Throughout the Pacific islands, there is a growing trend towards the accrediting and external certification of training institutions. The overall trend to national accreditation of educational institutions is welcome. However, conventional external accreditation is not applicable to the type of rural adult education training provided by Tutu and Napil. Tutu does not issue diplomas to its successful graduates which they can use to source wage employment. A graduate's savings account and their 5-year plan are seen as the Tutu graduate's "diploma".

Napil will issue a certificate to those who complete the VYDC. This is perhaps a compromise to meet the Vanuatu Development and Rural Training Centre Association (VDRTCA) requirements. There are moves afoot to have all curricula in Vanuatu accredited by the Vanuatu National Training Council (VNTC). National accreditors need to understand the raison d'être for non-formal adult educational institutions such as Tutu and Napil, otherwise their very existence could be threatened. Considerable effort needs to be devoted, by organisations such as FSA, to explaining what such institutions are all about and their importance to rural development.

[4] The Catholic NGO, Caritas (Aust) have been funding in recent years a program at Tutu entitled: "Enhancing the sustainability of the courses offered by the Tutu Rural Training Center". This program has had soil school, agroforestry, fruit tree and vegetable components.

Tutu's programs have been subject to continuous and rigorous review by the people who matter most – the people who receive the training. As Fr. McVerry notes, "The oscillation of participants between the traditional village life and the centre remain one of the most telling factors and is an inbuilt evaluator in terms of relevance of our practices". The Napil program will come under similar close scrutiny. Tutu's reputation for excellence has been hard earned for a period of over 30 years. However, this reputation could be quickly lost if it was perceived as not delivering remunerative self-employment to its participants.

Four decades on the challenge for Napil is even harder as it just begins the process of building its reputation with a demanding constituency. In situations like Tutu and Napil where constituents can quickly "vote with their feet", courses need to be flexible and able to evolve in line with needs. Examples of flexibility could include extending or cutting short a particular course due to unforeseen circumstances such as a major cyclone. Such pragmatism would not be possible in more formal training programs which have a fixed curriculum and issue certificates of achievement which may be subject to external accreditation.

Training must be in the local vernacular

Tutu's training (both verbal and written), is presented in the vernacular (Fijian in the Cakaudrove dialect). At Napil instruction is in the local language of the participants and not even in Bislama (Vanuatu's lingua franca). The use of vernacular at Tutu and Napil sets them apart from many rural training centres in the Pacific, where the instruction tends to be in English. Most Tutu trainees, unlike rural dwellers in other Pacific islands, are reasonably literate in English, thanks to Fiji's formal school system. Thus instruction could be in English. However, all instruction is in the vernacular because the training provided needs to be associated with returning to the village for self-employment in agriculture and not wage employment in urban areas.

At Napil there is apparent need to improve the basic numeracy of the trainees. This is not for outside employment, but to improve record keeping and management skills for successful self-employment. This should take the form of numeracy training that focusses on practical farm management requirements such as counting crops in the ground and calculating costs and returns.

Farming enterprises for the trainees need to be based on agronomically suitable crops that have a well-established marketing systems in place

At Tutu in recent decades, the enterprise mix for the trainees has focused on taro and kava. Both crops have well established private sector marketing systems, which ensure that the product can always be sold at the prevailing price. Traders are encouraged to come to Tutu – but the Centre itself has no involvement in marketing. Direct involvement in marketing is a pitfall that rural training centres should avoid.

In the past Tutu has promoted products (cocoa and vanilla) which at the time did not have well established private sector marketing systems. As a result the Tutu Young Farmer projects built around these products failed. This failure led to disillusionment with farming as a business.

From the outset Napil seems to have learnt the lesson that youth farming programs need to be based on agronomically suitable crops with established marketing systems. This is the case for the taro, kava, coffee and vegetable crops grown by Napil farmers. Napil's vegetable crops have all been sold in local Tanna markets. The continued success of the training program can be expected to lead to an oversupply of vegetables on the local market. Good marketing opportunities have been identified in Vila for temperate vegetables, particularly onions[5]. To take full advantage of this opportunity for onions will require the introduction of tropical varieties with better shelf life properties together with the adoption of improved curing and storage techniques. The Napil Centre has a key role to play in facilitating in the introduction of these innovations. The Centre should, however, not get directly involved in the marketing of these products. Rather, full advantage should be taken of the well-established marketing networks that the Tannese people have into Vila.

[5] Over the period 2009 to 2013 Vanuatu imported an average of 412 tonnes of onions annually from New Zealand (Vanuatu National Statistics Office). The average annual landed value of these imports was vt 34.6 million. On the Nov 24, 2014 the retail price for onions at Au Bon Marche Supermarket was 195 vt/kg for brown onions and 280vt/kg for red onions.

Future enterprises to be promoted need to be selected on the basis of proven support and marketing systems. Accordingly there is a good opportunity to expand Napil's current poultry enterprise initiative, utilizing FSA/Syndicat Agricole poultry program. Similarly the FSA Spices Network/Venui Vanilla provides a good opportunity to develop vanilla enterprises. Vanilla is a crop agronomically well suited to the Middle Bush area.

The courses need to provide a mechanism to accumulate savings for investment

Throughout the Pacific islands, a major constraint faced by farmers wishing to develop commercial agriculture on custom land is lack of capital – both investment and working capital. Vanuatu is certainly no exception in this respect. SPC's Pacific Youth in Agriculture Strategy; 2011-2015" refers to the financial barriers for youth participating in agriculture as "ready, willing and unable". To quote the Strategy:

> It is often envisaged that youth are the backbone of society and are the "future" leaders. However, poverty can narrow ones sense of the future and make planning seem pointless. Since the majority of rural youths dwell in the traditional villagers and live among the impoverished in society it is understandable that access to credit from development and financial banks is limited. Young men and women are often disheartened at the prospect of accessing credit as financial institutions. Most don't meet the requisites to even apply for a loan. This is seen as a stumbling block for young entrepreneurs in accessing capital for viable projects. The ability of youths to maintain expectations disappear as financial barriers become a reality.

The banking system (commercial or development banks), will not provide loan finance because of the absence of tradable security. The compulsory saving system established by Tutu, and now adopted by Napil, overcomes this constraint. A Tutu Young Farmer, prior to graduation, is able to establish a substantial farming enterprise and build a house on his own land without being encumbered by debt.

An important lesson learnt at Tutu is that a somewhat paternalistic approach (the Principal being a joint signatory to the account) needs to be taken to the use of the students own funds while Young Farmers are in training. The designers of the Napil VYFD Course have taken on board this lesson and significant savings are now being accumulated by the trainees.

In lieu of fees, there needs to be a significant contribution in kind/voluntary work

Tutu, in contrast to most training centres, does not charge trainees fees. This has been done to remove a major barrier to entry for low income rural households and reduces the obligation factor between the trainees and their parents. This does not mean that Tutu trainees don't make a major financial contribution to the Centre – quite the contrary. This is, however, done in kind through significant labour contributions to the Centre's maintenance and income earning enterprises.

The Napil Young Farmers pay an annual course fee of 10,000vt. The imposition of trainee fees is the result of a combination of financial pressure and the policies of VRDTCA. While the financial justification for fees is appreciated, the trade-off of potential negative consequences needs to be recognised. With this in mind every effort needs to be made to minimise the financial barriers to course participants and to make optimum use of in-kind contributions to the viability of the Centre.

Parental participation in the training program is essential

A feature of Tutu's youth focussed courses is the involvement of the parents. A one week Parents Course was initiated back in 1985. This course is now part of an ongoing program to link the participants and their training to their home village and their parents. Parental support and encouragement is seen as essential if the trainees are to make the transition to successful independent farmers. Parents play a key role in providing these young farmers with access to land.

The training program needs to start small and evolve in line staff capacity and the needs of the rural community

The Tutu RTC started in 1973 with a single course (Volunteer Course) involving 25 participants. In the intervening four decades the portfolio has expanded to six (6) courses. Any new rural training centre wishing to emulate the Tutu model would need to take care not to initially over extend itself and try to deliver too much.

Initial indicators of success will no doubt increase the pressure from funding agencies to expand and replicate the Napil experience, given the enormity of Vanuatu's urban migration problems. However, Napil will need to temper any expansion plans in line with capability to deliver successful outcomes. Vanuatu desperately needs a successful role model for training youth for self-employment in agriculture – it does not need another failed rural training centre.

Despite Napil's successful start-up of the pilot VYFD Course, realistically it is likely to be several years before this is an established proven entity. It is at this stage that concrete consideration should be given to replicating the Napil experience elsewhere in Vanuatu. At this stage the approach should be to arrange field visits to Napil by interested parties and let them make up their own mind if they wish to proceed with a similar rural training model in their own location. This was the approach taken with Napil's visit to Tutu in 2011.

