

Sonoma Adventist College

Poultry

Concept Proposal



Submitted - September 2022

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1. Foreword

SAC has been established on a strong foundation of input from Christian academic leaders, trades people, community volunteers and sponsors from private and government sectors. The SAC Board of Governors and the SAC administration and teaching faculties are committed to serving the people of Papua New Guinea by ensuring that this college becomes a center of academic excellence, leadership, wellbeing and innovation where students are inspired to serve their country through the learning and skills they have developed here.

This proposal to build a poultry at the College aligns with the directions of PNG Vision 2050 in relation to **Human Development Gender, Youth and People Empowerment (1.17.2.6 and 2.7)** and wealth creation. It is budgeted to cost K1,650,000. This poultry project will help to expand this institution of higher education by creating wealth and providing nutritious healthy food to the students. SAC is also committed to 1.17.2.10 in relation to introducing good citizenship, ethics, morality and personal viability in all educational and work programs.

SAC is an excellent example of an institution of Higher Education that demonstrates wealth creation on many levels. Each SAC staff member and student is involved in work projects that utilize the natural resources of the land and environment to ensure that students are fed healthy food every day from the crops produced on the land and that they have a beautiful environment to care for and which nurtures their wellbeing. Staff and students are involved in community service projects through the many ministries of the church. SAC is an excellent example of environmental sustainability. Each new building has energy saving design features such as solar energy systems and water catchment facilities.

SAC is committed to achieving excellence in institution development and service delivery and works with the Adventist Academic Accreditation body and DHERST to ensure ongoing quality improvements are made within the guidelines of the PNG National Quality Framework. As an institution of the wider SDA church in PNG, SAC is committed to spiritual, cultural and community development and therefore shares the values of the SDA Papua New Guinea Union Mission (**PNGUM, Strategic Vision 2017-2020**)

“The SDA church highly values the bible, people and unity among the body of Christ. We believe that every person deserves respect and dignity because of the infinite value God has placed on every individual. Through God’s grace, every person is gifted and needed for the diverse activities of the church in serving humanity”.

“The objective of the” DHERST 2017, “strategic plan is to help as many students as possible to gain entry to universities or colleges, to offer the quality of education and the most important to help them succeed once they have enrolled. That fundamental reorientation in focus is profound. It means that our hardest work needs to involve finding the strategies and tactics that will best enable students to meet their educational goals, whether they are pursuing a degree or striving toward some other educational objective”.

2. Executive Summary

2.1 Summary Information

Project Title	Poultry Building
Project Location	Sonoma Adventist College
Originating Organisation	Sonoma Adventist College
Contact and Address	Grace Paulson, Project Manager P O Box 360, Kokopo ENPG, PNG
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2.2 Summary Description

Sonoma Adventist College is a private Christian Tertiary Institution owned by the Papua New Guinea Union Mission. It provides diplomas, advanced diplomas and degrees in the areas of Business, Agriculture, Building, Ministry, Secondary and Early Childhood Education. Our student body is made up of students from across the provinces of PNG who board on campus where possible for the duration of their study.

Founded in 1967 with construction of buildings through ‘fly and builds’, as it has grown, a few other essential buildings have been added. The current infrastructure is aged and does not have the capacity for Sonoma’s future growth. Other proposals have been written to address the additional infrastructure required.

As a private Institution, Sonoma relies on student fees for its operations which leaves limited funding for projects that are critical to its development.

As part of our strategy to increase the capital for special projects of the College, SAC is endeavoring to create income generating projects of which the poultry is one.

2.3 Summary Goals and Objectives

This project will provide SAC with the options to provide eggs for the student meals and to generate income for the College through the chooks and eggs that are sold out to the community around SAC. This project aligns with the Higher and Technical Strategic Implementation Plan and lead the Institution and the wider population toward the *‘Vision 2050 will transform our people and our nation by reforming our mind-set and attitudes. It is envisaged that this, will provide the direction to reform and align our institutions and systems to make ‘Papua New Guinea become a smart, wise, fair, healthy and happy Society by 2050’ (PNG Vision 2050, p. 30).*

The project will house 200 chooks to begin with and will be expanded to house additional chooks with the money that is generated from the operation of the poultry. The poultry will provide the space required for the chooks to reside with the required water and food provisions.

