



ADRI



SECOND ANNUAL REPORT

1 April 1978 to 31 December 1979

University of Fort Hare
Together in Excellence

AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE
FORT HARE

No. 4/79

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UNIVERSITY OF FORT HARE

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SECOND ANNUAL REPORT

University of Fort Hare
Together in Excellence

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AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE

1 April 1978

to

31 December 1979

UNIVERSITY OF FORT HARE ALICE

ALICE

REPUBLIC OF SOUTH AFRICA

REPUBLIC OF SOUTH AFRICA

5700

1979

NOTES

Due to a change in the Institute's financial year to coincide with the calendar year, this report covers the period 1 April 1978 to 31 December 1979.

For various reasons, not least of which are production costs, this report is available in English only.



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AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE

UNIVERSITY OF FORT HARE

ALICE

REPUBLIC OF SOUTH AFRICA

1979

INTRODUCTION

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This report on the activities and general progress of the Agricultural Development Research Institute (ADRI) of the University of Fort Hare

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ANNEXURES	"A" ADRI : Proposed establishment
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Finally, sincere appreciation is extended to the Rector, Professor J.M. de Wet, and his staff, as well as the University Council, for their positive approach to the many problems and requests directed to them from ADRI, and the responsive way in which they responded.

INTRODUCTION

ORGANIZATION OF THE INSTITUTE

This report on the activities and general progress of the Agricultural Development Research Institute (ADRI) of the University of Fort Hare will attempt to show, as objectively as possible, that it has gone well with ADRI during the almost two years that have elapsed since its First Annual Report.

There are those who will maintain that a great deal more could have been achieved. This is not denied. However, the conviction persists that the risk of failure and possible collapse of the organisation would have been concomitantly greater, and the loss of credibility disastrous had the Institute bitten off more than it could adequately chew during its early days.

It is still early days for ADRI - the Institute is not yet three years old. Blessed as it has been by good fortune up to now, there are no grounds for complacency.



Further strengthening of the Institute's financial position should retain a high priority. On the other hand, the maintenance of high scientific standards and a gradual increase in the volume of output should be ADRI's overriding goal.

Thanks are due to a number of colleagues in different sections and departments of the University for their assistance to ADRI in some form or other during the period under review. The wish is expressed that, as ADRI grows in experience, it will be increasingly able to reciprocate by assisting these friends meaningfully in their research and advisory functions.

Finally, sincere appreciation is expressed towards the Rector, Professor J.M. de Wet, and his top management, as well as the University Council, for their positive approach towards the many problems and requests directed to them from ADRI, and the magnanimous way in which they responded.

ORGANISATION OF THE INSTITUTE

ORIGIN AND OBJECTS

The Agricultural Development Research Institute (ADRI) of the University of Fort Hare officially commenced operations on 1 April, 1977.

Situated in the Ciskei, the Institute was established to provide assistance to less developed areas in Southern Africa in the form of specialist advice and research into the wide range of socio-economic and technical problems which are putting a brake on the rate of development of the peoples involved.

ORGANISATION AND MANAGEMENT



Although closely linked with the Faculty of Agriculture, the Institute resorts under the direct control of its Board of Control, the Senate and Council of the University of Fort Hare.

ADRI BOARD OF CONTROL, 1978/79

The Rector, University of Fort Hare, Professor Dr. J.M. de Wet,
MSc (SA) BSc (Eng) (Witwatersrand) DIC PhD (London)

The Vice-Rector, University of Fort Hare, Professor Dr. A. Coetzee,
Cand Theol (Stellenbosch) MA (SA) D Litt (UOFS)

The Dean, Faculty of Agriculture, University of Fort Hare,
Mr. S.J. de Swardt, MSc Agric (Natal)

The Director, ADRI, Professor Dr. P.J. Burger, MSc Agric (Pretoria)
D Inst Agrar (Pretoria)

The Heads of the following Departments of the University:

Agricultural Extension & Rural Development: Professor Dr. T.J. Bembridge, MSc Agric (Reading) D Inst Agrar (Pretoria)

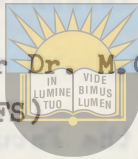
Agronomy: Professor Dr. E.H. Graven, MSc Agric (Stellenbosch) PhD (Wisconsin)

Agricultural Engineering: Professor M.D. Radford, Pr Eng BSc(Eng) Pretoria

Animal Science: Professor Dr. D.L. Brown, MSc Agric (Natal) DSc Agric (UOFS)

Genetics & Plant Protection: Mr. J.H.G. de Villiers, MSc Agric (Natal)

Soil Science: Professor Dr. M.C. Laker, MSc Agric (Stellenbosch) DSc Agric (UOFS)



University of Fort Hare

Agricultural Economics: Mrs. S. de Swardt, MSc Agric (Natal)

Economics: Mr. P. le Roux, BComm (Potch) MComm (UOFS), representing the Faculty of Economic Sciences.

Zoology: Professor Dr. R.A. van den Berg, MSc (Natal) DSc (Potch) STD (Stellenbosch) representing the Faculty of Science.

Social Work: Professor M.A. Hough, B (SW) (Stellenbosch) BA (Hons) (SA) MS (SW) (Boston), representing the Faculty of Arts.

ADRI is advised by an Advisory Council consisting of representatives of a wide range of public and private bodies and organisations.

Administration of the Institute is the responsibility of the Director who holds the rank of Professor and is a full member of the Board of the Faculty of Agriculture and the Senate of the University.

Research, administrative, part-time and temporary staff may be appointed as required. The Institute is expected to finance such appointments as far as is possible.

The potential staffing structure appears in Annexure "A".

FINANCE

The Institute's funds are managed as a University Council Fund and are obtained in the form of donations from a variety of sources as well as revenue accruing from work undertaken for outside clients.