A locally focussed rural centre can generate a substantial return from the investment of public funds

The Tutu experience has shown starting small and expanding gradually in line with capability, can still generate an exceptionally high rate of return from the investment of public funds. Since its inception Tutu has received some FJD 6 million (approx. USD 3 million) in government grants and donor funding. It has been possible to quantify some of the economic returns from this investment, thanks to the excellent records kept by the graduates of the Tutu Young Farmer Course. To quote McGregor et.al (2011):

> It is estimated annual income earned by the 68 Young Farmers who graduated in 2007, and will graduate in 2011 is $1.27 million. Had it not been for Tutu, these Young Farmers would have remained largely underemployed in the village or would have migrated to the urban areas with limited employment prospects. The annual income earned by the latest sets of Young Farmers has to be added the income earned by previous groups of Young Farmers and the income earned by the over 500 Married Farming Couples and 300 Young Single Women. There are also significant multipliers at play here, with other rural people associated with the Tutu courses. Of particular note here is the other young men who have been involved with the Young Farmer course, without formally attending the course (now designated as the Young Farmers 2 Course). Thus a government investment of a little more than $4 million over 35 years is now generating an equivalent amount annually. **It would be difficult to identify investments in rural development that would provide such a high rate of return on public funds** (p, 56).

At Napil similar rates of return can be expected from the modest targeted investment that has been made. To date there have been an investment of around 5.2 million vatu (USD 50,000) in private and donor funds at Napil. As of end of June 2014, nearly 300,000 vatu had been earned by the participants from the vegetables grown on their small Napil plots. Greater amounts are being earned from the sale of vegetables grown on their own land. All participants have benefitted from increased productivity of their taro and kava crops. These benefits are expected to continue to accrue into the future, with the expertise presumably passed on to their children. The sustainable agriculture techniques taught through the VYFD Course will mean that these benefits will be maintained into the future with their value demonstrated to other farmers in the Middle Bush area. All farmers in the Middle Bush area have benefitted from the Napil Centre making available quality vegetable seeds. However, as with Tutu, the consolidation and expansion of these benefits will require the continuation of modest external funding for the foreseeable future.

The major achievements of the Napil VYFD Course

The Napil VYFD Course is the first concerted effort to replicate the Tutu model elsewhere in the Pacific, including Fiji. The promoters of the Napil Course have understood the key principles underpinning the Tutu model. Under difficult circumstances and with limited funding, a successful start-up has been made in applying these principles to the particular conditions found in Middle Bush, Tanna. The arrangements that have put into place at Napil are seen as pioneering for Vanuatu in terms of the involvement of village youth in commercial agriculture – particularly with respect to young women. The specific achievements of the Napil pilot to date have been:

- The design of a course focussed on youth self-employment in agriculture in the Middle Bush area of Tanna. In common with other areas in Melanesia, this location has fertile soil and favourable climatic conditions – but faces high population and environmental pressures.

- Securing dedicated and competent staff from the community and strong community support for the initiative.
- Enrolling thirty three (33) young farmers, of which eleven (11) are women.
- All young farmers have obtained written consent from their parents and village chief that gives them access to land for the duration of the course.
- All participants have opened saving accounts in which the proceeds from the sale produce from their Napil Centre blocks have been deposited.
- Quality fresh vegetables are now being produced and sold on local Tanna markets - providing cash income and enhancing nutrition.
- Market opportunities in Port Vila have been identified for high value onions for which Middle Bush has a comparative advantage.
- A Young Farmer has secured a contract to supply vegetables to a local tourism operator.
- The use of vegetable and kava seedling nurseries have been introduced in to Middle Bush farming systems.
- Middle Bush farmers now have access to vegetable seeds and other nursery supplies at a reasonably affordable price.
- Village farmers have been introduced to farming systems that enhance productivity and land use sustainability. This provides an important demonstration for farmers in other locations facing similar problems.

The achievements to date can be attributed the understanding, vision and effort of three key people (Peter Kaoh, Tom Iotil and Geoff Bamford) and the willingness of the Tutu RTC to share its experience.

Major constraints and challenges faced by the Napil RTC

Securing ongoing funding to ensure staff continuity and expansion

The VYFD Course was initiated at Napil with start-up funding provided by Geoff Bamford and with some supplementary funding coming from MFAT (NZ) via Oxfam (NZ). This initial funding of 5.2 million vatu is now almost exhausted. Geoff Bamford, regrettably, died earlier in 2014 and FSA's current MFAT/Oxfam Project has come to an end.

A new Oxfam (NZ)/FSA project proposal was submitted to NZ MFAT in March 2014. This project entitled, Facilitating Income Generation from Self-Employment in Agriculture (FIGSEA), includes a provision for the ongoing funding of the Napil Program and the possible replication in other locations. A final decision from NZ MFAT on this funding proposal is still pending, although the expectation is that this funding will be forthcoming. The Oxfam (NZ)/FSA project provides for:

- Ongoing funding of existing core staff at Napil.
- A full time position to teach basic book keeping to the trainees and to handle the Napil accounts and financial administration.
- Materials for nursery improvement (including shade cloth, clear plastic and planter bags)
- Some basic expansion of the building to allow for a tool storage and minimal accommodation.
- Provision for a revolving fund to purchase vegetable seeds, nursery supplies and plastic field crates from the Syndicat Agricole for sale to farmers.

While the expectation is that NZ MFAT will eventually be forthcoming, it is critical that there not be a break in the continuity of the VYFD Course. At very least the basic salaries of the current staff (35,000 vt, 30,000 vt and 15,000 vt per month respectively) be maintained until longer term funding is in place.

It is apparent that the Napil RTC has done well in piloting the Tutu model, albeit on a much smaller scale. These achievements now need to be consolidated for the benefit of the people living in this densely populated location. The benefits accruing to Middle Bush alone would fully justify the effort and expenditure required. Beyond Middle Bush, lessons from the Napil experience can make a significant contribution to future rural and economic development for Vanuatu and the wider Pacific islands region. However, for this to be realised the Napil pilot will need to be nurtured and adequately supported.

Similarities and differences between the Napil RTC and the Tutu RTC

The Tutu model is defined by a number of key principles (McGregor *et.al* 2011). These are:

- the training is for a specific geographical area;
- the training is **not** for "drop outs" but for participants seeking remunerative self-employment from their own resources;
- the participants have demonstrated access to their own land;
- the training centre is a partnership between the sponsors, community and the funding agencies;
- the training requires a continuous oscillation between the training centre and the participants' own farms; and,
- the focus is on management - providing flexible and innovative courses that meet the needs of the participants.

There have been a number important lessons learnt from the experience of the Tutu RTC's four decades of operation (McGregor *et.al* 2011). These lessons are:

- the focus audience is 19 to 23 year olds who live in their own village;
- the course entry requirements must be specific and demanding;
- an intensive and prolonged extension and follow-up effort is required from staff to support the training;
- the successful management of a rural training centre requires a high level of expertise;
- staff should be selected on the basis of a proven track record in using their own resources;
- training must be in the local vernacular;
- farming enterprises for the trainees need to be based on crops that have well established marketing systems in place;
- the courses need to provide a mechanism to accumulate savings for investment;
- in lieu of fees, there needs to be a significant contribution in kind/voluntary work;
- parental participation in the training program is essential;
- the training program needs to start small and evolve with staff capacity and in response to the needs of the rural community;
- there should be sufficient flexibility to response to the needs of the constituents;
- there needs to be the freedom to innovate;
- the demand for the courses is the main source of inbuilt accountability; and,

- successful course participants can earn incomes well in excess of their peers who have migrated to urban areas and who are in wage employment.

The non-adherence to some of these key principles has led to failure in applying the so-called Tutu "model" in other locations. Such an example is Saint Martins in the Solomon Islands. The St. Martin's Rural Training Centre (SMRT) , as with the Tutu RTC, was an initiative of the Society of Mary of the Catholic Church and had access to a significant area of land. The Centre, located on 46 hectares on the Guadalcanal Plains, was established in response to the lack of practical, informal village training for young men, particularly those migrating from the village to urban centres. The training was intended to provide the opportunity for young men to be productive by utilizing the skills they learned to improve village life.

