ANNUAL REPORT OF
UNI SWA RESEARCH CENTRE
FOR THE
VICE CHANCELLOR
UNIVERSITY OF SWAZI LAND

ACTING DIRECTOR
UNI SWA RESEARCH CENTRE
JUNE, 2003
UNISWA RESEARCH CENTRE

1.0 VISION

Technological advancement and sustainable development through excellence in research

2.0 MISSION

The UNISWA Research Centre serves as the focal point for research at the University. It endeavours to facilitate the coordination, strengthening, promotion, generation, accumulation and dissemination of knowledge and information through research to enhance economic growth and development and promote socio-cultural values.

3.0 OBJECTIVES

The objectives of the UNISWA search Centre are:

3.1 To promote meaningful research at UNISWA by vitalizing research culture, liaising with relevant organs to harmonize teaching and research activities, and introducing incentives that are conducive to effective utilization of the available competencies and capabilities.

3.2 To strengthen staffing and upgrade facilities at the Research Centre to become the University's focal point for identifying, prioritizing and coordinating research, and compiling and disseminating research information.

3.3 To strengthen the technical base for research and its relevance through technical support, training and availability of key literature.

3.4 To formulate, review, implement and monitor policies and procedures for processing research proposals for funding.

3.5 To liaise with the National Research Council of Swaziland and establish links with other research institutions in and outside the country to strengthen and diversify research agenda.

3.6 To accommodate the diversity in research and encourage problem-specific and creative research to address UNISWA's academic requirements and national and regional needs.

Annual Report of UNISWA Research Centre, June, 2003
3.7 To establish and sustain effective interaction with beneficiaries of research and other stakeholders for enhancing research relevance and adoption.
3.8 To establish links with industry and other sectors for cooperation in handling research needs and provision of funding for research.
3.9 To utilise effectively available resources; cooperate with other institutions for sharing of facilities; and mobilize funding from inside and outside sources.

4.0 MANDATE OF UNISWA RESEARCH CENTRE

The mandate of the UNISWA Research Centre is:

4.1 Preparation of research proposals for external funding and implementation by staff

4.2 Facilitate and coordinate research submission of proposals; and monitor research funded by the UNISWA Research Board

4.3 Conduct and/or commission studies

4.4 Editing and publication of research reports in the form of UNISWA Research Centre Report Series

4.5 Preparation and publication of research highlights

4.6 Contribution to editorial activities of two UNISWA Research Journals and preparation of the Journals for publication

4.7 Organization of seminars and workshops

4.8 Liaison with the National Research Council of Swaziland, the Institute for Research in Traditional Medicine, Medicinal and Indigenous Food Plants and other research organizations at national and regional levels and beyond.

4.9 Maintaining profile of research and researchers at the University and at national level
ORGANIZATIONAL SET-UP OF UNISWA RESEARCH CENTRE

The organizational setup of the UNISWA Research Centre is in Figure 1.

Annual Report of UNISWA Research Centre, June, 2003
5.0 MEMBERS OF BOARDS AND COMMITTEES OF UNISWA RESEARCH CENTRE

5.1 MEMBERS OF UNISWA RESEARCH BOARD

Pro Vice Chancellor, Chairperson
All Deans of Faculties
All Members of Technical Committee
Director, UNISWA Research Centre
Bursar
Librarian
Registrar

5.2 TECHNICAL COMMITTEE, UNISWA RESEARCH CENTRE

The members of the Technical Committee for the year 2002/2003 are:

- Prof. K J B Keregero: Agriculture
- Dr. P Joubert: Commerce
- Dr. L J S Mundia: Education
- Dr. N. A. Sukati: Faculty of Health Sciences
- Prof. B Nyeko: Humanities
- Prof. A Sesay: Science
- Prof. F Ojo: Social Science
- Prof. H M Mushala: UNISWA Research Journal of Agriculture, Science and Technology
- Prof. A A Al-Teraifi: UNISWA Research Journal