2.4 Funding Summary

The current estimates per square meter are K5500. The size of the poultry is approximately 300m² a free-range area of 3,200 Sq. ft. as per standard requirement. The budget for this project is K1,650,000.

2.5 Project Duration

The construction of the project is intended to take a total of nine months. It will be initiated once the funding has been obtained.

3. Project Descriptions

3.1 The purpose of the Project

The purpose of this Project Submission is to justify the need for this facility and request for funding for the construction of the poultry for generating physical wealth for the College as an effort to improving the quality of the meals provided to our students. The skills and education of Kokopo District, East New Britain and Papua New Guineans as a whole will be enhanced further by increasing the wealth of the college through the generation of income that will allow for additional projects to be undertaken that will advance the Institution. This is because the higher education institutions in PNG are recognized as playing greater roles for the development of a prosperous PNG and achieving the government 2050 visions through better basic education services.

3.2 The Goal of the Project

This project is in alignment with the Higher Education and Technical Strategic Development Plan (2017-2038) and the 2050 PNG Vision for the empowerment of the people of PNG through Education and opportunities to develop themselves and for the creation of wealth.

3.3 Objective of the Project

This project intends to fulfil the following objectives:

1. Create a poultry that will provide eggs for student meals
2. Create a means for the College to generate income through the growth and sale of the chooks and chicks

4. Brief History of Sonoma

Sonoma Adventist College (SAC) is a tertiary institution located in a rural setting 17 kms from the township of Kokopo in East New Britain province, Papua New Guinea. The college began in 1968 as a development and extension of the Seventh-day Adventist churches outreach and mission to the people of the Pacific Islands. The Seventh-day Adventist church represents and administers a network of global non-for-profit agencies, services and organizations throughout the world whose vision includes the ongoing mission to provide education, holistic health, spiritual care and physical aid to people in underdeveloped countries.

Since its inception SAC has made significant contributions to the human resource capacity and development of PNG and neighboring Pacific Islands. In the context of PNG and the surrounding Pacific Island Nations the mission of the SDA church envisioned the liberation of Pacific peoples from all forms of bondage (spiritual, mental, social and physical). The mission of SAC has been to develop this mission through the insemination of appropriate knowledge, skills and attitudes by the staff and students. In the context of SAC this mission has been developed, implemented and integrated intentionally through daily practices in both curricular and extracurricular programs facilitated by staff and student leaders. The philosophy, beliefs, and values of the Seventh-day Adventist Church are reflected through the empowered

knowledge, skills, values and lifestyles of both staff and students. Graduates from SAC have become leaders in government, public service, education, health, SDA church enterprises, business organizations and private companies serving the people of PNG and the surrounding Pacific Nations.

For many years SAC endeavored to maintain students roll numbers of between 300-450 students. However, as a result of more recent educational directives and national education strategies SAC has needed to expand its student numbers. The introduction of the PNG governments 'Tuition Fee Free' (TFF) initiative subsidizing the cost of education for students along with the increasing number of SDA church members who desire to have their children trained in SDA institutions, has resulted in a rapid expansion of student numbers during the last 7 years (2014-2021).

4.1 Current Activities of the College

During the last seven years (2015-2021) SAC has continued to develop and expand the vision and mission on many levels including the crucial need of accommodating the increase in student numbers. Infrastructure development has been achieved in three areas:

- increased number of general and teaching staff alongside current staff members higher qualifications;
- the development of administration protocols and policies in line with academic program quality assurance and higher education administration responsibilities.
- Additional room in the men's dormitory and additional 4 rooms in the women's dormitory
- Build of a workshop for the Building Department funded by the South Pacific Division of SDA
- Major funding from the Australian Government towards a center of excellence
- Additional office spaces for increased staff
- Employment of a chef and a counselor as per the DHERST plan
- Upgrade of the computer labs

4.2 Need for a poultry

The campus is located on land that is owned by our parent organization PNGUM. There is adequate space for erecting a poultry. The cost of eggs and chooks are high. SAC purchases chooks from the villages around and stores them in freezers. However, due to the constant fluctuations in power and the failure of power as well, there have been occasions when the frozen meat has to be destroyed due to contamination.

