



Royal Academy
of Engineering



Growing Agricultural Engineering in Africa: Supporting the Operations and Implementation of the Strategic Plan for AfroAgEng (Project ACP1921\3\2)

Final Report

21 January 2022



Harper Adams
University



This report is approved for submission to the Royal Academy of Engineering.



Prof JC Smithers
(Project Leader)

Date: 21 January 2022



Prof UL Opara
(President of PASAE)

Date: 21 January 2022



Mr T Mavundza
(President of SAIAE)

Date: 21 January 2022

1. Background

It has been projected that the population in Arica will more than double from 1 billion people in 2010 (~ 15% of 6.9 billion globally) to 2.3 billion people in 2050 (~25% of 9.6 billion globally). This will be accompanied by massive urbanization and increased demand for food, water and energy. The Food and Agriculture Organization of the UN has projected that agricultural output will need to double globally by 2050 to meet the growing demand, with 70% increase in demand coming from developing nations.

Africa is a youthful continent, with over 1 billion people which is projected to reach 2.3 billion by 2050 with more than 60% of the population over 25 years of age. With over 65% of global uncultivated agricultural land present in Africa, it is expected that this potential can be turned into new products and economic opportunities to feed Africa and contribute to global food and nutrition security. Agricultural Engineering technologies and skilled professionals are necessary to realize this vision.

Given the widespread and growing insecurity in food, water and energy throughout Africa, technologies to promote food, water and energy security are necessary. These can be developed by Agricultural Engineers, hence there is a significant need to grow the Agricultural Engineering profession in Africa. Agricultural Engineering is a small engineering discipline internationally, but has a vital role to play in many spheres of life. This includes improving the efficiency of food production, food processing and food storage, efficient utilisation of sustainable sources of energy, as well as sustaining the environment through the development and application of technologies for sustainable water and environmental management.

The Pan African Society for Agricultural Engineering (PASAE), commonly referred to as AfroAgEng, strives to be an active professional Agricultural Engineering society to bring together academics, research, industry and policy for the common goal of transforming agriculture in African to achieve higher productivity and to be an engine for economic development. It is envisaged that further support for the establishment, growth and financial stability of AfroAgEng will promote and grow the profession of Agricultural Engineering in Africa, which is necessary to provide the skilled human resources and technology for improved and sustainable water supply, food production, food processing, food storage and environmental management. This will promote the food, water and energy security required to meet the growing population, both in Africa and internationally, and thus support the reduction of poverty in rural marginalized societies. The project also promoted collaboration between professional Agricultural Engineering societies and academic institutions in Africa and the UK, and thus provide a platform for joint projects and professional activities in the future.

The objectives of this project were to:

- (i) Promote and grow Agricultural Engineering in Africa by continuing support for operations and financial sustainability of the Pan African Society of Agricultural Engineers (AfroAgEng).
- (ii) To support the implementation of the strategic plan for AfroAgEng developed during the GCRF Africa Catalyst Phase 2 project (AC1718/2/46).



2. Objectives Set vs Objectives Achieved

Many of the activities originally proposed to meet the objectives of the project were impacted by local lockdown and travel restrictions as a consequence of the COVID-19 pandemic. The activities undertaken to meet the objectives were revised accordingly, as summarised below.

Objectives Set	Achievement Status
Raise the profile by showcasing the role and capabilities of Agricultural Engineering	<p>The combined 3rd PASAE / NIAE International Conference and Workshops were rescheduled and held online from 9-22 April 2021. The theme of the conference was “Engineering Africa’s Agro-Industrial Transformation for Economic Prosperity and Sustainable Development”. Two workshops were presented and 66 presentations were made covering seven themes. A report on the conference and programme is contained in Appendix A. Institutions invited to make presentations in plenary sessions included the Nigerian Presidency, State Governor and other state officials, AfDB, AFRIMEX, NIAE, RAENG, CIGR, SAPZ, ASABE, FAO, CIHEAM, AU/AfCFTA and UNIDO.</p> <p>Support has also been provided to prepare for the 4th PASAE International conference to be held in Ghana in conjunction with the Ghana Society of Agricultural Engineering (GSAE). A summary of the activities is included Appendix B.</p>
Compilation of information document on Agricultural Engineering for economic development in Africa	<p>A comprehensive 88-page report on “<i>Agricultural Engineering in Africa: A Key Driver for Transforming Agriculture to Deliver Food Security and to Support Economic Prosperity</i>”, which includes a call to action with 25 recommendations, was produced. Information for the report was derived from the literature, call for submissions and online interviews with key people. This report was launched during an online event held on the 3rd August 2021, with statements of support made by a range of institutions (e.g. RAENG, CIGR, SAIAE, FAO, ASABE, AfDB, AFRIMEX, RUFORUM) and was attended by more than 60 people. The report can be accessed from https://pasae.org.za/publications.html and details on the launch event from https://pasae.org.za/Events.html.</p>