The University provides accommodation and certain other services to the Institute and is responsible for the salaries of the Director and the Secretary. As stated elsewhere, additional staff can be appointed only if the necessary financial support can be found or earned by the Institute.



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REPORT ON THE INSTITUTE FOR 1978/79

VISITORS

During the period under review, ADRI enjoyed the privilege of visits from a number of persons. A visitor's book still has to be started but records show that inter alia, the following were involved:

Professor Dr. A van Wambeke, Cornell University, USA

Mrs. Marian Lacey, Rhodes University

Mr. G. van de Wall, Dept. of Co-operation & Development

Dr. F.H. Swart and Dr. H. Hamburger, Committee for Development Research (CDR) of the Dept. of Co-operation & Development, Pretoria

Mr. W.J. Kleyn, Sons of the Soil Trust

Canon Peter Buckler OBE, Director, Arthur Rank Centre, UK

Messrs Clark & du Randt, General Mining & Finance Corporation

Messrs Nel & Shipalana, Ford Motor Company

Messrs R. Berold & David Cooper, Environmental Development Agency (EDA)

Messrs. G. Swart & W. Smart, Dept. Agric. Technical Services

Brigadier van der Spuy, Officer Commanding EP Command

Major J. du Bois, Eastern Province Command

Mr. J. van der Merwe, Food & Nutritional Products

Mr. Stanley Kaplan & party from Israel

Mr. F. le Riche & party, Sentrachelm

Mr. G. Antrobus & party, Rhodes University

Dr. F. Groenewald, CDR, Dept. Co-operation & Development, Pretoria

Mr. J. Lutz, Dept. Co-operation & Development, Pretoria

Mr. T. Fenyas, University of the North

Mr. Duncan, Langeberg Co-operative

Mrs. Matthews, Alice

Mr. Case, Bayer Agro-chem

Mr. Metter, Imperial Chemical Industries

Mr. J. Hundleby, Ciskei Dept. of Agriculture & Forestry

Mr. Eric Johnson, Ciskei Dept. of Agriculture & Forestry

Mr. T.A.M. Murton, Dept. Co-operation & Development

Mr. Yitzhak Abt, Israel

Messrs Tony van de Watt & Liebenberg, Corporation for Economic Development, Pretoria

Professor H.M. Ferrinho, Mrs Berrange & 17 Students from the University of Cape Town

Mr. J. Bezuidenhout, Ciskei Dept. of Agriculture & Forestry
 Mr. Louis Steyl, Kingwilliamstown
 Mr. Ken Humphrey, Transkei Development Corporation
 Mr. Brunt & Mrs Vosloo, Information Services, CSIR
 Professor Denzil Russel, University of Rhodesia, Salisbury
 Mr. G. Godden, Ciskei Dept. of Agriculture & Forestry

CONSTITUTION

During the period under review a considerable amount of time was devoted to updating the Institute's Constitution. Besides the work put into it by the Executive Committee of ADRI's Board of Control, the Constitution was reviewed and commented upon by both the Law Faculty and the Administration of the University.

The finalizing of this matter was, unfortunately, delayed by various related issues which cropped up and required prior clarification. Although some time was lost in this process it did not affect ADRI's operations in the slightest.



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Hopefully, this matter will be finally dealt with during the first round of Board of Control, Senate and Council meetings in 1980.

Two of the proposed amendments affect the Advisory Council and are thus of special interest. One of these deals specifically with the Department of Co-operation & Development and its application to be represented on ADRI's Board of Control instead of on the Advisory Council (since approved by the University Council). The other amendment proposes further changes in the composition of the Advisory Council itself.

ORGANISATIONAL PARTICIPATION

The Director maintained involvement with and attended meetings of the following bodies:

- FOXDARC (Fort Hare/XDC Agricultural Research Committee)
- CENTOIL (Ciskei Essential Oils project)
- TARC (Transkei Agricultural Research Council)

SAIL (SA Institute for Agricultural Extension, Eastern Cape Branch)

Sons of the Soil Trust

Norms Committee, Eastern Cape Region, Department of Agricultural Technical Services

Fresh Water Fish Sub-Committee of the Committee for Development Research (CDR)

First Ciskei National Agricultural Show: Organising Committee

Faculty of Agriculture, Heads of Departments Committee, UFH

Board of the Faculty of Agriculture, UFH

Senate, UFH

Research & Capital Equipment Committee, UFH

Due to increasing commitments in ADRI itself, the Director was obliged to step down from some activities which could not be closely identified with ADRI and its objectives. In a few other cases, e.g. FOXDARC, activity has either dwindled to nothing or the body itself has virtually ceased to exist.



During the period under review, ADRI accepted responsibility for a joint exhibit, with the Faculty of Agriculture, at the First Ciskei National Agricultural Show. The Fort Hare stall attracted many visitors and was eventually awarded a trophy for the "Best Non-commercial Exhibit".

The Director attended the Ciskei Development Conference at Zwelitsha and read a paper at a regular meeting of the Transkei Agricultural Research Council. He also addressed a CSIR - symposium at Fort Hare, and various groups of short-course and other students.

Mr. P.M. Adams presented papers at the S.A. Economic Convention in Johannesburg and at the Urban Foundation Workshop in Durban.

ADRI PROMOTION

For most of the period involved in this report, ADRI has maintained a low profile, preferring to consolidate internally in preparation for the task ahead.

Satisfactory progress was made in the course of this early phase and the feeling is that a suitable program to promote ADRI in the less developed states of Southern Africa should now receive special attention. The "Open Day" function which is to be held in conjunction with the Advisory Council meeting in February 1980, is a step in this direction.

As far as South Africa is concerned, it could be said that the hundreds of pamphlets which were distributed with letters to would-be donors in the course of ADRI's fund-raising drive did, to some extent, serve to bring the Institute to the notice of the business world especially.

With regard to an emblem and letterhead for ADRI, it has become clear that there is not much enthusiasm amongst people involved for the designs received up to now. The idea has gained ground that the name "ADRI" itself could adequately serve the purpose of publicising the Institute.