4.2.1 Poultry Design

Below are two images that give an idea of the poultry design.

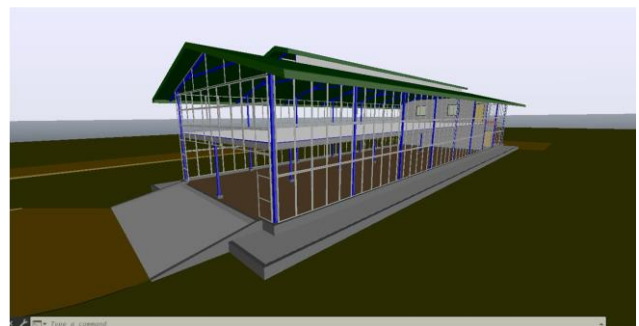


Table 1: Sonoma Adventist College Student Numbers 2019-2022

Year	Total No of Students	Day Students	Boarding Students	Male Boarding Students	Female Boarding Students
2019	600	200	400		
2020	605	199	397	208	189
2021	653	164	480	244	236
2022	659	196	500	248	252

4.3 Beneficiaries

Direct Beneficiaries

The direct beneficiaries of this project will be Sonoma Adventist College students and the campus in its plans to grow and become self-sufficient.

Sonoma Adventist College as it grows and expands into an excellent Tertiary Education Provider and eventually into a University

The stakeholders of Sonoma Adventist College through the infrastructure that will be built on the campus for enhancing its mission to improve the quality of life for the people of PNG and to enable them to become what Jesus wants them to be utilizing their fullest potential

Indirect Beneficiaries

The indirect beneficiaries of this project will be the larger population of PNG. As Sonoma generates income, there will be provision for additional income that can be utilized to further improve infrastructure and the facilities across the campus that in turn will enable to increase the student enrolment. The larger number of students will provide better prospects at employment with higher salaries than they would have had prior to being educated.

5. Project Details

5.1 Project Site

The master plan below has been developed as part of our strategy for the growth of the College. The poultry is included in the plan (number 24).

5.4 Contracting Procedures

The Project will use the SAC tendering processes and procedures to implement the Project. The College, through its Project Management Office, as part of good governance will obtain quotes and select the quote that will not only be price effective but can deliver quality goods and services efficiently and effectively within the timeframe that is given.

6. Institutional Capacity and Implementation Plan

This is a large integrated and complex project which will require technical and professional project management knowledge and experience. A Project Management Team will be therefore be appointed and approved by the Sonoma Adventist College Board. The Project Management Team will comprise expertise in civil engineering, buildings, surveyors and overall Project Manager. It is anticipated that once funding is made available, implementation construction will be done in the following manner:

- (a) Detailed project planning will be carried out.
- (b) Construction of a poultry that can house 200 chickens

Sonoma Adventist College has previously successfully managed large scale projects. It is also currently working towards a large scale project that has been recently approved. SAC has appointed an expatriate project manager who is qualified and experienced to handle the management of large scale projects.

6.1 Implementation Schedule

Project Deliverables		
Title	Description	Notes
Design for the poultry and concept plan		Completed and in place
Architectural Drawings	Full set of architectural drawings	Jan 2023
Building Board Permit	Obtain a permit for the construction of the building	Feb 2023
Resource Consents	Obtain resource constraints for the building	Feb 2023
Tender Process	Request for Tender from at least 3 companies and complete the process	April 2023
Select Contractor	Appoint the winner of the tender process for the construction	May 2023
Project Implementation Plan	Prepare the implementation plan per stage of the project	June 2023
Build	Implementation of the project	July - Dec 2023
Purchase assets	Purchase chooks and feed	Dec 2023
Close Project	Post Project Evaluation/Lessons Learned	Jan 2024