An evaluation conducted in 2009 concluded that the Tutu model did not work at St. Martin (Kalisto and Vouza 2009). The reviewers concluded that the course that covered agriculture, carpentry, mechanics, joinery and life-skills was relevant to the trainees needs. However, it their view the Tutu "model" did not work at St Martins. They concluded: "The concept itself is relevant and it works in Fiji, however it does not operate like that in the Solomon Islands unless it is reviewed to meet the conditions of the Solomon Islands." It seems that those who designed the St Martin's Young Farmers Course based on the Tutu "model" had a poor understanding of the key oscillation principle. This is reflected in the comments of the Kalisto and Vouza review:

> Two years of training is appropriate for a rural training centre. The first year, students often takes time to adjust, and often it is at a time where most of the trainees are beginning to adjust to a life very different from the village life they come from. It is only in the 2nd year that students are beginning to acquire understanding and put into place the knowledge they learned in the first year. Again, these two years are only spent at the Centre, but they go back to their village in their 2nd year in June to undertake home projects. According to some of the trainees, they said that "when they go home to embark on new projects, it does not work". The time frame from June – November is too short to initiate home projects. The projects that may be made available to them in that time only belong to their immediate family such as a piggery and poultry. These projects are not initiated by the students, but by their families. …….The Tutu Model that was adopted by the Centre does not work because individuals who live by the Centre are interested to go to other Provinces to experience a different environment. The Tutu Model is restricted and does not allow students to expose to other cultures and to engage with other people (2009).

The Tutu model is exactly about enabling the trainees focus on their home environment to achieve a remunerative and satisfying lifestyle. In contrast, it is clear that the designers of the Napil VYFD Course fully understood this. These key principles and lesson learnt are elaborated briefly below with respect Tutu and consideration is given to how they have been applied at Napil.

The key principles of the Tutu "model"

The training is for a specific geographical area

Rural training centres in the Pacific are usually national centres that accept students from the entire country. Prominent examples are the Navuso RTC in Fiji and St. Martins RTC in the Solomon Islands. The Tutu in contrast, until very recently only served the Province of Cakaudrove where the Centre is located. Recently the Tutu catchment has been extended to parts of the adjacent provinces of Bua and Macauata – which are culturally and agronomically similar.

The reason for the narrow geographic focus is that it facilitates the return of trainees to farm their own land. The focus on a narrow geographic area means similar crops to be grown at the Centre and on the trainees home farms. It also allows for frequent and cost effective: oscillation between the Centre and the trainees home farms; and, participant home farm visitations by staff before, during and after the course.

The catchment area for the participants also needs to be geographically limited so that elders/parents/landowners can benefit from short course so they can provide necessary support for the young participants.

The Napil RTC even more closely meets this geographic area condition than Tutu itself. The Napil Centre is situated in a culturally/linguistically homogenous area, where farmers grow the same crops and face similar environmental and population pressure challenges. The home farms of the trainees are within realistic walking distance from the Centre. This close proximity brings with it some major advantages in terms of:

- minimising the overhead costs of building and maintaining residential dormitories;
- significantly reducing the financial and supervisory cost of oscillation between the Centre and participants home farms; and,
- enables young men and young women to participate in the same course at the same time.

Close proximity, however, brings with it potential down sides that need to considered and appropriately managed where necessary. A key stated objective of the Tutu RTC is to form and train young people "to be autonomous, responsible and mature young adults, who are principle-led decision makers, who are able to take control of their own lives and choosing freely to live as farmers on their own land, accept their call to be of the village, and be able to live in the service of others in their society". The forming of this autonomy and independence would appear to be made more difficult when the course participants return to the house of their parents on a daily basis.

With such a narrow catchment area there is also an increased risk of Napil RTC becoming an excessively insular and parochial training institution. This is an issue that Tutu had had to deal with over the years and important lessons have been learned that are applicable to Napil. Measures taken involve staff training and exchanges and the utilization of suitable outside expertise in training 'slots'. However, this needs to be done in such a way that doesn't undermine the essential character and focus of the training institution to train young people to farm their own land.

A consequence of the Tutu model being only applicable to a confined geographical area is that the cost of scaling up and replication tends to be much higher than it is for the standard nationally oriented rural training centre. However, as the Tutu experience has shown, the benefits of a successful application of this locally orientated approach can far outweigh the costs.

The training is not for "drop outs" but for participants seeking remunerative self-employment utilising their own resources

Tutu is quite different from most other educational institutions operating in the Pacific islands. High schools, colleges and universities are formal educational institutions that offer a fixed curriculum (usually externally approved) and provide a certificate/diploma/degree indicating the trainee has successfully completed the program. Success at such institutions is measured through exams and other such measures. The certificate is used to secure a formal wage earning employment or to obtain entry into other education institutions. The Tutu RTC is quite different. Tutu, and similarly Napil, are non-formal training institutions that train young people for self-employment using their own resources. For Tutu the minimum requirements for entry are high but are not based on formal educational qualifications. The trainees are not required to pass formal examinations and at Tutu they do receive a certificate at the completion of the course. The non-formal nature of the training makes accreditation difficult through conventional accreditation systems and standards.

Rural training centers throughout the Pacific islands are usually seen as second level training institutions designed for "drop outs" from the formal education system who are unable to secure wage employment. This is not the case with Tutu, which is designed to make young Fijians successful farmers of their own land. The Napil VYFD Course was designed with exactly the same objective.

Most entrants into Tutu have a relatively low level of formal education achievement – although this level has tended to increase over the years. The formal education levels of the Napil trainees is even lower. In the early years of Tutu the trainees were usually perceived as "drop outs" by their family and village and it can be expected that initially Napil trainees will be perceived in the same way. The perception of Tutu trainees and graduates has changed significantly over the years. Entry into Tutu courses is highly competitive and being a Tutu graduate brings with it considerable prestige. This can be attributed to the demonstration effect of the

incomes and livelihoods of Tutu graduates. It can be expected that community perceptions of the Napil trainees will also change over time for the same reason.

The participants have demonstrated access to their own land

Tutu has been successful in developing proactive approaches to the sensitive issue of accessing land for young people. There is a consensus among the Young Farmer Course graduates that the facilitation of access to their clan (*mataqali*) land was a critical factor in their success at Tutu. To gain entry into the Tutu Young Farmer Course a village youth needs to have planted at least 1,000 kava plants (or equivalent). The quantifiable and transparent criterion demonstrates two main determinates of success as a farmer: access to land on which to plant; and, commitment to be a farmer. Also required for entry is a signed agreement from their parents and clan head that gives them access to the land they are farming.

Such demanding, quantifiable and transparent entry requirements based on crops planted are not yet in place at Napil. In the earlier years of Tutu they were also not in place. Napil, however, from the outset has put into place the entry requirement of a signed agreement from their parents and the village chief that gives access to land for the duration of the course. For Vanuatu, such a formal land access agreement is seen as a path breaking development for the involvement of youth, particularly girls, in agriculture.

The training centre is a partnership between the sponsors, community and the funders

Tutu could not have succeeded without the partnership between the sponsor (the Society of Mary of the Catholic Church), the community (the Province and people of Cakaudrove) and the main funding entity (the Government). The Society of Mary, apart from providing a sizable amount of high quality land, supplied the people with the enthusiasm and the long term commitment to establish and run the Centre. In case of the Napil VYFD Course the promoter is the long established local NGO the Farm Support Association (FSA) and in particular FSA's manager Peter Kaoh who originates from Tanna. FSA has a well-deserved reputation for effective low cost project management appropriate for the conditions found in rural Vanuatu. The active involvement and oversight of FSA will be required for some years yet if the VYFD Course is to be sustained Inevitably, in the longer term, the involvement and interest of a Vila based NGO sponsor will wane. A high level of community involvement will be necessary to compensate in the longer term for absence of a faith based organisation which underpin the Tutu RTC. In his respect current apparent level of community ownership and commitment at Napil is encouraging and needs to be continually cultivated.

It is unlikely that a successful rural training centre in the Pacific can ever be fully financially self-sufficient. Thus ongoing public funding support is critical – be this through the government and/or aid donors. This has been the case for Tutu, which has had long term financial support from the Fiji Government and more recently from aid donors and international catholic NGOs. Tutu has embarked on a concerted income generation program to increase the Centre's independence – however it is unlikely that financial self-sufficiency can achieved for at least several decades.

The initial funding for the start-up for Napil VYFD Course came from a private benefactor followed by donor funding channelled through an international NGO (Oxfam) to a local NGO (FSA). Napil, unlike Tutu, has very little land of its own. This limits it Centre's income generating capability – although some income generating opportunities have been identified. Napil will require continued outside funding, of the order of 2 million vatu (around USD 20,000) annually for the foreseeable future[6]. This level of modest level of public funding could be expected to generate significant benefits.