5.3 MEMBERSHIP OF EDITORIAL BOARD, UNISWA RESEARCH JOURNAL OF AGRICULTURE, SCIENCE AND TECHNOLOGY

The members of the Editorial Board of the UNISWA Research Journal of Agriculture, Science and Technology for the 2002/2003 academic year are:

- Prof. H M Mushala: Chairperson
- Dr. M.P. Dlamini: Faculty of Agriculture
- Mr G Ocen: Faculty of Agriculture
- Dr. N. A. Sukati: Faculty of Health Sciences
- Dr. I T Zwane: Faculty of Health Sciences
- Prof. A Sesay: Faculty of Science
- Prof. O T Edje: Secretary
5.4 MEMBERSHIP OF EDITORIAL BOARD, UNISWA RESEARCH JOURNAL

The members of the Editorial Board of the UNISWA Research Journal are:

Prof. A A Al-Teraifi: Chairperson
Prof. M A Khan: Commerce
Dr. J P Mutangira: Education
Dr. L J S Mundia: Education
Prof. W D Kamera: Humanities
Dr. C W Sukati: Institute of Distance Education
Dr. Z G Ngcobo: Library
Prof. O T Edje: Secretary

5.0 STAFFING

Members of staff of the UNISWA Research Centre during the period under review are as follows:

Prof. O T Edje: Acting Director
Ms H Z Nkambule: Research Assistant
Mrs. F Magagula: Secretary

6.0 FUNDING FOR RESEARCH

6.1 FUNDS APPROVED FOR RESEARCH FROM UNISWA, 2002/2003

One of the mandates of the University of Swaziland, is to conduct research. In order to facilitate the implementation of this objective, among others, the UNISWA Research Board was established in 1995 and funds have been allocated to the UNISWA Research Centre for research on a yearly basis since then. However, for the first time in the history of the UNISWA Research Board, since it was established in 1995, funds were not allocated for research grants in the 2002/2003 academic year, only operating cost was allocated as 76.7% of the Centre’s vote for research was not approved, despite an appeal from the Acting Director of the Centre. However, after a request for a supplementary budget in January, 2003 funds were eventually allocated for ten research proposals amounting to E301,315 [see Table 1 below]. The allocation of the supplementary budget, though belated was made possible through the Office of the pro Vice Chancellor, who is the Chairperson of the UNISWA Research Board. Table 1. Names, faculties, titles and amount of research proposals approved by the Technical Committee in December, 2002 for consideration by the UNISWA Research Board.
Table 1. List of research proposals and amount awarded by UNISWA Research Board, 2002/2003

<table>
<thead>
<tr>
<th>List</th>
<th>Name of Author</th>
<th>Faculty</th>
<th>Title of project</th>
<th>Amount approved [E]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K. J. B. Keregero J. Pali-Sikhulu</td>
<td>Agriculture</td>
<td>The relevance, accessibility and effectiveness of the agricultural extension service in Swaziland</td>
<td>48, 531.95</td>
</tr>
<tr>
<td>2</td>
<td>G. Tati M. M. Keregero</td>
<td>Agriculture</td>
<td>Male-female household leadership, diversification of activities and differentials in labour resources allocation in rural Swaziland</td>
<td>12, 737.00</td>
</tr>
<tr>
<td>3</td>
<td>M. L. Mwinjilo E. A. Aiyelari</td>
<td>Agriculture</td>
<td>An assessment of the performance of tractor hire services in Swaziland under government, individual farmers and cooperatives</td>
<td>19, 229.60</td>
</tr>
<tr>
<td>4</td>
<td>D. M. Mgheeni R. L. Vilakati-Kiondo J. Rugambisa</td>
<td>Agriculture</td>
<td>Evaluation of sugar cane tops as a ruminants feed in the Lowveld communal areas of Swaziland</td>
<td>48, 878.48</td>
</tr>
<tr>
<td>5</td>
<td>UNISWA Research Centre and University Planning Centre</td>
<td>Education</td>
<td>A needs assessment survey of adult education needs and opportunities in Swaziland</td>
<td>29,000.00</td>
</tr>
<tr>
<td>6</td>
<td>J. S. Mtshali A. F. Murye K. J. B. Keregero</td>
<td>Health Sciences and Agriculture</td>
<td>Community involvement in malaria control activities</td>
<td>33, 479.40</td>
</tr>
<tr>
<td>7</td>
<td>A. Monadjem</td>
<td>Science</td>
<td>Breeding ecology of birds at Mlawula-North Eastern Swaziland: An inter-annual investigation</td>
<td>23, 978.88</td>
</tr>
<tr>
<td>8</td>
<td>A. M. Zamberia K. Gathu</td>
<td>Social Science and education</td>
<td>Coping with HIV/AIDS on campus: A needs assessment of students at the University of Swaziland</td>
<td>9, 433.23</td>
</tr>
<tr>
<td>9</td>
<td>H. Z. Nkambule</td>
<td>UNISWA Research Centre</td>
<td>Knowledge, Attitudes and Practices of Swazi youth regarding the custom of Umcwasha</td>
<td>45, 546.92</td>
</tr>
<tr>
<td>10</td>
<td>UNISWA Research Centre</td>
<td>UNISWA Research Centre</td>
<td>A study of research needs for mitigating the impact of HIV/AIDS pandemic in Swaziland</td>
<td>30, 500.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>301 315.46</strong></td>
</tr>
</tbody>
</table>
6. 2. SOURCING EXTERNAL FUNDING FOR RESEARCH