8. Budget

The total cost of this project is anticipated to be K1,650,000. The impact of covid and supply of materials could change this figure significantly from the time that this proposal is submitted to the time that funding is obtained. A broad breakdown of this figure is below:

Items	Cost	Comments
Initial costs	K200,000	Professional services for the drawings, surveyor, structural engineer, services engineer, architect, building board etc.
Workers x 2 (1 year)	K50,000	Including NAS contribution
Space preparation and electricity and water	K150,000	Leveling, Electrical work, plumbing, compliance
Chooks and feed	K40,000	200 chooks and feed for one year
Building and construction	K900,000	As per appendix B
Fencing and external area	K152,000	Fencing for the external area
Security room	K50,000	Security post onsite for protection
Contingency 10%	K108,000	
Total	K1,650,000	

External audit of SAC for 2020 has been completed and can be provided if required. Sonoma has the capacity to maintain the ongoing costs of this building as a poultry will be managed through the funds generated in its operation.

8.1 Feasibility Study for the Sonoma Adventist College Poultry

8.1.1 Income

Egg production

Lowest egg production - 55% (110 eggs per day) at Kina 1.00 per egg

$$110 \times 7 = 770 \text{ egg /wk.}$$

$$770 \times 4 = 3,080 / \text{month}$$

$$3,080 \times 24 \text{ months} = 73,920.00$$

$$\text{Cost of feed} = 37,456$$

$$\text{ROI} = 36,464.00$$

$$\text{Monthly} \quad 36,464.00 / 24 \text{ months} = 1,519.33$$

$$\text{Weekly} \quad 1,274.37 / 4 = 318.59$$

$$\text{Daily} \quad 314.34 / 7 = 44.91$$

Other Income sales

- Cull layer after the term of the project 200 Heads(if no mortality) @ 25 p/h
200 x 25 = 5,000
- Chicken dung- 194 bags of chicken dung @ k10 per sack
194 x 10 = 1,940

Total expected annual income = K43,404

8.1.2 Expenses

Initial cost of 200 semi free hens and 3,200 sqft building with interlink 5ft high foundation of cemented brick

Duration of project implementation: 2 years

1 - 8 weeks brooding

9 - 20 weeks rearing

24 months laying

Feeds purchased locally for 200 chooks

Stages	No of kgs of feed required	No. of bags	Price per bag (kina)	Total
1-8 weeks	800	20	118	2360
8-20 weeks	2160	54	124	6696
24 weeks	4800	120	130	15600
Totals	6960	194	127 average price	24656.00

Cost of DOC chicks

64 day old chicks x 200 = **12,800.00**

Contingency = 2544.00

Total est. cost 37,456.00

9. Risks and Issues

Risks	Likelihood (Low, Medium, High)	Consequences (Fatal, Serious, Manageable)	Mitigating Strategies
Weather Events - Rain	High	Manageable	Contract variation will be inserted as a requirement and appropriate extension of a reasonable period to

			be provided for and project should resume on dry months of the year.
Lack of funds to proceed?	Low	Serious	Project will only be initiated once funds have been obtained
Contractors fail to complete or delay in the completion	High	Manageable	Select only contractors who have a good reference for completing on time Penalty clauses will be included in the contract for delays
Poor quality of work by the contractor	High	Serious	Technical and professional assessors will be part and partial of project management team. Completion of payment to be done only after Certification of satisfactory completion of work. Choose only reputable firms with proven track records.
Theft of materials purchased for the project	High	Serious	Ensure adequate and proper storage facilities are provided for the materials purchased for the project.
Employment disputes from workers	Medium	Manageable	Conditions of casual employment to be clearly spelt out before any engagement. Payment to be at the rate acceptable to the Department of Labour.
Inability to purchase chooks required	Medium	Manageable	Will source and place orders early to ensure that the chooks are available at the right time

10. Project Success Criteria

- Completed poultry build to a high standard of workmanship by Dec 2023
- Produce eggs for student use and sale by Jan 2024
- Delivered on time within budget guidelines and met reporting criteria.
- Project deliverables ensured an efficient work process and safe work environment was maintained throughout the project.