Objectives Set	Achievement Status
<p>Build relationship with industry, government and funding agencies</p>	<p>The planned face-to-face meetings with representatives from key institutions were not possible due to travel restrictions. Therefore, a number of institutions were targeted and involved in the 3rd PASAE-NIAE conference and <i>Agricultural Engineering in Africa</i> report launch event, as summarised above and detailed in Report #1 (Dialogues with stakeholders) in Appendix C.</p> <p>The top ranked 100 questions of importance for the future of Agricultural Engineering education and research in Africa were identified based on extensive literature search and framing. Through a series of dialogues with stakeholders from government, industry and non-state actors, key issues of importance to the relevance and practice of agricultural engineering in Africa were highlighted. Participating organisations agreed to partner and collaborate with PASAE as we grow agricultural engineering in Africa. See Report #2 in Appendix C for details.</p> <p>A compendium of key state and non-state actors was compiled, which includes funding agencies, relevant to Agricultural Engineering education, research and practice in Africa. Through online searches and building on our extensive network capital of stakeholders working on various aspects of agricultural development in Africa, the compendium lists key organisations and agencies and provides information about their representatives. Details are included in Report #3 in Appendix C.</p>
<p>AfroAgEng to support regional and national Agricultural Engineering Societies</p>	<p>Proposals for support were requested and approved from East (EA), North (NA), West (WA), Central (CA) and Southern (SA) regions in Africa. This included:</p> <ul style="list-style-type: none"> • Creation of a database of Agricultural Engineering training institutions with contact details, level of training provided, accreditation of the programmes and enrolled and graduated students. • Creation of a database of National Agricultural Engineering Related Professional Institutes/Societies including contact details, no. of members and operational status of the institutes/societies. <p>In addition, specific requests for support were received and which included:</p> <ul style="list-style-type: none"> • Support to run CPD training events (NA). • Website development and promotional material (NA, SA, WA). • IT equipment (SA). • Establishment of a permanent secretariat (WA). <p>Appendix D contains reports from the regions on the support received. The information received from the regions has been consolidated into a single database on Agricultural Engineering training institutions and Professional Institutes/Societies in Africa and is summarised in Appendix E.</p>



Objectives Set	Achievement Status
Focus on youth engagement	As part of the 3 rd PASAE/NIAE conference, a continental wide quiz for students was run and prizes for the top 3 students were made. In addition, presentations made by students were judged by an international panel and 3 best technical presentations were awarded cash incentives. Appendix A contains a summary of youth focussed activities undertaken. Social media platforms were used to attract and engage with the students.
Raising public awareness	The PASAE website and some of the national society webpages (as reported above) have been revised and upgraded with support from the project. The “Agricultural Engineering in Africa” report referred to above is available from the PASAE website (https://pasae.org.za/publications.html), with more than 120 hits to date. This report is expected to contribute significantly to raising the profile of Agricultural Engineers by increasing public awareness and influencing key people and institutions and by showcasing exciting opportunities to attract new entrants and to grow the profession.
Support for the engagement with academic Agricultural Engineering programmes offered in Africa and facilitation of collaboration between the institutions and with IAgRE (UK) and HAU	An online workshop on “ <i>Modernising Agricultural Engineering Programmes to meet Africa’s Agenda 2063: The Africa We Want</i> ” was held on 21 st September 2020. Seven speakers were invited to make presentations and this was followed by facilitated discussion on six questions in six breakout sessions with a report back from each discussion group to a final plenary session. The workshop received more than 450 registrations and the event was live-streamed on YouTube, but only approximately of 80 delegates connected and participated in the workshop. The presentations made and the reports from the discussion groups are available from https://pasae.org.za/Events.html .
Development of a CPD training portfolio	Five CPD webinars were commissioned and run in conjunction with KeSBAE and SAIAE: <ul style="list-style-type: none"> • Environmental, Biological and Agricultural Engineers in the Fight Against COVID - 19 in Africa (2-h, 82 delegates) • Environmental Concerns in Development of Agricultural Projects (2-h, 42 delegates) • Developments in Renewable Energy in Africa (2-h, 42 delegates) • Water Resources Planning in Agriculture (2-days, 25 delegates) • Fundamentals of Energy Management Opportunities in Agriculture (2-days, 14 delegates). Reports on the CPD activities are contained in Appendix F.