With this in mind, a suitable design in which the letters ADRI are accentuated was procured and used in conjunction with the official UFH crest on the printed covers of all ADRI reports (including this one), together with the UFH colours. Most colleagues who have seen the covers have expressed their satisfaction. The University Council and the Department of Co-operation & Development have also by implication indicated their approval of the design.

It is perhaps applicable here to announce that there is strong feeling amongst members of the Board of Control that the name "ADRI" should be altered to include the concept "Rural Development". It has been informally suggested that an R be inserted between the A and the D so that ADRI will read ARDRI (same sound) and the full designation - Agricultural and Rural Development Research Institute.

The word "Rural Development" appears to be a popular one in developing situations and, if incorporated as suggested, should not only catch the eye and ear of e.g. potential donors, but also clarify the position of the Institute which, at present, is seen to concentrate on agriculture to the exclusion of other aspects of development.

FINANCIAL SITUATION

Financial Statement

The financial position of the Institute for the period 1 April 1978 to 31 December 1979 is summarised in Annexure "B".

Thanks to the sympathetic support of the University Council, the Rector and staff members responsible for financial administration, the financial position of ADRI has improved considerably during the period under review.

Fund-raising

Following initial assistance provided by the Corporation for Economic Development Limited during 1977/78, a fund-raising program for 1979 was devised and implemented with the enthusiastic support of members of the Fundraising Committee appointed by the ADRI Board of Control and the Director of Development and Public Relations of the University.



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Three main centres were visited by teams of two Committee members, namely Port Elizabeth, Cape Town and Johannesburg. A total of 24 Companies and other Institutions were personally approached in the course of these visits. It became clear that there was money available for the "right kind of project" and it was up to ADRI to follow-up these potential sources intensively.

As a background to the personal visits to would-be donors, a written appeal for financial and/or other forms of assistance was addressed to approximately 500 potential donors. This approach had realised a total of about R6 000 when the financial year ended on 31 December 1979. Thanks are due to the University Council for sponsoring the 1979 fund-raising drive to the amount of R1 000.

Fund-raising will continue during 1980.

Donations were received from the following companies and their interest in ADRI and its work is gratefully acknowledged:

Pfisers	Searles Holdings
Gubb & Ings	Reunert & Lenz
McCarthy	Elgin Refractories
Northern Free State Motors	Lion Match Co.
Fattis & Monies	Oceana Group
Volkswagen	ICI
Landkem	MSD
Malbak	Unisec

Working fees and S & T allowances

Following representations from the Board of Control, the University Council approved that members of the University Staff engaged upon work for ADRI be allowed to receive a maximum working (consulting) fee of R20 per 8-hour working day from ADRI whilst so employed. However, the period involved should be decided upon beforehand.



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Council further agreed that a special standard S & T rate of R20 per day be similarly instituted in respect of the period such staff members are away from base.

The power to negotiate and determine the fees, remuneration and tariff of charges for services rendered to "external" clients has been delegated to the Director and Executive Committee of the Board of Control.

Loan from University Council

Discussions with top management of the University on ADRI's financial quandary led to the University Council granting ADRI a loan of R35 000 with which to fill at least one of the approved Senior Research Officer posts.

More research staff would enable ADRI to accept more remunerative research commissions and thus accelerate the growth of its capital fund. No particular conditions are attached to the loan; it is repayable at a low interest rate, if any, over the long term.

STAFF AND ACCOMMODATIONPosts and appointments

On 31 December 1979, the position in regard to posts and staff in ADRI was as follows:

<u>Post approved</u>	<u>Incumbent</u>
Director	P.J. Burger, MSc Agric (Pretoria) D Inst Agrar (Pretoria)
Snr. Research Officer (Socio-economic & Planning)	P.M. Adams, BSc(Stellenbosch)MA(Oxon)
Snr. Research Officer (Technical)	Vacant (To be filled shortly)
Research Officer (Socio-economic & Planning)	Vacant
Research Officer (Technical)	Vacant
Technician (Socio-economic & Planning)	Vacant)) Temporarily "filled" by) National Service-men) seconded to ADRI
Technician (Technical)	Vacant)
Snr. Clerk	Vacant
Secretary/Typist	Mrs. Whitecross



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Mr. Adams was appointed to the post of Senior Research Officer for a contract period of three years with the aid of the University Council loan referred to earlier. It is hoped that the means will be available to continue his appointment upon expiry of the contract.

Applications were also invited in advertisements for the filling of the second Senior Research Officer post. By 31 December 1979, eight good applications had been received. These will be processed early in the new year and an appointment hopefully made.

Financial support for this latter appointment will come from the University itself by means of its official budget. This follows a decision by the University Council, approved by the Minister of Education & Training, to sponsor a senior a senior post in ADRI on a "permanent" basis.

The effective filling of these two senior posts will take a rather heavy responsibility from the Director's shoulders and should increase the volume of research and other projects undertaken by ADRI considerably.

The two Technician posts on the schedule above have been very adequately "filled" to date by two National Servicemen each of whom was seconded for 18 months duty to ADRI. One of these men, who rendered sterling service to ADRI during his term of duty, reached the end of his term of duty at the end of 1979. The other's time expires at the end of 1980.

Attempts are being made to obtain the services of a further one or two servicemen for duty as Technicians on the Institute's staff.

At the moment there is a dire need for an efficient clerk who could assist in the management of the Institute. Urgent steps are being taken in an effort to find a suitable person for the post.

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At this stage there is no need for extra typists. To date, excessive volumes of urgent material for typing have been given out to external typists.

During the period under review, Mrs Whitecross replaced Mrs. J Radford who resigned as Secretary/Typist.

Office accommodation

Since its inception in 1977, ADRI has been comfortably housed in three offices in the Agriculture building of the University.