The training requires a continuous oscillation between the training centre and the participants' own farms

The ultimate value of a training course which is directed at self-employment in agriculture, is what happens in the participants' home situation. The regular oscillation between the trainee's home farm and the training centre is a necessary key component of the Tutu model. Oscillation allows the trainee to put into practice and to test the

[6] In recent years the Tutu RTC has received an annual government grant of between FJD 440,000 to 550,000 (approx. USD 226,000 to 276,000).

principles they learn at the training centre on an ongoing basis. The adjustments that need to be made in the trainee's life style back in the village are made in an incremental manageable manner. The expectation is that as result of this oscillation during the course the young farmer is able to make a relatively seamless transition from life as a trainee to a self-employed farmer on their own land. In the case of Tutu, the Principal Fr McVerry notes:

> For the young farmers they are able to actually establish themselves during the course, e.g. build their own houses, make their own furniture, buy farming and household equipment etc. so that at the end of the course there is no major change of direction but simply carry on with what they have already been doing. Their course is actually living out a 5-year plan that Tutu has drawn out for them including the years prior coming to Tutu, and they leave with own five year plan they have clearly articulated and accepted by their parents …… . It gives staff the opportunity to visit the participants during their home period and see, experience and reflect with them on obstacles and difficulties. In the case of the youth, staff are able to encourage parents who co-operate with the participants program and confront parents who are un-cooperative (cf parent's course).

At the training centre course participants receive positive peer support from the other trainees who are facing the same set of challenges. This is in contrast to the situation faced by trainees from more conventional rural training centres who usually only try to return to their village situation to farm at the completion of the course. These graduates simultaneously they face the challenge of adjusting back to village life and applying their newly acquired skills from the training centre. Not least of the challenges is obtaining the necessary access to land for their farming enterprise and obtaining the full support of their parents. This they are required to do in isolation without the support of the training centre and probably without any accumulated financial assets. The magnitude of this challenge can be overwhelming and, unlike Tutu, there is usually no second chance to succeed. If the home farming enterprise is not established as expected – the ex-trainee either succumbs to the routine of village life or leaves or seeks wage employment elsewhere.

For Tutu Young Farmers the oscillation involves 5-weeks at the Centre and 5-weeks back at their own farms. This means that if they initially fail in their home period and targets etc. they are able to come back: re-evaluate with staff on a personal level, then have another crack in 5-weeks' time. In learning from past mistakes, Young Farmers go through this process twenty times in their four year course and so many who initially do not cope well alone, are able to finally get on top of it. For Napil, the oscillation is considerably shorter and does not involve living at the Centre.

The consistent and exceptionally high return rate to farming is what makes the Tutu RTC stand out, in comparison to other farmer training programs. Since 1983, 224 young men have completed the Young Farmer Course. Of these, 206 (92%) are still farm as their source of livelihood, of which 200 (89%) are farming their own mataqali land (McGregor et.al 2011). In this respect, it is useful to make a comparison with the Navuso Agricultural School operated by the Methodist Church. In the 1970s Navuso was regarded as the premier farmer training institution in the Pacific islands. Navuso's trainees came from all over Fiji – thus regular oscillation between the Centre and home farms was not feasible. The best return rate to farming achieved by the Navuso Student Farmer Scheme was some 50% return of its graduates to farming (Bamford 2001).

While the oscillation principle is a necessary requirement of the Tutu model, it does bring with it disadvantages and limitations. For Tutu these have included:

- **The established discipline and flow of the course is interrupted and has to be re-established when the trainees return from their time in the village**. For Napil with such a short oscillation period there is little or no such interruption in course flow. However, at Napil the short oscillation period limits the opportunity to establish work discipline at the Centre.
- **Problems, hurts, disillusionments' suffered during the village situation come back with the trainees** as baggage that remains a negative distraction unless debriefed properly by staff. For Napil such problems are likely to be accentuated with daily village and home problems returning to Centre with the trainee.

- **Frequent return to the home village brings with it significant financial cost for trainees** in terms of travel costs. This is another reason why the Tutu model can only be applied within the confines of a limited geographical area. For Napil this is not an issue as the trainees walk between the Centre and their home.

- **Extended absences from the Centre limits the types of projects that trainees can undertake at the Centre**. Small livestock (poultry and piggery) and vegetable growing projects tend not to be feasible because they require constant attention. In the past Tutu Young Farmers had piggery and poultry projects that were looked after by staff in absence of the trainees. This proved too demanding in terms of staff time and these projects have now been dropped. For Napil this is not an issue, and offers an important advantage compared with Tutu. Napil has been able to successfully have vegetable projects as a major focus.

- **Crops grown at the home farm have to be those that are not unduly impacted by extended periods of absence.** This does not represent a constraint for the Napil VYFD Course participants.

- **Demands placed on staff**. Tutu staff are required to be frequently away from their own families and spend long working hours in village based consultations. Over time Tutu has been able to develop the dedicated and skilled staff required despite the relatively low salaries on offer. These staff have almost exclusively come through the Tutu course ranks and are not college graduates. It is already apparent that Napil is adopting the approach of identifying future staff from its trainees. The Napil staff will need to be equally dedicated and skilled. However, due to the close proximity of the trainees home farms, it is not necessary for them to be frequently away from their families for extended periods.

Overall it would seem that Napil have adopted and adapted an oscillation system that is well suited to the particular situation found at Middle Bush Tanna. Napil, with no residential requirements, has made it easier to include young men and women in the same course. On the other hand a primary objective for the Tutu TRTC is to develop autonomy and independence for the trainees. This would be more difficult to achieve with the Napil VYFD Course, with trainees returning to their family homes each evening.

The focus is on management - providing flexible and innovative courses that meet the needs of the participants.

Management is central to successful self-employment using your own resources. For those in wage employment in the formal sector, knowledge of management is useful, but not essential. Hence management in all its facets is at the core of Tutu's courses. Napil VYFD Course curriculum also suggest that management is also being afforded high priority.

Over the years, the Tutu RTC has been flexible and to some degree experimental in its approach to rural training. This has enabled the Centre to make changes in an effort to develop more effective programs to prepare youth for self-employment in response to the changing needs of rural Cakaudrove. The courses on offer today at the TRTC have evolved significantly over the years. There is now major emphasis on environmentally sustainable agriculture and its links with longer term commercial viability. This was a direct response to the acidification and declining fertility of Taveuni soils. A major focus of the Napil Young Farmer course has also been on sustainable farming practices that enhance soil fertility. This is a direct response to the high population pressure of the Middle Bush area of Tanna (Kaoh et.al 2014).

Some lessons learned from the Tutu experience

The focus audience for Young Farmers should 19 to 23 year olds who live in their own village

The Tutu "model" is about character formation. It has been the Tutu experience that this is best achieved within the 19 to 23 age category. At that age, trainees still have youthful enthusiasm but have experienced the tribulations of village life. It is required that entrants into Tutu training program must have spent the at least the last two years living in the village. Tutu does not cater for unemployed and disillusioned youth from urban areas who wish to return to live in rural areas. This group have particular needs that need to be addressed – but this is not provided by Tutu.

The initial prospectus for the Napil VYFD Course stated that the entry age of the trainees should 19 to 23 years – with course open to both men and women. However, subsequently, a number of keen young people approaching 30 were admitted to the Course. One of these older trainees has been particularly successful and has become a role model for the group. He is now being groomed as a Napil trainer.

At this early stage of developing the Napil program such flexibility in the upper age limit is understandable. The Tutu experience has shown that it takes time for such a course to prove itself and for of demand for places to develop. However, as Napil's reputation grows and demand for places starts to outstrip availability there should be stricter adherence to the upper age limit. As noted by Fr. Petero Matiratu "The current minimum age for recruiting is thirty years of age, I believe the age level should be lower down to (18-23) years as the older the people become the more dominant, they are in a bigger group. The result of this is that younger participants can't fully show their potential" (annex 2).

Course entry requirements must be specific, quantifiable and demanding

Entry into Tutu is not based on formal education qualifications. Nevertheless the requirements to enter a Tutu course are demanding, specific and quantifiable. A necessary, but not sufficient criteria, to gain entry into the Young Farmer Course to have planted at least 1,000 kava plants (or equivalent). This quantifiable criteria demonstrates two main factors that are critical for success at Tutu: 1) access to land on which to plant; and, 2) commitment to be a farmer.

Napil, similarly, does not use formal education qualifications as an entry requirement. The necessary requirements for entry is a signed land access agreement from parents and the village chief and a keen interest in farming as a career. Specific quantifiable planting targets are not yet used as selection criteria. It would be unrealistic to expect planting targets to be in place at this early stage of developing the training program. Tutu is now in a position to insist on such stringent entry requirements with the demand for trainee places far exceeding availability. It is expected that over time Napil will increasingly be in position to follow suit and should do so.

An intensive and prolonged extension and follow-up effort is required from staff to support the training

Successfully applying the Tutu model is particularly labour intensive in terms of staff time, both at Centre and on the home farms of the trainees. In the case of the Tutu Young Farmers Course this extension begins several years before the trainee enters Tutu, with village meetings with potential entrants and their parents, coaching applicants and young farmer groups, and evaluating applicants' capability to succeed at Tutu. Follow-up extension back on their home farms continues for several years after the completion of the course. The total time to complete the Young Farmer training process is around 10-years – even though the course proper is for 4-years.