In an attempt to supplement funding for research, the UNISWA Research Centre facilitated sourcing grants externally for research and training. The one for training has been approved. The others are in various stages of assessment, but we are hopeful.

Table 2. List of research proposals facilitated by the UNISWA Research Centre

<table>
<thead>
<tr>
<th>List</th>
<th>Title</th>
<th>Donor</th>
<th>Amount Requested [US $]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Training Course in “Writing Winning Research Proposal”</td>
<td>International Foundation for Science, Sweden</td>
<td>3,788.00</td>
</tr>
<tr>
<td>2</td>
<td>A Qualitative Study in the Interest of Identifying Cultural, Traditional, Religious Practices and values that promote Sexual Violence Against Women and Children in Swaziland</td>
<td>Bristol-Myers Squibb Foundation, South Africa</td>
<td>74,980</td>
</tr>
<tr>
<td>3</td>
<td>Development and Dissemination of the Best Practice Collection on HIV/AIDS and Sexual Violence, HIV/AIDS Counselling, Standards, Practices and Training</td>
<td>Bristol-Myers Squibb Foundation, South Africa</td>
<td>99,800</td>
</tr>
<tr>
<td>4</td>
<td>A Proposal for Sustainable HIV/AIDS Abatement Endeavours in Southern Africa: Considering Contextual Influences and Designing Relevant and Gender Sensitive Sort-Term Counselling and Educational Activities in Botswana, Lesotho, Swaziland and Namibia</td>
<td>SADC Health Sector Coordinating Unit, South Africa</td>
<td>800,000</td>
</tr>
<tr>
<td>5</td>
<td>Research Needs for Mitigating the Impact of HIV/AIDS Pandemic in Swaziland</td>
<td>UNAIDS, Tanzania</td>
<td>30,000</td>
</tr>
</tbody>
</table>

7.0 FACILITATION OF COLLABORATIVE PROJECTS

During the period under review, the UNISWA Research Centre facilitated the following collaborative projects:
7.1 FAO-UNISWA LinKS PROJECT

The overall objective of this project is to enhance rural people’s food security and promote sustainable management of agro-biodiversity by strengthening the capacity of institutions in the agricultural sector to apply approaches that recognize men and women farmer’s knowledge in their programmes and policies.

The project will be based at the Secretariat of the National Research Council. The LinKS project will be under an FAO-recruited national Coordinator and an Assistant Coordinator. Candidates for both posts have been interviewed by FAO and hope to assume duty soon.

The institutional administration of the LinKS Project shall be under the Technical Committee of the UNISWA Research Board.