As the turnover of work increased over the past year it became clear that the office accommodation was too small to provide, adequately, for both staff and storage. The position would become critical, it was felt, in the event of ADRI appointing one further staff member. The same would be true if the Faculty itself expanded by as few as one or two additional staff members.

The latter alternative has, in the interim, manifested itself and ADRI has been requested by the Faculty of Agriculture to vacate an office (the last available) which had been used temporarily to house ADRI's National Servicemen.

Representations in this regard were made to the University authorities early in 1979, and it is hoped that this problem will shortly be solved. In view of the intended appointment of a Senior Research Officer and a Senior Clerk in the near future, the matter is extremely urgent.

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RESEARCH, SPECIALIST ADVISORY AND SUPPORTING PROJECTS

Projects undertaken

The main tasks of ADRI are to undertake itself, or promote research into development problems, to render specialist advice in connection with practical development schemes and to undertake a variety of supporting projects which will provide a facilitating service to the Institute's research and advisory function.

During the period under review a total of 12 such projects was undertaken of which five were completed (Annexure "C"). Since 1 November 1979, when Annexure "C" was drawn up, the University Council has approved all the projects submitted to it. This means that, besides projects under negotiation and those completed, all the others are now in progress.

It is perhaps important to stress some of the service projects undertaken by ADRI as a support to its research function. Three of these are the so called Databank Project, the "Compres" or computerised project registration project and the Newsletter Project.

As indicated in Annexure "C", these projects are on-going in the sense that the spadework has been completed and the methods evolved are currently being applied and monitored. So, for example, the registration of all University research projects has been computerised, the beginnings of a databank for the University have been established and computerised and tentatively linked with similar systems at the CSIR.

Regarding the proposed Newsletter, all preparatory work has been completed and the first edition under the title "ADRINEWS" will appear on schedule by March 1980.

The availability of such aids to research and communication in the field of rural development should play an important part in optimizing the process of change. Their value will depend largely on the extent to which they are used.

Reports on completed projects

Reports on four of the five completed projects were duplicated and bound, like this report, in specially designed and printed covers. Each report has received a reference number and forms part of an official ADRI report series.

These reports are the following:

- No. 1/78 Enkele aanbevelings in verband met die ontwikkeling van ongeveer 900 ha besproeiingsgrond op die Makatini Skema
- No. 1/79 Die bepaling van kanaalgroottes vir die Makatini Besproeiingskema
- No. 2/79 Climate in relation to crop production in the White Kei Valley
- No. 3/79 Comments concerning the economic feasibility of the plan for Ncora Irrigation Scheme



Copies submitted to the University Council and the Department of Co-operation & Development have received favourable comment.

Modus Operandi

In the absence of its own research staff, the assignments accepted by ADRI have virtually all been sub-contracted to University staff members at the reigning tariffs described earlier. In one case, an expert from the UOFS was commissioned to assist the ADRI team.

Costs have invariably been recovered from the client upon completion of the particular project. ADRI has levied a management fee in most cases at a rate of approximately 10 per cent.

The one exception so far has been the so-called "General Mining Master Project". Here, the client is funding the project directly in advance on an annual basis. Such an arrangement will help ADRI to appoint contract staff to its establishment, increase its potential to render services and, generally, facilitate forward planning.

As described earlier, ADRI is confidently expecting the appointment of further research personnel to its establishment. This will greatly enhance ADRI's potential to expand its operations.

The future

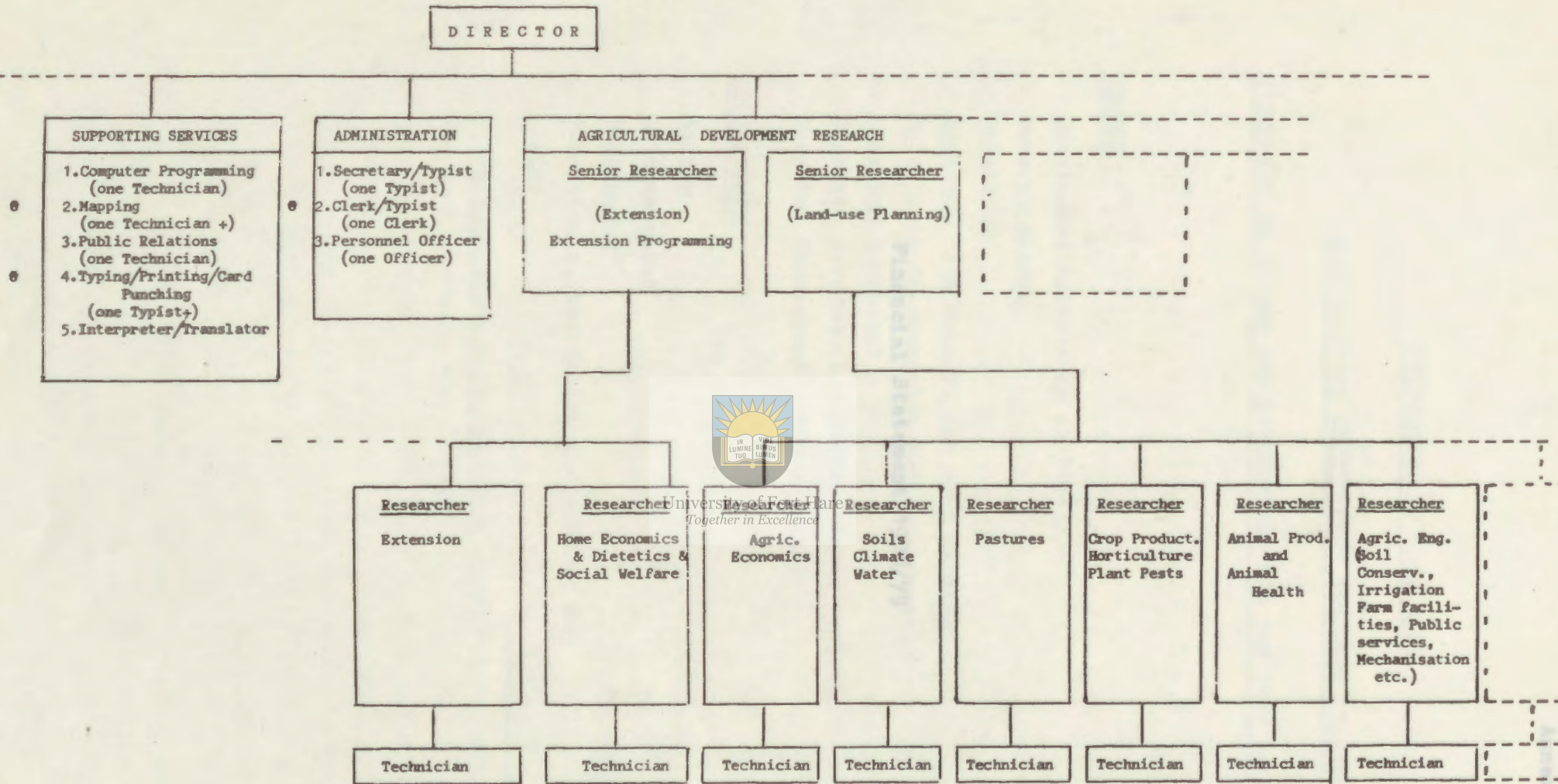
Given continued good fortune, ADRI will strive to improve its output of useful information in a number of fields.