Less than half of Young Farmer Course applicants are selected and go on to participate in the actual course – even though many meet the planting targets. These other young farmers are considered part of the Tutu program and continue to receive extension inputs from the Tutu staff.

During his actual time at Tutu, a Young Farmer will be visited at his home farm three times a year by staff. The visitation program involves:

- visiting the trainee's farm, where crops are counted and advice given;
- discussion with the trainees parents and village heads;
- coaching of other young people who have applied for entry to Tutu; and,
- identifying changes that might be made at Tutu to make the courses more responsive to the needs of young people living in the village.

This staff intensive extension program mean that the staff trainee ratio at Tutu is much higher than that for formal education institutions. The Tutu RTC currently has 33 staff members, of which 16 are fulltime. There around 40 to 60 trainees participating in courses at one time. Tutu staff tend to work long hours - not being constrained by civil service or wage worker regulations and attitudes.

The much closer proximity of the Napil trainees home farms to the Centre makes it somewhat easier for the Napil staff to provide extension services – but the demands on staff are still considerable. With currently 35 participants in the VYFD Course and 2.5 staff members – the staff/trainee ratio is significantly less favourable than the situation at Tutu. This will need to be addressed if the staff are not to be overloaded and their effectiveness undermined.

The value of short courses for elders/parents/landowners.

These short courses have proven to be highly beneficial is explaining the Tutu model and in securing the necessary home support for the young participants. A limited geographical catchment area for participants make such parents courses feasible.

A paradigm shift in the approach to rural training is required

The Tutu non-formal adult education methodology, now being applied at Napil, requires a paradigm shift in the approach to training. This training is focussed on providing the management skills for remunerative self-employment utilising the participants own resources. The training is not to provide certifiable skills to secure outside wage employment. The process needs to be led by dedicated core staff who the trainees grow to respect and trust largely through the extension process. This approach builds an openness for change and to enable traditional farmers to change their habits and attitudes. Attitudinal change is slow particularly in rural areas. The staff must be able to relate with young people and also be able to engender the trust of the older people whose support is also required for people working communally owned land. The designers Napil of the VYFD Course seems to have fully embraced this non formal approach to adult education with dedicated core staff fitting the Tutu mould.

Much of the necessary management skills of Tutu staff have been learnt on job. At Tutu the role of staff is seen to be not so much as that of teacher, trainer, technician, etc. but more that of a "formator" of the management attitudes, values, and practices required for self-employment in agriculture. They work daily alongside the trainees as “formators”.

Tutu’s core staff have learnt their necessary management skills on the job – first as Tutu trainees, then as successful farmers in their own right and subsequently through a formation process as Tutu staff. Initially Tutu employed staff chosen from Tutu course participants, who had no formal qualifications simply because the Center could not afford to employ so called 'qualified people'. The current Tutu Principal, Father McVerry relates to the situation that was faced: “We soon learned that these people were far more effective than the so called qualified people who often lacked rapport and credibility in their own persons. Rural people are in general often suspicious of people who come with theoretical answers and proposals, but more accepting of other farmers who have done it themselves and can talk with integrity from experience”.

Non staff members can be utilised to provided supporting technical and specialist training inputs

A formal education alone would not be sufficient to equip people to manage a rural training centre such as Tutu and Napil. Formal education can, however, provide staff with valuable complementary skills in areas such as soil science, small engine mechanics and carpentry. Such skills can often be best provided short term training inputs utilizing external resources. However, incorporating these inputs require a degree of planning and some additional funding.

Tutu employs a. cabinet maker, mechanic, book keeper, to support the program focussed on self-employment in agriculture. Various specialised technical inputs are also provided by people who are not staff members. For example training in small engine repair is provided by an instructor from the Centre for Appropriate Technology and Technology (CATD) located on Viti Levu. In the past training in some technical aspects of agriculture have been provided by local Ministry of Agriculture staff, when suitable people were available. In more recent times, however, with increasing emphasis on sustainable agriculture practices, the Tutu staff have been more involved with training in areas of agronomy and soil science. The orientation of this training has remained “hands on” and practical. Experienced experts have been hired to ‘train the trainers’ in areas such as the running Soil Schools,

agroforestry and nursery management. These experts are paid modest fees, usually as part of a donor funded activity[7].

Over time cost effective ways need to be found for incorporating more specialised and/or technical skills into VYFD Course. Such areas would include: human development, health and nutrition, record keeping and basic numeracy. This is probably best achieved through incorporating short teaching "slots" utilising suitable outside expertise into the course program when it available. For example presentations on health and nutrition could made by a local Health Department officer. As a government officer the expectation that there would be no payment for these short inputs other than possibly travel expenses.

Human development, rightly so, is prominent in the VYFD Course curriculum. Human development training requires particular skills and training. It would be unrealistic to expect that the existing core staff would have these skills. A local Marist priest, Fr. Antoine Tamaraka sm, is based in Middle Bush. Fr. Antoine has worked at Tutu and is trained in the area of human development. He has expressed willingness to present a human development "slot" at Napil at no financial cost to Napil. Careful consultation would be required with the Napil communities with regard to Fr Antoine's role to avoid confusion in the future. FSA staff visit Napil on a somewhat ad-hoc basis. There would seem to be opportunities to utilise FSA staff in a more formal systematic way. Record keeping and administration are seen as priority areas. Funding to cover travel expenses would be required.

Staff should be selected on the basis of a proven track record in using their own resources

All Tutu staff are chosen on the basis of a proven track record in using their own resources. Most are graduates of the Tutu system and will return to farming their own land when they have completed their service at Tutu. These staff are ideally placed to be role models for the village youth they seek to mentor and mould. Few have academic qualifications – although most have been exposed to a variety of short term externally run courses, and this is encouraged. Napil core staff would also benefit greatly from appropriate external short term courses and exchanges.

The demand for the courses is the main source of inbuilt accountability

Throughout the Pacific islands, there is a growing trend towards the accrediting and external certification of training institutions. The overall trend to national accreditation of educational institutions is welcome. However, conventional external accreditation is not applicable to the type of rural adult education training provided by Tutu and Napil. Tutu does not issue diplomas to its successful graduates which they can use to source wage employment. A graduate's savings account and their 5-year plan is seen as the Tutu graduate's "diploma".

Napil will issue a certificate to those who complete the VYDC. This is perhaps a compromise to meet the Vanuatu Development and Rural Training Centre Association (VDRTCA) requirements. There are moves afoot to have all curricula in Vanuatu accredited by the Vanuatu National Training Council (VNTC). National accreditors need to understand the raison d'être for non-formal adult educational institutions such as Tutu and Napil, otherwise their very existence could be threatened. Considerable effort needs to be devoted, by organisations such as FSA, to explaining what such institutions are all about and their importance to rural development.

Tutu's programs have been subject to continuous and rigorous review by the people who matter most – the people who receive the training. As Fr. McVerry notes "the oscillation of participants between the traditional village life and the centre remain one of the most telling factors and is an inbuilt evaluator in terms of relevance of our practices". The Napil program will come under similar close scrutiny. Tutu's reputation for excellence has been hard earned for a period of over 30 years. However, this reputation could be quickly lost if it was perceived as not delivering remunerative self-employment to its participants.

[7] The Catholic NGO, Caritas (Aust) have been funding in recent years a program at Tutu entitled: "Enhancing the sustainability of the courses offered by the Tutu Rural Training Center". This program has had soil school, agroforestry, fruit tree and vegetable components.

Four decades on the challenge for Napil is even harder as it just begins the process of building its reputation with a demanding constituency. In a situations like Tutu and Napil where constituents can quickly "vote with their feet", courses need to be flexible and able to evolve in line with needs. Examples of flexibility could include extending or cutting short a particular course due to unforeseen circumstances such as a major cyclone. Such pragmatism would not be possible in more formal training programs which have a fixed curriculum and issue certificates of achievement which may be subject to external accreditation.

Training must be in the local vernacular

Tutu's training (both verbal and written), is presented in the vernacular (Fijian in the Cakaudrove dialect). At Napil instruction is in the local language of the participants and not even in Bislama (Vanuatu's lingua franca). The use of vernacular at Tutu and Napil sets them apart from many rural training centres in the Pacific, where the instruction tends to be in English. Most Tutu trainees, unlike rural dwellers in other Pacific islands, are reasonably literate in English, thanks to Fiji's formal school system. Thus instruction could be in English. However, all instruction is in the vernacular because the training provided needs to be associated with returning to the village for self-employment in agriculture and not wage employment in urban areas.