Objectives Set	Achievement Status
Support for secretariat, administrative procedures, budget control and auditing for AfroAgEng.	Support for the PASAE secretariat and membership administration has been provided by the project. This has included the introduction of PayPal for membership fee payment, a revised membership database, and the development of a mail merge system to generate and mail membership invoices. In addition, call for nominations and the election of a new PASAE Council as per the PASAE constitution was undertaken, annual PASAE council meetings were arranged and facilitated, and regular combined AfroAgEng project and PASAE Council meetings were scheduled and run.
Submission of project reports	Five project progress reports, a final report in August 2021 and this final report have been submitted timeously to the RAENG.

3. Project Team

The project team responsible for project consisted of the following people:

- **Prof Jeff Smithers** (PASAE and SAIAE): Project leader, PASAE secretariat, convenor of workshop on “*Modernising Agricultural Engineering Programmes*”.
- **Prof Linus Opara** (PASAE and SAIAE): President of PASAE, build relationship with industry, government and funding agencies
- **Mr Alastair Taylor** (IAgrE – UK): Editor and main author of “*Agricultural Engineering in Africa*” report.
- **Dr Jonathan Cooper** (HAU – UK): Team member and analysis of questionnaire from workshop on “*Modernising Agricultural Engineering Programmes*”.
- **Mr Edmund Mashatise** (HAU – UK): Team member.

In addition to the above, the following members of the PASAE Council made significant contributions to the project:

- **Prof M Faborode**: Chair of Organising Committee of the 3rd PASAE-NIAE conference
- **Prof E Bartali**: Council member
- **Prof EYH Bobobee**: Council member
- **Dr J Mpagalile**: Council member
- **Prof N Banadda**: Council member
- **Mrs C Gurira**: PASAE administrator

4. Challenges and Lessons Learned

Some of the challenges and lessons learned from this project are summarised in the table below:

Activity	Challenges encountered	Solution/lessons learned
Project team and ad-hoc AfroAgEng Council meetings	Difficulty in finding time suitable for all project team and AfroAgEng Council members for project meetings	Use online polling to find most suitable dates and long advance notification of next meeting would have assisted in the scheduling of meetings. To some extent, the lock down related to the COVID-19 pandemic in some countries, and the ability to meet online, may have contributed to increased availability of members.



Impact of COVID-19 pandemic	Many of the planned activities involved travel and face-to-face meetings and conferences and hence were impacted by the lockdown and travel restrictions.	Online project team meetings with the PASAE Council were regularly used to communicate. The 3 rd PASAE-NIAE conferences was initially postponed and then successfully held as an online event. Communication with and involvement of key institutions was achieved by involving them in events arranged as part of this project (e.g. 3 rd PASAE-NIAE conferences, the online workshop on <i>Modernising Agricultural Engineering Programmes</i> , the launch of the report on <i>Agricultural Engineering in Africa</i>). The CPD events were developed and successfully held online.
Project team and PASAE Council	Progress with allocated tasks slow or not being actively pursued.	Where possible, additional assistance was offered and different approaches suggested and undertaken to tasks suggested. The outsourcing with funding provided to KeSEBAE and SAIAE ensured that online CPD events were developed and delivered. The involvement of different regions in Africa to develop regional databases of information from institutions offering programmes in Agricultural Engineering, and on regional and national Agricultural Engineering Institutes/Societies, was successful. In addition, additional requests from the regions for support for specific activities were supported within the budget available. The general lesson learnt from the above is that reliance on project team and PASAE Council members, who volunteer their time, was less successful in achieving outcomes compared to outsourcing the delivery of the outcomes with some funding provided.