It may be expected that there will be many requests for situational studies involving surveys of different kinds. On the other hand, there is a great need for ADRI to initiate research in some other areas, e.g. the technical aspects of development which are not receiving the necessary attention at the moment.

There is great scope for inter-disciplinary applied research in the developing situation. ADRI has already formally approached the Faculties at Fort Hare with a request that they introspectively evaluate their research in the light of the many needs of the rural people.

ADRI has also started collecting funds for a wide range of this kind of research and has drawn up a document (Annexure "D") describing the projects it has in mind. This document is being used in ADRI's fund-raising campaign.

A D R I : PROPOSED ESTABLISHMENT



As ADRI's level of production increases staff requirements in these categories will expand rapidly, e.g. a large number of maps will be published per research report; one Technician will not be able to cope as output increases.



UNIVERSITY OF FORT HARE

AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE

STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31 DECEMBER 1979

INCOME

Unexpended balance as at 31/12/78	36 712,93
General Mixing	20 000,00
Donations	4 905,00
Donation from Council for fund raising	1 000,00
Department of Agriculture	5 323,93
Botanical project	2 098,56
Ciskei Government - Botanical project	350,00
Transkei Government - Botanical project	350,00

Financial Statement 1978/79



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EXPENDITURE

Salary	6 811,58
Entertainment	20,80
Stationery	39,44
Subsistence, travelling and working for claims	7 086,19
	13 958,01
Unexpended balance as at 31/12/79	226 434,01

UNIVERSITY OF FORT HARE

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AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE

AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE (ADRI)
STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31 DECEMBER 1979

PROJECTS FOR THE APPROVAL OF 1981-82

AT ITS MEETING ON 22 SEPTEMBER 1979 R R

INCOME

Unexpended balance as at 31/12/78		36 712,43
General Mining		20 000,00
Donations		4 905,00
Donation from Council for fund raising		1 000,00
Department Co-operation and Development-		
Makatini 2 project		5 325,93
Ciskeian Government - Buffalo project		2 098,66
Transkei Government - Ncora project		350,00

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EXPENDITURE

Salary	6 811,58	
Entertainment	20,80	
Stationery	39,44	
Subsistence, travelling and working fee		
claims	7 086,19	13 958,01
Unexpended balance as at 31/12/79		<u>R56 434,01</u>

Nature of project: The provision of a suitable channel to bridge the communication gap between research, especially at the UFR, and practice in the developing black states of Southern Africa. A suitable person outside ADRI will be contracted to undertake editorship and production of the proposed newsletter. Four editions per annum are envisaged.

An editorial committee headed by an ADRI official will supervise the project. "Outside" sponsorship is being sought. Until obtained, the Research & Capital Equipment Committee of UFR has been requested to sponsor the project.

UNIVERSITY OF FORT HARE

AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE (ADRI)

PROJECTS FOR THE APPROVAL OF COUNCIL

AT ITS MEETING ON 20 NOVEMBER 1979

1. UFH Registration No. ADRI 79001

Name: Compres

Commissioned by: ADRI and UFH research administration

Sponsored by: ADRI and UFH research administration

Budget: Nil (No cost to ADRI)

Nature of project: Development of a computerised project registration system for ADRI and the entire University

Justification: Such a system facilitate the administration of research

Status of project: Completed

Recommendation to Board: Ex post facto approval

2. UFH Registration No. ADRI 79002

Name: ADRINEWS

Commissioned by: ADRI

Sponsored by: UFH or alternative

Budget: R2 000 per annum (including production and distribution costs, as well as editorial fees)

Nature of project: The provision of a suitable channel to bridge the communication gap between research, especially at the UFH, and practice in the developing black states of Southern Africa. A suitable person outside ADRI will be contracted to undertake editorship and production of the proposed newsletter. Four editions per annum are envisaged.

An editorial committee headed by an ADRI official will supervise the project. "Outside" sponsorship is being sought. Until obtained, the Research & Capital Equipment Committee of UFH has been requested to sponsor the project.

Justification: No effective 'communication channels appear to exist between UFH and those at policy and practical level in development work.