Figure 1: The onions of a Napil Young Farmer being dried in the sun

At Napil there is apparent need to improve the basic numeracy of the trainees. This is not for outside employment, but to improve record keeping and management skills for successful self-employment. This should take the form of numeracy training that focusses on practical farm management requirements such as counting crops in the ground and calculating cost and returns.

Farming enterprises for the trainees need to be based on agronomically suitable crops that have a well-established marketing systems in place

At Tutu in recent decades, the enterprise mix for the trainees has focused on taro and kava. Both crops have well established private sector marketing systems – which ensures that the product can always be sold at the prevailing price. Traders are encouraged to come to Tutu – but the Centre itself has no involvement in marketing. Direct involvement in marketing is a pitfall that rural training centres should avoid.

In the past Tutu has promoted products (cocoa and vanilla) which at the time did not have well established private sector marketing systems. As a result the Tutu Young Farmer projects built around these products failed. This failure lead to disillusionment with farming as a business.

From the outset Napil seems to have learnt the lesson that youth farming programs need to be based on agronomically suitable crops with established marketing systems. This is the case for the taro, kava, coffee and vegetable crops grown by Napil farmers. Napil's vegetable crops have all been sold in local Tanna markets. The continued success of the training program can be expected to lead to an oversupply of vegetables on the local market. Good marketing opportunities have been identified in Vila for temperate vegetables, particularly onions[8]. To take full advantage of this opportunity for onions will require the introduction of tropical varieties with better shelf life properties together with the adoption of improved curing and storage techniques. The Napil Centre has key role to play in facilitating the in introduction of these innovations. The Centre should, however, not get directly involved in the marketing of these products. Rather, full advantage should be taken of the well-established marketing networks that the Tannese people have into Vila.

[8] Over the period 2009 to 2013 Vanuatu imported an average of 412 tonnes of onions annually from New Zealand (Vanuatu National Statistics Office). The average annual landed value of these imports was vt 34.6 million. On the Nov 24, 2014 the retail price for onions at Au Bon Marche Supermarket was 195 vt/kg for brown onions and 280vt/kg for red onions.

Future enterprises to be promoted need to be selected on the basis of proven support and marketing systems. Accordingly there is a good opportunity to expand Napil's current poultry enterprise initiative, utilizing FSA/Syndicate Agricol poultry program. Similarly the FSA Spices Network/Venui Vanilla provides a good opportunity to develop vanilla enterprises. Vanilla is a crop agronomically well suited to the Middle Bush area.

The courses need to provide a mechanism to accumulate savings for investment

Throughout the Pacific islands, a major constraint faced by farmers wishing to develop commercial agriculture on custom land is lack of capital – both investment and working capital. Vanuatu is certainly no exception in this respect. SPC's Pacific Youth in Agriculture Strategy; 2011-2015" refers to the financial barriers for youth participating in agriculture as "ready, willing and unable". To quote the Strategy:

> It is often envisaged that youth are the backbone of society and are the "future" leaders. However, poverty can narrow ones sense of the future and make planning seem pointless. Since the majority of rural youths dwell in the traditional villagers and live among the impoverished in society it is understandable that access to credit from development and financial banks is limited. Young men and women are often disheartened at the prospect of accessing credit as financial institutions. Most don't meet the requisites to even apply for a loan. This is seen as a stumbling block for young entrepreneurs in accessing capital for viable projects. The ability of youths to maintain expectations disappear as financial barriers become a reality.

The banking system (commercial or development banks), will not provide loan finance because of the absence of tradable security. The compulsory saving system established by Tutu, and now adopted by Napil, overcomes this constraint. A Tutu Young Farmer, prior to graduation, is able to establish substantial farming enterprise and build house on his own land without being encumbered by debt.

An important lesson learnt at Tutu is that a somewhat paternalistic approach (the Principal being a joint signatory to the account) needs to be taken to the use of the students own funds while Young Farmers are in training. The designers of the Napil VYFD Course have taken on board this lesson and significant savings are now being accumulated by the trainees.

In lieu of fees, there needs to be a significant contribution in kind/voluntary work

Tutu, in contrast to most training centres, does not charge trainees fees. This has been done to remove a major barrier to entry for low income rural households and reduces the obligation factor between the trainees and their parents. This does not mean that Tutu trainees don't make a major financial contribution to the Centre – quite the contrary. This is, however, done in kind through significant labour contributions to the Centre's maintenance and income earning enterprises.

The Napil Young Farmers pay an annual course fee of 10,000vt. The imposition of trainee fees is the result of a combination of financial pressure and the policies of VRDTCA. While the financial justification for fees is appreciated, the trade-off of potential negative consequences needs to be recognised. With this in mind every effort needs to be made to minimise the financial barriers to course participants and to make optimum use of in-kind contributions to the viability of the Centre.

Parental participation in the training program is essential

A feature of Tutu's youth focussed courses is the involvement of the parents. A one week Parents Course was initiated back in 1985. This course is now part of an ongoing program to link the participants and their training to their home village and their parents. Parental support and encouragement is seen as essential if the trainees are to make the transition to successful independent farmers. Parents play a key role in providing these young farmers with access to land.

The training program needs to start small and evolve in line staff capacity and the needs of the rural community

The Tutu RTC started in 1973 with a single course (Volunteer Course) involving 25 participants. In the intervening four decades the portfolio has expanded to six (6) courses. Any new rural training centre wishing to emulate the Tutu model would need to take care not to initially over extend itself and try to deliver too much.

Initial indicators of success will no doubt increase the pressure from funding agencies to expand and replicate the Napil experience, given the enormity of Vanuatu's urban migration problems. However, Napil will need to temper any expansion plans in line with capability to deliver successful outcomes. Vanuatu desperately needs a successful role model for training youth for self-employment in agriculture – it does not need another failed rural training centre.

Despite Napil's successful start-up of the pilot VYFD Course, realistically it is likely to be several years before this is an established proven entity. It is at this stage that concrete consideration should be given to replicating the Napil experience elsewhere in Vanuatu. At this stage the approach should be to arrange field visits to Napil by interested parties and let them make up their own mind if they wish to proceed with a similar rural training model in their own location. This was the approach taken with Napil's visit to Tutu in 2011.

A locally focussed rural centre can generate a substantial return from the investment of public funds

The Tutu experience has shown starting small and expanding gradually in line with capability, can still generate an exceptionally high rate of return from the investment of public funds. Since its inception Tutu has received some FJD 6 million (approx. USD 3 million) in government grants and donor funding. It has been possible to quantify some of the economic returns from this investment, thanks to the excellent records kept by the graduates of the Tutu Young Farmer Course. To quote McGregor et.al (2011):

> It is estimated annual income earned by the 68 Young Farmers who graduated in 2007, and will graduate in 2011 is $1.27 million. Had it not been for Tutu, these Young Farmers would have remained largely underemployed in the village or would have migrated to the urban areas with limited employment prospects. The annual income earned by the latest sets of Young Farmers has to be added the income earned by previous groups of Young Farmers and the income earned by the over 500 Married Farming Couples and 300 Young Single Women. There are also significant multipliers at play here, with other rural people associated with the Tutu courses. Of particular note here is the other young men who have been involved with the Young Farmer course, without formally attending the course (now designated as the Young Farmers 2 Course). Thus a government investment of a little more than $4 million over 35 years is now generating an equivalent amount annually. **It would be difficult to identify investments in rural development that would provide such a high rate of return on public funds** (p, 56).

At Napil similar rates of return can be expected from the modest targeted investment that has been made. To date there have been an investment of around 5.2 million vatu (USD 50,000) in private and donor funds at Napil. As of end of June 2014, nearly 300,000 vatu had been earned by the participants from the vegetables grown on their small Napil plots. Greater amounts are being earned from the sale of vegetables grown on their own land. All participants have benefitted from increased productivity of their taro and kava crops. These benefits are expected to continue to accrue into the future, with the expertise presumably passed on to their children. The sustainable agriculture techniques taught through the VYFD Course will mean that these benefits will be maintained into the future with their value demonstrated to other farmers in the Middle Bush area. All farmers in the Middle Bush area have benefitted from the Napil Centre making available quality vegetable seeds. However, as with Tutu, the consolidation and expansion of these benefits will require the continuation of modest external funding for the foreseeable future.

The major achievements of the Napil VYFD Course

The Napil VYFD Course is the first concerted effort to replicate the Tutu model elsewhere in the Pacific, including Fiji. The promoters of the Napil have understood the key principles underpinning the Tutu model. Under difficult circumstances and with limited funding, a successful start-up has been made in applying these principles to the particular conditions found in Middle Bush Tanna. The arrangements that have put into place at Napil are seen as pioneering for Vanuatu in terms of the involvement of village youth in commercial agriculture – particularly with respect to young women. The specific achievements of the Napil pilot to date have been:

- The design of a course focussed on youth self-employment in agriculture in the Middle Bush area of Tanna. In common with other areas in Melanesia, this location has fertile soil and favourable climatic conditions – but faces high population and environmental pressures.