5. Next Steps Post Funding/Moving Forward

The continued implementation of the strategic plan for AfroAgEng will be the sole responsibility of the PASAE Council. It is thus important to facilitate the election of Council members who have the commitment and motivation to do this. An amendment to the PASAE constitution is proposed in order to include presidents of national and regional Agricultural Engineering professional institutions/societies in the membership of the PASAE Council. This will facilitate collaboration between national and regional societies and PASAE.

The visibility of PASAE has been significantly increased with support from this project. This includes an updated website with new pages and links to events, publications and promotional material, and the



involvement of key institutions in the events held. These relationships need to be further developed to attract future support and collaboration.

The actions undertaken during the project have not resulted in any meaningful increase in membership of PASAE. In addition, the payment of annual fees by members has been very limited. Hence, the sustainability of PASAE needs to continue to be a primary focus for the PASAE Council and sources of funding to supplement membership fees need to be actively pursued, for example, by building on the relationships with key institutions developed in this project.

6. Project Visibility

The PASAE website (<https://pasae.org.za/index.html>) includes the following pages and links:

- (i) Link to the events held, including video clips from the events: <https://pasae.org.za/Events.html>
- (ii) Link to 3rd PASAE-NIAE International conference: <https://pasae-niae2020conference.com/>
- (iii) Link to download the report on “Agricultural Engineering in Africa”: <https://pasae.org.za/publications.html>
- (iv) Links to the presentations made and group reports from the workshop on “Modernising Agricultural Engineering Programmes: <https://pasae.org.za/Events.html>
- (v) Events and activities have also been posted on Social Media (e.g. Facebook)

7. Project Activities

Project activities and their impact are summarised in the table below:

Activities	Impact
Project team meetings	Regular online meetings were help online to plan project activities, allocate responsibilities and to track progress. The meetings were also used to adjust activities and re-allocate budget accordingly to respond to the impacts of the COVID-19 pandemic.
Annual PASAE Council	Biennial election of the PASAE Council and Annual PASAE Council meetings were successfully facilitated.



Activities	Impact
<p>Support for the combined 3rd PASAE / NIAE International Conference and Workshops held online from 9-22 April 2021</p>	<ul style="list-style-type: none"> • The online conference was attended by 528 delegates from 13 countries. • Two workshops were presented and 66 presentations were made covering seven themes. • A number of state and other institutions were represented at the conference. • Peer reviewed technical proceedings were produced. • The website for the NIAE is being updated to incorporate a platform/portal for developing online CPD courses and to include a portal for the NIAE Journal of Agricultural Engineering and Technology (JAET) to expand its visibility and global reach. • The momentum from the conference has been capitalized on to re-invigorate and re-energize NIAE with the establishment of a Structures Strengthening and an International Affairs Committees, reorganization of the NIAE secretariat and strategic plan, and launch of an ABE Curriculum Review Committee which is spearheading the review of the ABE curriculum for all Nigerian institutions of higher learning as part of the NIAE Strategic Plan.
<p>Support for the 4th PASAE Conference to be held in Ghana in 2022</p>	<ul style="list-style-type: none"> • Funding was provided to the Ghana Society of Agricultural Engineering (GSAE) to assist in planning and arrangements for the conference.
<p>Compilation, production and publication of a comprehensive 88-page report on <i>“Agricultural Engineering in Africa: A Key Driver for Transforming Agriculture to Deliver Food Security and to Support Economic Prosperity”</i></p>	<ul style="list-style-type: none"> • This report on Growing Agricultural Engineering in Africa Project (GAEAP) clearly articulates the role of Agricultural Engineering in meeting many of the UN SDGs and the aims of the Africa 2063 agenda. This report is intended to raise the profile, visibility and role that the Agricultural Engineering profession should be playing in meeting many of the food and water insecurity and environmental challenges faced on the African continent. The target audience includes government, private and public institutions and companies and the general public, particularly scholars making career choices. • The report also includes a call to action with 25 recommendations which is intended to galvanise and focus the efforts from institutions and organisations to support and grow the Agricultural Engineering profession in Africa. • The online launch of the report included statements from key institutions and organisations and was attended by more than 60 people. • More the 115 copies of the report had been downloaded at the time of the compilation of this report.