Status of project: Just commenced

Recommendation: Ex post facto approval

3. UFH Registration No. ADRI 79003

Name: Databank

Commissioned by: ADRI

Sponsored by: ADRI, alternatively UFH

Budget: R10 000 per annum for the entire University

Nature of project: The designing and implementation of a computerised system whereby research findings and other valuable data may be systematically stored and easily retrieved when required. This involves the development of a suitable computer program for the UFH computer and the establishment of good working relations with other information services, eg the CSJR Centre for Scientific and Technical Information from which Databank material will be purchased on an on-going basis.

Justification: Having ready access to classified information on a particular subject is indispensable to anyone engaged in educational and especially research activities. This can only be done effectively by means of a computerised system which is linked up with other similar systems.

Status of project: The development of a computer program for the UFH computer has been completed. Good relations have been established with the CSIR. The co-operation and commitment of the UFH is being sought.

Recommendation: Ex post facto approval

4. UFH Registration No. ADRI 79008

Name: Ncora Report Evaluation

Commissioned by: Transkei Dept. Agriculture & Forestry

Sponsored by: Transkei Dept, Agriculture & Forestry

Budget: R500

Nature of project: Evaluation of the report, drawn up by consultants, with regard to the economic aspects involved.

Justification: Not applicable

Status of project: Completed
Recommendation: Ex post facto approval

5. UFH Registration No. ADRI 79009

Name: White Kei

Commissioned by: RF Loxton, Hunting & Associates

Sponsored by: RF Loxton, Hunting & Associates

Budget: R1300

Nature of project: A study of crop adaptability in relation to climate in the White Kei area

Justification: Not applicable

Status of project: Completed

Recommendation: Ex post facto approval

6. UFH Registration No. ADRI 79011

Name: Tyefu Consultation

Commissioned by: RF Loxton, Hunting & Associates

Sponsored by: RF Loxton, Hunting & Associates

Budget: R1500

Nature of project: Providing expert advice to the client with regard to the experiments being conducted at the Tyefu Irrigation Scheme

Justification: Not applicable

Status of project: On-going

Recommendation: Approved

7. UFH Registration No. ADRI 79012

Name: Buffalo Basin Master

Commissioned by: Ciskei Dept. of Agriculture & Forestry

Sponsored by: Ciskei Dept. of Agriculture & Forestry

Budget: R30 000

Nature of project: A survey of natural, economic, human and technological resources in the catchment of the Buffalo River in the Ciskei. The different facets of the survey form "component projects" under the "master" program

Justification: Not applicable

Status of project: One component project has been partially completed

Recommendation: Approved

8. UFH Registration No. ADRI 79013

Name: Makatini Master

Commissioned by: See component projects

Sponsored by: See component projects

Budget: Total of component projects to date

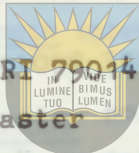
Nature of project: All studies relating to development in the Makatini Flats

Justification: Not applicable

Status of project: On-going, two component projects have been completed

Recommendation: Approved

9. UFH Registration No. ADRI 79014



Name: General Mining Master

Commissioned by: General Mining & Finance Corporation Ltd.

Sponsored by: General Mining & Finance Corporation Ltd.

Budget: R100 000 over 5 years

Nature of project: A study in human development, comprising a range of resource surveys, including the human factor, and the designing and implementation of educational (extension) programs to obtain the adoption of improved land-use systems

Justification: Not applicable

Status of project: Early stages of planning and organisation

Recommendation: Approved

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AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE (ADRI)

REPORT FOR THE APPROVAL OF COUNCIL

10. UFH Registration No. ADRI 79005

Name: Makatini I

Commissioned by: Corporation for Economic Development Ltd. (CED)

Sponsored by: CED

Budget: Approx. R2 000

Nature of project: To investigate and advise on soils, adapted crops and irrigation methods with a view to the planning of approximately 900 ha of irrigable land in the Makatini flats.

Justification: Not applicable.

Status of project: Completed

Recommendation: Ex post facto approval



11. UFS Registration No. ADRI 79006

Name: Makatini II

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Commissioned by: Department of Co-operation & Development

Sponsored by: Department of Co-operation & Development

Budget: Approx. R6 000

Nature of Project: The determination of irrigation canal dimensions for the Makatini Irrigation Scheme

Justification: Not applicable

Status of project: Completed

Recommendation: Ex post facto approval

12. UFS Registration No. ADRI 79007

Name: Mount Pleasant

Commissioned by: Transkei Agricultural Research Council (TARC)

Sponsored by: Undertaken for no charge

Budget: No expenditure

Nature of project: Soil survey to determine the suitability of the area for the establishment of an agricultural research station.

Justification: Not applicable.

Status of project: Completed

Recommendation: Ex post facto approval

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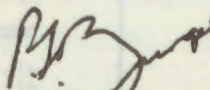
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AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE (ADRI)PROJECTS FOR THE APPROVAL OF COUNCILAS ITS MEETING ON 20 NOVEMBER 1979

1. According to the Constitution of ADRI (Par. 3(vi)(b), a function of the Board of Control is "to select projects and submit them to the Council for approval".
2. Although ADRI has already undertaken and even completed several projects, it is only recently that a working procedure has been set up in terms of which the intended flow of project through the Board of Control to Council is made possible.
3. The attached statements briefly describe the various ADRI projects involved. The recommended action by Council is indicated in each case.