7.2 MEMORANDUM OF UNDERSTANDING BETWEEN UNDP/UNOPS REGIONAL PROJECT AND THE UNIVERSITY OF SWAZILAND

The objective of this project is for sustained research and development in mushroom production in Swaziland. It should be noted that a similar project already exists with the Ministry of Agriculture and Cooperatives. However, the focus here at the University will be on research as well as production.

7.3 MEMORANDUM OF UNDERSTANDING BETWEEN UNDP/UNOPS REGIONAL PROJECT, MINISTRY OF AGRICULTURE AND COOPERATIVES AND THE UNIVERSITY OF SWAZILAND [SWAZILAND INSTITUTE FOR TRADITIONAL MEDICINE, MEDICINAL AND INDIGENOUS FOOD PLANTS]

The objective of this project is similar to 7.2 above. However, the main focus here will be on research, development and training of agronomists in the science of mushroom production.

8. A SURVEY ON HOW TO FACILITATE STAFF MEMBERS PARTICIPATION IN RESEARCH AT UNISWA

One of the functions of the University is to conduct research. In addition to contributing to the body of knowledge and the improvement of the welfare of humankind, research enhances intellectual growth and improves the quality of teaching. Staff, who conduct research, also serve as role models for students.
However, staff are not as actively involved in research as would be expected in an academic institution as ours, despite the fact that the University does provide fairly generous sums of money as research grant.

In view of the above, the Centre decided to conduct a survey to determine why staff were not doing as much research as would be expected and develop strategies to address the problem. Accordingly, a survey has been conducted. The questionnaires are being analysed and the findings will be discussed and published widely.

9. WORKSHOP/CONFERENCES ORGANISED BY THE CENTRE

Five conferences/workshops/seminars were organized by the Centre [Table 3] while the Centre facilitated three [Table 4]

The usual apathy that characterizes the attendance of staff at conferences/workshops/seminars is still with the Institutions. In most cases, outside participants may be more than those from within the University. Why?

Table 3. List of conferences/workshops/seminars organized by UNISWA Research Centre

<table>
<thead>
<tr>
<th>List</th>
<th>Title of conference/workshop/seminars</th>
<th>Date</th>
<th>Venue</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Use of PowerPoint Facility for the Presentation of Technical Papers</td>
<td>08 October 2002</td>
<td>Computer Laboratory, Luyengo Campus</td>
<td>30</td>
</tr>
<tr>
<td>2.</td>
<td>Writing Winning Research Proposals</td>
<td>15 October 2002</td>
<td>Main Conference Room, Kwaluseni Campus</td>
<td>75</td>
</tr>
<tr>
<td>3.</td>
<td>Writing Research Abstracts</td>
<td>18 October 2002</td>
<td>Main Conference Room, Kwaluseni Campus</td>
<td>27</td>
</tr>
<tr>
<td>5.</td>
<td>Use of PowerPoint Facility for the Presentation of Technical Papers</td>
<td>25 February 2003</td>
<td>Commerce Computer Laboratory II</td>
<td>17</td>
</tr>
</tbody>
</table>
During the period under review, the Centre participated in the facilitation of the following conferences and workshops

Table 4. List of conferences and workshops facilitated by the Centre

<table>
<thead>
<tr>
<th>List</th>
<th>Conference/Workshop/Seminar</th>
<th>Date</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Workshop on “African University Day” and “Science Day”</td>
<td>15 November, 2002</td>
<td>Main Conference Room, Kwaluseni Campus</td>
</tr>
<tr>
<td>3.</td>
<td>Official Opening of the “University Library, Secretariat of National Research Council of Swaziland and Health Information and Counselling Centre” by His Excellency the Right Honourable Prime Minister, Dr. B S Dlamini.</td>
<td>22 November, 2002</td>
<td>Cardiff Hall, Luyengo</td>
</tr>
<tr>
<td>4.</td>
<td>Smart partnership Workshop</td>
<td>07 March, 2003</td>
<td>Kwaluseni Campus</td>
</tr>
<tr>
<td>5.</td>
<td>Workshop “HIV/AIDS Awareness, prevention and Care”</td>
<td>13-14 March, 2003</td>
<td>Cardiff Hall, Luyengo</td>
</tr>
</tbody>
</table>