Activities	Impact
Build relationship with industry, government and funding agencies	<p>Awareness of PASAE and the role of Agricultural Engineering has been firmly established with representatives from key institutions and by their involvement in the 3rd PASAE-NIAE conference and the launch of the <i>Agricultural Engineering in Africa</i> report. These relationships need to be further developed going forward.</p> <p>The top ranked 100 questions for Agricultural Engineering in Africa identified in this project are intended to be a starting point. Research priorities and challenges change continuously and unpredictably as new concerns and needs arise, and new knowledge is revealed, and it will be important to review and reassess this list in the not-too-distant future.</p> <p>Initial mapping of Agricultural Engineering related key state and non-state actors and funding agencies was compiled. This is considered to be a living document, requiring periodic and regular update.</p>
Support regional and national Agricultural Engineering Societies	<p>The 5 regions in Africa were all required to compile databases of both Agricultural Engineering training institutions and of National Agricultural Engineering related Professional Institutes/Societies. These will be collated to create continental databases which can be used by PASAE to facilitate modernisation and collaboration between Ag Engineering training programmes and to engage with and, where necessary, revive national and regional Agricultural Engineering societies and institutions.</p> <p>In addition, specific requests for support from the regions have enabled the offering of CPD training events, website development and production, supplied IT equipment, and assisted in the establishment of a permanent secretariat in WA.</p> <p>The information received from the regions has been compiled into a consolidated database.</p>
Incentives for participation by students in the 3 rd PASAE-NIAE conference and continental quiz to engage students.	<p>Both of these activities were undertaken to involve young professionals and students.</p> <p>For the intercontinental quiz completion, 33 nominees represented their various institutions in the competition. For the paper presentation competition, 21 papers were received and, after adjudication by an international panel, cash awards were made to the top three presentations.</p> <p>Given the level of participation in these activities good progress was made in terms of engaging students across the continent.</p>



Activities	Impact																														
Raising public awareness	<p>As summarized in the table below, the updated PASAE website has had 14 811 hits in 2021 from 1 427 different visitors from 28 different countries, with significant increases in periods related to the launch event for the <i>Agricultural Engineering in Africa</i> report.</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Unique visitors</th> <th>Hits</th> </tr> </thead> <tbody> <tr> <td>Jan 2021</td> <td>24</td> <td>33</td> </tr> <tr> <td>Feb 2021</td> <td>31</td> <td>34</td> </tr> <tr> <td>Mar 2021</td> <td>62</td> <td>116</td> </tr> <tr> <td>Apr 2021</td> <td>68</td> <td>129</td> </tr> <tr> <td>May 2021</td> <td>145</td> <td>337</td> </tr> <tr> <td>Jun 2021</td> <td>139</td> <td>692</td> </tr> <tr> <td>Jul 2021</td> <td>737</td> <td>10,375</td> </tr> <tr> <td>Aug*2021</td> <td>221</td> <td>3,095</td> </tr> <tr> <td>Total</td> <td>1,427</td> <td>14,811</td> </tr> </tbody> </table> <p>*Up to 5 Aug 2021</p> <p>The “<i>Agricultural Engineering in Africa</i>” link has had more than 120 hits up to 5th August 2021. The above statistics indicate the events held and the PASAE website have contributed to increased public awareness and interest.</p>	Month	Unique visitors	Hits	Jan 2021	24	33	Feb 2021	31	34	Mar 2021	62	116	Apr 2021	68	129	May 2021	145	337	Jun 2021	139	692	Jul 2021	737	10,375	Aug*2021	221	3,095	Total	1,427	14,811
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Online workshop on “ <i>Modernising Agricultural Engineering Programmes to meet Africa’s Agenda 2063: The Africa We Want</i> ” held on 21 st September 2020.	<p>The presentations made and the reports from the discussion groups are available from https://pasae.org.za/Events.html.</p> <p>This workshop generated a large amount of interest with more than 450 registrations although only 80 delegates participated in the workshop. The event was also live-streamed on YouTube. The presentations and group discussions have been downloaded 47 times in from 1 January – 5 August 2021 from the PASAE website. One of the recommendations from the workshop was that PASAE should establish a Technical Section focused on Agricultural Engineering Education and Training in Africa, and this will be pursued in the future.</p>																														
Development of a CPD training portfolio	<p>A total of 205 delegates attended five CPD webinars developed and run by KeSBAE and SAIAE. The agreements with KeSBAE and SAIAE are that 30% of the income generated when the training events are offered accrue to PASAE, thus creating an income stream for PASAE.</p>																														
Support for PASAE secretariat, administrative procedures and budget control	<p>PASAE and AfroAgEng Project teams have been established on the Microsoft Teams platform to house and share the PASAE membership list, budget control spreadsheets and administrative documents. The use of PayPal for international payments has been utilised by 8 members. Invoices for membership fees have been generated and distributed. The election of a PASAE Council and annual PASAE Council meetings have been facilitated. Thus, the impact of the project has been the establishment of an operational online administrative system with documents that can be shared between members of the secretariat.</p>																														
Submission of project reports	<p>Five project progress reports, a final report in August 2021 and this final report have been submitted to the RAENG.</p>																														