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P J BURGER
DIRECTOR : ADRI
2/11/79

ADRI RESEARCH AND DEVELOPMENT PROJECTS

8/204/79

UNIVERSITY OF PORT HARE
ADRI RESEARCH STATEMENT AS AT 1/11/79

Under Negotiation	For Recommendation by ADRI Board of Control	For Approval by Council	On - going	(Completed) Final Report
1. <u>Fish Farming</u> Dept. Zoology, Ag. Econ, Ag. Eng. (1). CDF (2). Viskor (3).		1. <u>Makatini Master</u> All depts. (1). Dept. Coop & Dev. (2). Dept. Coop & Dev. (3).	1. <u>Buffalo Basin Master</u> (No. Adri 79004) (1 - Vegetation Survey)	1. <u>Makatini I</u> (No. Adri 79005)
2. <u>Makatini III</u> Dept. Co-operation & Development (2). Dept. Co-operation & Development (3).		2. <u>Makatini I spf</u> Agronomy, Soil Science (1). CED Ltd. (2). CED Ltd. (3).	2. <u>Compres</u> (no. Adri 79001)	2. <u>Makatini II</u> (No. Adri 79006)
3. <u>Makatini IV</u> Dept. Agric. Economics (1). Dept. Co-operation & Development (2).		3. <u>Makatini II spf</u> Soil Science, Ag. Econ., Agron/Crops, Ag. Eng. (1). Dept. Co-operation & Development (2). Dept. Co-operation & Development (3).	3. <u>Databank</u> (No. Adri 79003)	3. <u>Mount Pleasant</u> (No. Adri 79007)
4. <u>Spice Production</u> Dept. Agronomy/Crop Prod. (1). Robertson Spices (2). Robertson Spices (3).		4. <u>Mount Pleasant spf</u>	4. <u>Newsletter</u> (No. Adri 79002)	4. <u>Mcora</u> (No. Adri 79008)
5. <u>Meat Consumption Survey</u> Mdantsane & Zwalitsha Ag. Econ (1). Ciskei Govt. (2).		5. <u>Mcora spf</u>	5. <u>Tyalara Farm Development</u> (No. Adri 79010) - Cancelled	5. <u>White Kei</u> (No. Adri 79009)
6. <u>Agric. Statistics</u> Ag. Econ. (1). Kwa Zulu Govt. (2). Dept. Coop & Dev. (3).		6. <u>White Kei spf</u>	6. <u>Makatini Master</u> (No. Adri 79013)	
7. <u>Beef Marketing</u> Agric. Ext. (1). Kwa Zulu Govt. (2). Kwa Zulu Govt. (3).		7. <u>Buffalo Basin Master spf</u>	7. <u>General Mining Master</u> (No. Adri 79014)	
8. <u>Extension Service</u> Agric. Ext. (1). Kwa Zulu Govt. (2). Kwa Zulu Govt. (3).		8. <u>Tyalara Farm Development spf</u> - Cancelled	8. <u>Tyefu Consultation</u> (No. Adri 79011)	
		9. <u>General Mining Master</u> All Depts. (1). General Mining & Finance Ltd. (2). General Mining & Finance Ltd. (3).		
		10. <u>Tyefu Consultation</u> Agronomy Hunting, Loxton & Ass. (1). Hunting, Loxton & Ass. (2). Hunting, Loxton & Ass. (3).		
		11. <u>Compres spf</u> U.F.W. (2). U.F.W. (3).		
		12. <u>Databank spf</u> Dr. E. Botha (Botany) (1). Fac. Agric. (2). U.F.W. (3).		
		13. <u>Newsletter spf</u> (1). (2). U.F.W. (3).		




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(1. Co-operating department/institution/person
2. Client/Benefiting party
3. Sponsor

Spices, herbs and pharmaceuticals
Essential oils
Agricultural Bulletins and Pamphlets
Agricultural Statistics
Livestock Management and Policy
Miscellaneous Projects

ADRI RESEARCH AND DEVELOPMENT PROJECTS

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Buffalo Basin Vegetation Study	
Makatini - irrigation potential evaluation	
Makatini - determination of canal sizes	
Mount Pleasant Experimental Farm - Soil Evaluation	
Ncora Report - economic evaluation	
Climate/crop production evaluation - White Kei Valley	
Tyalara Farm Development	
Table Maize cultivar trial - Tyefu Irrigation Scheme	
Longterm stocking rates for the Ciskei veld	
Bare fallow moisture conservation trials	
Physico - chemical parameters of irrigation and drainage	
Tyefu research and consultation project	
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<u>PROPOSED</u>	
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MOTIVATION: RURAL DEVELOPMENT RESEARCH PROJECTS

GENERAL

Our Homelands are in a bad way. This fact was well documented by the Tomlinson Commission which covered the question with great thoroughness and put forward a number of excellent suggestions. Though people were moved to rural villages and the agricultural and grazing lands were demarcated and rationalised in accordance with the Commission's recommendation, one of the principal recommendations, namely that the number of farmers should be restricted to the number of viable units, was never implemented. The result is that today many, and in some parts the majority of farmers are on half or quarter economic units while many people have no land rights at all. Populations have risen while production has remained static resulting in a general fall ^m per capita food consumption and malnutrition is widespread. Our first priority therefore is to raise the productivity of the subsistence farmer. This is an aspect which has not been seriously tackled by our agricultural research bodies up till now.



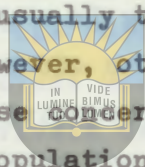
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It is estimated that we must find ⁺8 million jobs by the end of the century. People have tended to look to urban-based industries to provide the bulk of these, but at an average figure of R30,000 per job, this means R240,000,000,000, or an average of R12,000,000,000 per annum. The country cannot afford this rate of capital expenditure. Compare this with the figure of R18000-20,000 per job for irrigation farming, about half this amount for mechanised dryland farming and from about R2,000-R3,000 for a peasant farmer and consider the ripple effect of primary production on the economy as a whole, and the potential gains in stimulating this badly neglected sector of the economy become apparent, particularly when viewed in the light of unemployment and the consequent social stresses.

The rural areas are the cinderella of the development scene, but their importance to the country as a whole is becoming realised by more and more people. For instance, the Urban Foundation have come to realise that urban improvements will no sooner be made than they will be swamped by rural migrants if the problem of migration is not

solved at source, i.e. in the rural areas themselves. The possibility of starting a Rural Foundation has been mooted. Should such a Foundation come into being, it would presumably try to improve the lot of the rural residents in much the same way as the Urban Foundation is doing for the urban dweller. Many Government Departments are becoming similarly interested. Something must be done. But how? What are the priorities, what are the blockages holding back progress and what means do we have to make improvements? These questions must first be answered before effective action can be taken. It is our business to do the research in order to find the answers, and as answers and facts will soon be required, the research must start now, and on a broad front covering all aspects of rural life.