- Securing dedicated and competent staff from the community and strong community support for the initiative.
- Enrolling thirty three (33) young farmers, of which eleven (11) are women.
- All young farmers have obtained written consent from their parents and village chief that gives them access to land for the duration of the course.
- All participants have opened saving accounts in which the proceeds from the sale produce from their Napil Centre blocks has been deposited.
- Quality fresh vegetables are now being produced and sold on local Tanna markets - providing cash income and enhancing nutrition.
- Market opportunities in Port Vila have been identified for high value onions for which Middle Bush has a comparative advantage.
- A Young Farmer has secured a contract to supply vegetables to a local tourism operator.
- The use of vegetable and kava seedling nurseries have been introduced in to Middle Bush farming systems.
- Middle Bush farmers now have access to vegetable seeds and other nursery supplies at a reasonably affordable price.
- Village farmers have been introduced to farming systems that enhance productivity and land use sustainability. This provides an important demonstration for farmers in other locations facing similar problems.

The achievements todate can be attributed the understanding, vision and effort of three key people (Peter Kaoh, Tom Iotil and Geoff Bamford) and the willingness of the Tutu RTC to share its experience.

Major constraints and challenges faced by the Napil RTC

Securing ongoing funding to ensure staff continuity and expansion

The VYFD Course was initiated at Napil with start-up funding provided by Geoff Bamford and with some supplementary funding coming from MFAT (NZ) via Oxfam (NZ). This initial funding of 5.2 million vatu is now almost exhausted. Geoff Bamford, regrettably, died earlier in 2014 and FSA's current MFAT/Oxfam Project has come to an end.

A new Oxfam (NZ)/FSA project proposal was submitted to NZ MFAT in March 2014. This project entitled, Facilitating Income Generation from Self-Employment in Agriculture (FIGSEA), includes a provision for the ongoing funding of the Napil Program and the possible replication in other locations. A final decision from NZ MFAT on this funding proposal is still pending, although the expectation is that this funding will be forthcoming. The Oxfam (NZ)/FSA project provides for:

- Ongoing funding of existing core staff at Napil.
- A full time position to teach basic book keeping to the trainees and to handle the Napil accounts and financial administration.
- Materials for nursery improvement (including shade cloth, clear plastic and planter bags)
- Some basic expansion of the building to allow for a tool storage and minimal accommodation.
- Provision for a revolving fund to purchase vegetable seeds, nursery supplies and plastic field crates from the Syndicate Agricol for sale to farmers.

While the expectation is that NZ MFAT will eventually be forthcoming, it is critical that there not be a break in the continuity of the VYFD Course. At very least the basic salaries of the current staff (35,000 vt, 30,000 vt and 15,000 vt per month respectively) be maintained until longer term funding is in place.

Figure 13: Vegetables sold in the Lenakel market: A direct product of the Napil Rural Training Centre

Figure 14: Young Napil Farmer with his seedling nursery

The limited land available at the Napil Centre

The Tutu RTC is located on 480 ha of prime agricultural free hold land on Taveuni which is owned by the Society of Mary in the Province of Mary in Oceania. This resource has been a key asset in providing training for the youth of Cakaudrove Province for self-employment in agriculture utilising their own resources. In contrast, the Napil RTC has had only 2.5 ha of good quality agricultural land allocated to the Centre by two of the Middle Bush tribes. This relatively small area limits the size and the scope for expanding the Napil program. The maximum trainee carrying capacity for the current VYFD Course of 3-year duration is around thirty (30) allowing a minimum fallow period. It is unlikely that more land will be allocated to the Napil Centre, given the land shortages and population pressure that exists.

The number of trainees could be increased somewhat by reducing the duration of the course to two (2) years. The Tutu Young Farmer Course duration is four (4) years. However, for Tutu, the longer period is determined by the time required to harvest the kava grown by the trainees at the Centre and the 5-week oscillation period back on the trainees' home farms. Neither of these reasons apply to Napil. The crops grown by trainees at the Napil Centre are vegetables and taro and the participants oscillate back to their home farm on a fortnightly basis. It would seem that the current VYFD Course curriculum could still adequately covered over a two (2) year period. Thus consideration for shortening the course could be given for the next trainee intake.

Satellite Young Farmer plots away from the Centre, but coming under the Napil RTC umbrella, might be another way to increase land availability. Already a few VYFD Course trainees, not belonging to the two land owning tribes, don't have plots allocated to them at the Centre. Included in this group is Napil's leading young farmer. If community support could be obtained, satellite plots could be a realistic option given the short distances involved that would allow for supervision and extension to be effectively provided.

Napil not being a church based institution

Throughout the Pacific islands church denominations have historically played the lead role in rural youth training. This is likely to continue to be the case. SPC's "Pacific Youth in Agriculture Strategy notes, "Many young people identified the importance of spiritual guidance in their development, and thus the need for the church to play a lead role in influencing their behaviour and linking their engagement in agricultural activities to their personal development and empowerment" (SPC 2010). The Church can and does play a very positive role in encouraging and facilitating youth involvement in agriculture. However, the influence of the Church can also be quite negative. The Tutu FAO Report notes, "Fiji the church has encompassed the very essence of traditional Fijian way of life. The order of the week revolves around church activities. Village folk are obliged to respond to these ideologies and in the process distract from matters concerning youth participation agricultural enterprises. A void can be created that leads to frustration, confusion and instability among village youth" (McGregor et.al 2011).

At Tutu, community support is not restricted to the Catholic population. Tutu courses have always open to all religious denominations and ethnic groups. A sizeable minority of the trainees have been non-Catholics. There are strict rules in place which prohibit students changing religion while at Tutu. The only restriction in place is that instruction be in the local Fijian vernacular. Yet, the prime mover for the establishment of the TRTC and its subsequent development has been the Society of Mary, which serves as a trustee and provides a substantial area of fertile land upon which the Centre is located. Over the years, the Society of Mary has provided a number of exceptional leaders. All the staff section heads are Tutu graduates and have a strong association with the Catholic Church. Coming under the auspices of the Church has provided a high level of motivation, dedication to service and financial sacrifice. This sacrifice included working without wages for several years when funding was severely cut after the 1987 Coup. It is highly unlikely that Tutu could have survived if it was a government or a secular training institution. For Napil, in the absence of an entity such as the Society of Mary, it is the community that will need to provide the staff with the exceptional motivation and commitment necessary for long term sustainability. The impression of the Review Team is that a very promising start has been made in this respect.

Recommendations

Funding

The Napil RTC will require continued external funding for the foreseeable future. Such funding can generate significant economic, social and environmental benefits. While recognising the need for ongoing external funding, increasing financial self-sufficiency should be a priority objective for Napil. Increased financial self-sufficiency will enhance the independence of the Centre. It will also reduce the risk of disruption to existing training programs when funding is delayed or reduced. Napil now potentially faces such a disruption as it awaits the approval of FSA/Oxfam's funding request to NZ MAT. Tutu has faced a history of such disruptions.

Care needs to be taken to ensure that funding programs, including course fees, don't undermine the core training objectives of the Centre. A very appropriate income earning opportunity for Napil is in vegetable seed and seedlings and nursery/farm supply (including poultry inputs).

Staff, staffing and course content

The back ground and experience of Napil's current core staff is appropriate for the training needs of the Centre. However, a more favourable staff/trainee ratio needs to be established to avoid staff being over-loaded to the extent that it undermines their effectiveness as trainers. There needs to be a continuation of the processing of developing promising new core staff from the ranks of Napil trainees. A priority area would seem to be the recruitment of a full time person responsible for finance and administration.

Cost effective ways need to be found for incorporating more specialised and/or technical skills into the VYFD Course curriculum. Identified areas include human development, health and nutrition and record keeping. It is suggested that this be done through incorporating short 'slots' utilising suitable outside teaching resources that might be available. A particular prospect to be explored is the utilisation of Fr Antoine Tamaraka sm to deliver the human development component of the VYFD Course. There would seem to be opportunities to utilise FSA staff in a more formal systematic way in training for the participants and staff. Record keeping and administration would seem to be one such area. A sufficient travel budget allocation would need to be made available for this purpose.