8. In-country Partners Activity/Engagement

A number of national and regional partnerships have been engaged as detailed above and summarized below.

South African Institute of Agricultural Engineers (SAIAE):

- Development of databases of information and status of Agricultural Engineering training programmes and national Agricultural engineering Societies in the region.
- Development and running of two CPD events.
- Support for website upgrade and enhancements including interactive forms and app integrations for online membership management, social media integration, events calendar and web security.
- Support for development of promotional material.
- Support for IT equipment (computer and software).

Kenyan Society of Environmental, Biological and Agricultural Engineers (KesEBAE):

- Development of databases of information and status of Agricultural Engineering training programmes and national Agricultural engineering Societies in the region.

Nigerian Institute of Agricultural Engineers (NIAE):

- Development of databases of information and status of Agricultural Engineering training programmes and national Agricultural engineering Societies in the region.
- Organization and running of the 3rd PASAE-NIAE conference.
- Website development and promotional material.
- Revitalisation of the NIAE and establishment of a permanent secretariat.

Scientific Association for Water Information System (SAWIS)

- Development of databases of information and status of Agricultural Engineering training programmes and national Agricultural engineering Societies in the region.
- Support to run CPD training events.

9. UK Partner Activity/Engagement

As part of the project team, the UK partners (IAgrE and HAU) have been involved from project conceptualization to project planning, initiation, reassessment of planned activities due to the COVID-19 pandemic and project execution, including event planning, producing deliverables and assessment of deliverables submitted by in-country partners. In particular, the IAgrE partner took the lead in the collation of information, compilation, drafting and publication of the *Agricultural Engineering in Africa* report. Partners from HAU contributed to the workshop design, execution and analysis of the questionnaires from the workshop on *Modernising Agricultural Engineering Programmes*, and thus also contributing to the *Agricultural Engineering in Africa* report. HAU also provided input and editorial review of the report.



Both UK partners are involved in education and training and will be involved in future activities related to the review and modernization of Agricultural Engineering programmes. Where possible, IAgRE will be engaged to support the promotion of Agricultural Engineering in Africa and for support of activities undertaken by PASAE.

10. Independent Evaluation of Project

No external independent assessment of the project was planned or undertaken.



11. Measuring Project Impact

Key indicators (from application form)	Baseline value	Target value (from application form)	Current value
Activities in the strategic plan initiated and some activities completed	No Baseline	Activities in the strategic plan initiated and some activities completed.	As indicated below, all nine components of the strategic plan have been initiated [●] and some completed [✓]: <ul style="list-style-type: none"> • Raise the profile by showcasing the role and capabilities of Agricultural Engineering [●✓] • Compilation of information document on Agricultural Engineering [●✓] • Build relationship with industry, government and funding agencies [●] • Support regional and national Agricultural Engineering Societies [●✓] • Focus on youth engagement [●] • Raising public awareness [●] • Influencing key people and institutions [●✓] • Support for the engagement with academic Agricultural Engineering programmes offered in Africa and facilitation of collaboration between the institutions and with IAgRE (UK) and HAU [●✓] • Development of a CPD training portfolio [●✓]
Number of members who have joined AfroAgEng	No Baseline	Membership income to sustain PASAE	Eight new members recruited during the project.
Annual PASAE Council meetings.	No Baseline		PASAE Council has been elected per constitution and annual PASAE Council meetings have been held and minutes produced.
Functioning and sustainable AfroAgEng	No Baseline	Functioning and sustainable AfroAgEng fulfilling it's constitutional mandate	PASAE is fulfilling its constitutional mandate to promote and advance the profession of Agricultural Engineering in Africa and has an elected and functional Council, operational secretariate and administrative system.



12. Financial Report

See submitted Excel spreadsheet containing details on Project Income and Expenditure.