**10.0 ABSTRACTS OF RESEARCH ON SWAZILAND**

The progress on the publication of abstracts of research in Swaziland has been rather slow. For example, only 163 abstracts were received from the commissioned exercise. This is despite the fact that a workshop on how to write abstracts was organized on 18 October, 2002 to facilitate the process and encourage more participation. Incidentally, nearly all the abstracts received so far are from one Faculty although the invitation was to all staff of the Institution. It should be noted that the UNISWA Research Board pays E44.50 for every approved abstract.

The abstracts will be published by end of June, 2003

**11.0 FINAL REPORTS OF RESEARCH PROJECTS FUNDED BY UNISWA RESEARCH BOARD.**

The UNISWA Research Centre has received the following six final reports of research projects that were funded by the UNISWA Research Board [Table 5]. The researchers and the titles of the reports are:
Table 5. List of final reports of research projects funded by UNISWA Research Board

<table>
<thead>
<tr>
<th>List</th>
<th>Department</th>
<th>Faculty</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Land Use and Mechanization</td>
<td>Agriculture</td>
<td>B. R. T. Vilane E. J. Mwendera</td>
<td>An assessment of rainwater harvesting technologies and the quality of the harvested water in Swaziland</td>
</tr>
<tr>
<td>3.</td>
<td>Biological Sciences</td>
<td>Science</td>
<td>A. Monadjem</td>
<td>An investigation into the breeding ecology of birds at Mlawula, north-eastern Swaziland.</td>
</tr>
<tr>
<td>4.</td>
<td>Biological Sciences</td>
<td>Science</td>
<td>C. N. Magagula</td>
<td>The distribution of carabid beetles (Coleoptera: Carabidae) relative to landscape fragmentation and distribution</td>
</tr>
</tbody>
</table>

The reports are with publishers and will be distributed after publication. In the meanwhile efforts are being made to organize seminars to enable researchers disseminate their findings.

**12.0 PUBLICATIONS OF THE CENTRE**

**12.1 UNISWA RESEARCH JOURNAL OF AGRICULTURE, SCIENCE AND TECHNOLOGY**

Between April 2002 and 28 manuscripts were received for publication in UNISWA Research Journal of Agriculture, Science and Technology compared to 24 last year.

Volume 6 number 1, with 11 papers, is with the publishers and should be ready for distribution by the end of the May. About seven papers are in an
advanced stage of preparation for publication. Nevertheless, the problem of reviewers, that was reported last year is still very much with us. Various efforts are being made to improve the situation.

12.2 UNISWA RESEARCH JOURNAL

Fifteen manuscripts were received for publication in the UNISWA Research Journal compared to 12 last year. Volume 16, with eight papers, including one book review, is with the publishers and should be ready by the end of April, 2003.

Like its sister journal, it is plagued by slow rate of review and other related problems.

Despite the international recognition, the publication of both journals is still behind schedule. This is due primarily to the slow pace of reviewing manuscripts. In order to address this constraint, the Centre compiled a profile of reviewers, whom the Centre thought would be more willing to referee papers faster than was the case in the past. This does not seem to have solved the problem and alternatives are been considered.

13. PUBLICATION BY CENTRE STAFF.

The following papers were presented at workshops and conference by staff of the Centre.

Edje, O T. and Zwane, M D. 2003. Sugarcane production is the main cause of hunger in Swaziland: Fact or fiction. Paper presented at a panel discussion on Sugarcane production is the main cause of hunger in Swaziland: Fact or fiction. University of Swaziland. 20 March, 2003 Luyengo, Swaziland.