The use of well-designed exchanges would seem to be an effective way to upskill core staff. Tom Iotil has already benefitted greatly from the time he spent at Tutu. It has been suggested that an identified VYFD Course trainee attend the 6-month Tutu Young Women course – with the view that she would return to Napil as a lead trainer. Caritas (Aus.), which already has a program with Tutu, is identified as a potential funding source for such an exchange. Suitable farmer to farmer exchanges involving Napil staff could also be sponsored by the Pacific Island Farmer Organisation Network (PIFON). FSA and Tutu are foundation PIFON members and Napil could consider becoming a member in its own right. An exchange with Tonga with onion varieties, handling and storage is identified as one such possibility

To enhance the involvement of parents, consideration should be given to establishing a parents' short course as part of the VYFDC program.

Additional enterprise considerations for trainees

Vegetables and nurseries has been a successful enterprise focus for the Napil trainees. A number of small poultry enterprises have also been established utilising the proven FSA/Syndicat Agricole village poultry model. Consideration should be given to expanding the number of poultry enterprises. Input supplies (day old chicks and feed) are an integral part of this model and would offer Napil an excellent supplementary income earning opportunity.

The trainees on their home farms grow vegetables, taro, coffee and sandalwood. Consideration should be given to adding vanilla. The Middle Bush offers proven excellent conditions for vanilla. A technical support/market structure is already in place through the FSA Spices Network/Venui Vanilla. Venui Vanilla's success in developing niche markets for Vanuatu's vanilla products is now being threatened by a supply shortage. Middle Bush, through Napil, could make a major contribution to overcoming this problem, which would be beneficial to the entire Vanuatu vanilla industry.

Course entry requirements and fees

It is recommended that the course entry requirements become increasingly stringent overtime as the VYFDC becomes more established and the demand for places increases. Three particular adjustments in entry requirements are suggested:

- having quantifiable pre-entry planting targets;
- removing exceptions to the upper age limit for entry; and
- extending the signed land access agreements to the trainees beyond the duration of the course

Consideration should be given to reducing, and if possible, eliminating course fees and replacing these with an increase in in-kind contributions.

Mechanism to viably increase the number of trainees

To reduce the impact of the small amount of land available at the Centre consideration should be given to:

- reducing the duration of the VYFD course from three (3) years to two (2) years; and,
- establishing satellite outside plots that come under the umbrella of the main Napil Centre

Technical advisory inputs

A particularly good opportunity has been identified for onions, if tropical varieties with better shelf life properties can introduced, together with improved curing and storage techniques. The island of Tongatapu in Tonga has become a substantial onion producer. This area has similar climate conditions to Tanna and there are opportunities for technical exchanges through PIFON.

Outreach

Considerable effort needs to be devoted to explaining what institutions such as Tutu and Napil are about and their importance to rural development. This is seen as role for Tutu and FSA and the wider PIFON network. Appropriate exchanges between the Tutu RTC and Napil RTC should be explored.

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Annex 1

Vanuatu Young Farmers Development Course (VYFDC)

Agrimen blong Graon

Nem blong Young farmer: JOHN NOKLAM

Village: Lamnatu

Agrimen blong Papa mo Mama

Mitufala NIERE NOKLAM mo Liman (Name blong Papa mo Mama)
Olsem Papa mo Mama blong JOHN NOKLAM (Name blong young farmer)
Mitufala i agri se mifala igivem pis graon ia we istap long JOHN NOKLAM (name blong pies we graon istap long hem) long hem blong hemi wokem project blong hem long hem. Graon ia hemi bigwan kasem 1 1/2 hecta Mifala iagri se bae hemi wok long graon ia blong 3 yia. Mifala i talem tru se graon ia hemi stap long hand blong mifala mo mifala i promes se bae mifala ino save tekem out graon ia long hem kasem hemi finisem project blong hem.
Mitufala iagri fulwan se sapos mifala i brekem agriment ia bae Komiti blong Napil RTC igat right blong tekem wan decision o sakem out pikmini blong mitufala long course.

Signature blong Papa [signature] Signature blong Mama Liman

Witness Name mo Signature [signature] Date 21/07/012

Agrimen blong Chief

Mi olsem Jif Kiss Jack Kissel (Name blong Chief)
Olsem Chief blong JOHN NOKLAM - NIERE NOKLAM mo Liman (Name blong young farmer, Nem blong Papa mo Mama)
Mi talem tru se graon ia hemi stap long hand blong Papa mo Mama blong JOHN NOKLAM (nem blong young farmer). Mi talem tru se bae ino save kat problem long hem kasem 3 yia. Mi agri se bae hemi wok long graon ia blong 3 yia. Mi talem tru se graon ia hemi stap long hand blong mi mo mi promes se bae mi make sure se bae ino gat problem long hem kasem young farmer ia hemi finisem project blong hem.
Mi agri fulwan se sapos mi brekem agriment ia bae Komiti blong Napil RTC igat right blong tekem wan decision o sakem out young farmer ia long course.

Signature Chief [signature] Witness Name mo Signature [signature]

Date 21/07/012

1/1

Annex 2: Feed back and impressions from Father Petero Matairatu on his visit to the Napil Rural Training Centre

General remarks based on the Tutu experience

Overall the Napil Rural Training Centre is doing well in adopting the Tutu model in a smaller scale. Tom Iotil and his staff are doing a great work in trying to lift the developments of rural farming into business. Passion, process and principles are part of the development of young people. One need to take into accounts that dreams can only be achieved if we the course staff takes away the factor that our participants are drop outs that they can't achieved anything but have faith in them that they have a lot of potential to achieve greater things in life. There is a magic spark within each heart that lights the power of imagination of every young men and women.

Course Aims and Objectives

The Course is about **forming** ➡ **training** ➡ **starting** the participants to become farmers practicing farming as a business on their own land to help improve their lives.

The stated objectives are: At the end of training (at 2,5-5years) each young farmers will graduate with a certificate in farming as business, given a personal passbook with a balance over 100,000VT have over 200stems of kava of 2 years old, 150 stems of Kava of less to build him /her a permanent house.

Suggestions based on the Tutu experience

If the aim of the rural training centre can be re- word to have a deeper emphasis on the participants to take hold of their lives in the rapidly changing world or to be more autonomous.

- NRTC mission and vision should be made clear to participants and their parents during the initial recruitment of the participants
- The program is not for drop outs but another way for rural non formal education that will help the participants to see agriculture as a business
- The emphasis is to see agriculture as not a role to play but to see it as their daily call as it will empower them to nurture their call daily
- Management class of how to achieve 100,000VT, 200 stems of kava of 2 years old and 150 of less than two years old at the end of the course should be given at the beginning of the course to help young farmers set their daily planting targets.

Administration

Suggestions based on the Tutu experience.

- There should be a written agreement on the Napil building for future security of the course either with the agencies who build the building or with the land owners, or both (whatever is appropriate).
- The course length should be cut down to two years to avoid overcrowding on farm land
- Trainers should undergo refresher courses every few years.
- Suitable and available outside resources should be utilised to provide short training "slots" in specialised areas of non-formal education such as health.
- Human development course were part of the course outline. This is a critically important area – but none of the resident trainer are really qualified this specialist area. My

recommendation was for the trainers to asked Fr Antoine Tamaraka sm a local Marist priest who used to work in Tutu to teach the course. He is trained in this area and expressed willingness to do so. However, careful consultation would be required with the Napil communities with regard to Fr Antoine's role to avoid confusion in the future

- There is a need to look at OHS compliance to ensure the security of the running of the course in the future
- Emphasis should be placed also on the female participants as the course is to help them aware of the importance of the femininity as a big part of it is to prepare them in their marriage life.
- The current minimum age for recruiting is thirty years of age, I believe the age level should be lower down to (18-23) years as the older the people become the more dominant they are in a bigger group. The result of this younger participants can't fully show their potential
- Exchange program for an outstanding young woman course participant to attend the Young Women's 6-month course in Tutu, Taveuni. This would be done with the view of her to becoming a future Napil trainer
- Culture aspect should be taken into account to replace the spiritual elements that underpin the strength of the Tutu Rural Training Centre (Marian spirituality)
- Participants should be taught to keep their own farm records. As a farm manager they should know details of what they planted in the garden. Daily targets need to be set.
- Dreams set by the participants should be realistically achieved.
- One on one involvement of staff with trainees is essential.
- A course should be developed for parents whose children are trained at Napil. This will help them be aware of what their children are going through and a full understanding that their children are trying to be more autonomous and to take hold of their own lives.
- Timetable at home should be cleared to both parents and participants
- During farm visitation trainers should spent time with participants, their parents and the community elders in regards to the development of the participants growth at home and the community at large
- Napil staff should look at the marketing issues problem
- There is no need for a rush in the development of the course – a gradual step by step approach is appropriate
- There should be a day set aside for participants to contribute in the daily running of the family to work for money or to work in the family plantation

With love and prayers

Fr Petero Matairatu sm