Sesay, A., Edje, O T . and Magagula, C. 2002. Working with farmers on the UNISWA jugo bean research. Proceedings of a consultative workshop on the involvement of the University in community service. 4 July, 2002 University of Swaziland, Kwaluseni, Swaziland

14. OTHER ACTIVITIES BY STAFF OF THE CENTRE

Prof. O T Edje was elected Chairperson of the Sub-Committee on “Crop and Livestock Production” of the “National Consultative Committee on Food Security”

Ms H Z Nkambule participated in a SHAPE research project on “Sexuality and HIV/AIDS Baseline Data. Her involvement was in all phases of the research from questionnaire development, its administration and data collection

Ms Nkambule also participated in the writing the research proposal to Bristol-Meyers Squibb on included on “A Qualitative Study in the Interest of Identifying Cultural, Traditional, Religious Practices and values that promote Sexual Violence Against Women and Children in Swaziland”

She also submitted a proposal to the UNISWA Research Board on “Knowledge, Attitude and Practices of Swazi Youth Regarding the Custom of Umcwasho

She has completed the data collection on the survey on “How to Facilitate Staff Members Participation in Research at UNISWA”
15. INTERNATIONAL WORKSHOPS ATTENDED BY STAFF OF THE CENTRE.

The Acting Director attended a workshop on “How to Write a Convincing Proposal, Hague, The Netherlands, July, 2002

The Acting Director attended a workshop on “IFS Research Proposal Writing Course”, Maputo, Mozambique, 25-27 November, 2002

The Acting Director attended a training course on “Writing of Research Proposals, Mountain Inn, Mbabane, Swaziland

16.0 IMPLEMENTATION PLAN OF THE STRATEGIC PLAN

The Centre, with the assistance of the University Planning Centre, identified major University-wide and URC-centre issues from the Strategic Plan for implementation for the quarter ending March, 2003. The activities are contained in the other quarterly reports of the University Planning Centre.

It is hoped that with better planning and coordination, and funds permitting, the Strategic Plan will be addressed more aggressively than was the case this year.

17. COLLABORATION AND LINKAGE

As reported last year, UNISWA Research Centre and the Crop Production Department are collaborating with the Swaziland Sugar Association in sugarcane research. A sugarcane intercropping project was established at the Simunye Sugar Estate. The need to assess intercropping sugarcane with food crops came about as a result of food security concerns by the farmers in the Komati Downstream Development Project. These farmers have begun growing sugarcane as a monocrop, using all the fields on which they produced food crops. Unlike in food crops, where they could grow two or more crops in a year, returns from commercial cane production are realized after twelve months. This is a long period to wait, hence this project. In this intercropping trial, sugarcane, maize [for green mealies], cowpeas and groundnuts have been sown in pure as well as in mixed stand. If all goes well, it is hoped that farmers can meet their cash and food needs by growing cane in association with food crops.
As sugarcane production by small-scale farmers increases, intercropping cane with arable food crops will increasingly become an important cropping system in smallholder sugarcane development areas across the country. It is hoped that intercropping will be able to provide both cash and food at the same time.

The planted cane has been harvested and the results are very interesting. This MSc research project has generated considerable interests and we appreciate the opportunity for this collaborative project. The ratoon crop, which is also being grown in association with green maize, groundnut or cowpeas, is yet to be harvested so too are the arable crops.

The BSc final year research project on filtercake as a substitute for inorganic fertilizer for sugarcane production, that we reported on last year is on course. The planted crop has been harvested and the results are being analysed.

18.0 WEBSITE

UNISWA Research Centre website is nearing completion and should be launched by the Acting Director of ICT soon, when he launches the new UNISWA website.

19.0 ACKNOWLEDGEMENT

The Acting Director of the UNISWA Research Centre and his colleagues, would like to express gratitude to the Vice Chancellor, the Pro Vice Chancellor and the UNISWA Research Board for their support during the 2002/2003 academic year.

We also wish to extend our appreciation to members of the Faculty Research Committees, the Technical Committee, members of the Editorial Board of both the UNISWA Research Journal of Agriculture, Science and Technology and UNISWA Research Journal for their cooperation in facilitating the work of the UNISWA Research Centre.

We also thank authors of papers, reviewers of manuscripts, invited speakers at seminars and workshop, participants at workshops and seminars, who contributed to the achievements of 2002/2003.

We are counting on your cooperation for the challenges that lie ahead.