Probably the most urgent need in the Homelands is to raise agricultural production. Agriculture is usually the most important activity in rural areas in any case. However, other aspects of rural life are of the utmost importance to those concerned, and are likely to increase in importance as the rural population continues to increase beyond the maximum number that can be sustained by agriculture alone. Questions of a social, industrial, housing, educational and technical nature must also be answered. Our proposed programme of research is aimed at covering these questions as well as purely agricultural ones. The attached descriptions of projects are among those which we would like to undertake and are submitted for your consideration.



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NEWSLETTER

A newsletter is being started by ADRI. It will be aimed at informing the Homeland Governments of the facilities offered by ADRI and other development organisations, and at providing a forum for those involved with rural development whether they are in Government Service, the Private Sector or the Universities.

It will cover news of experimental work, theses, conferences and practical development schemes and will aim to present a comprehensive view of the rural areas and their development in order to keep those involved abreast of developments all over the sub-continent.

Knowing what is happening in one's field is a need which has often been expressed to us. Unlike most professional organisations which have their own newsletter and journals, there is nothing of this kind in rural development. The newsletter will be aimed at an advanced level of lay readership - the researchers and decision-makers - and will be distributed to all relevant Government Departments, of Homeland and Independent States, Private developers, relevant University Departments and Institutes, and also overseas.



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DATABANK

Adequate and up-to-date data and a knowledge of developments in the field concerned are a prerequisite for any research or planning exercise. There is currently no data service available in the field of rural development in Southern Africa. It is intended to start such a facility similar to those available to developers in developed countries.

This project has been started with University funds, but it has the potential for considerable expansion to serve all aspects of rural development and we are seeking a sponsor who will make this possible.

Presently, all University research projects are registered and monitored by ADRI on computer tape. We are now in the process of compiling a rural development tape of references of all books and articles in this field from searches made by the SASDI service of the C.S.I.R. These references will be computerised and will be searchable by means of key words for purposes of literature reviews and keep up to date on literature published in the rural development field in general. We hope to extend this by the employment of extra staff to monitor and enter articles, reports and publications on all related aspects from Southern African sources. This is a field not covered by the overseas reference tapes available to the C.S.I.R. We hope to build up a Southern African Development Tape on the lines of that produced by the Department of Water Affairs called WATERLIT by which time it will have outgrown us and should then be taken over by the C.S.I.R. and/or Government Departments. We therefore wish to father an information service which will become national in scope, but even in its infancy will serve anyone concerned with development.

An estimated R7,000 per annum will make it possible to make a start on the proposed Rural Development Tape. Requirements could rise to over R20,000 per annum, but by this stage it is hoped that Government sponsorship will have been found.

THE PRACTICAL DEVELOPMENT OF RURAL COMMUNITIES

The one thing which the Agricultural Development Research Institute
 A start on the first of these projects has been made. This first
 project, which has been termed "a project in human development",
 is being sponsored by one of the mining houses. It is hoped to
 duplicate this project in each of the Homelands, and if possible,
 more than one per homeland. Briefly, the project consists of the
 identification of an area whose population are keen to develop and
 whose Government supports the project and is prepared to put in the
 necessary staff, and possibly infrastructure.

Physical and social surveys will be made to determine the potential
 of the area and the factors which are currently putting a break on
 production. Then means of overcoming these restraints will be
 developed and put to the people who will be helped to overcome them.
 The whole process will be monitored and it is hoped to develop a
 modus operandi which could be easily transferred to other areas. Each
 area will serve as a trial and demonstration for the surrounding areas.
 It is aimed to help people to help themselves through the co-ordination
 of Government Departments, the Private Sector and the people themselves.

The cost of such a project to ADRI is estimated at R20,000 per annum.
 Distant areas would require transport and subsistence costs to be
 added. The cost to the Homeland Government will vary depending on the
 area and it's requirements and the Government's policies as against
 what the Government would expect to spend on the area in any case.
 We do not yet know how long it will take to "develop " a person and
 suspect that local variations could be substantial, but we hope to see
 some short-term results in a year or two and permanent beneficial
 changes in about five years.

ADRI is therefore looking for working capital of R100,000 to R150,000
 over five years per area.

FIELD SCALE TRIAL GROUND

The one thing which the Agricultural Development Research Institute does not have at present is (any) land available to do Agricultural Development Research on. While Government and Industrial firms' researchers make use of farmers on whose farms field scale trials are conducted, there are few such farmers in the Homelands who have the competence and skill which is necessary, and virtually none who can afford to bear the costs of the inevitable losses. Furthermore, peasant farmers are not only unable to bear losses or carry risks, but the idea of trials is foreign to them. While a researcher would happily see a dozen or more trials fail in order to establish one successful break-through, a single failure in the sight of a peasant farmer is sufficient to shatter credibility. The University farm is almost completely taken up with existing experiments and is in any case geared to small scale experiments while our need is for field-scale trials. As the expected loss of yield between the theoretical maximum as found on an experimental plot and that of a field trial under farming conditions is about 50%, the results of experiments done on the research farm cannot be recommended for use in the field before their viability is tested under field conditions. We are therefore unable to recommend or to try out crops, methods or techniques which have proved successful in other countries, other parts of this country, or even on our research farm. Admittedly there is room for enormous improvements in the Homelands using only well tried and tested techniques, but with our ability to try out new things curtailed, the chances of making any break-throughs are greatly reduced. A trial farm with facilities would provide the setting in which of the proposed projects would be conducted.

Negotiations have been started to acquire the use of land for this purpose. Should nothing become available in the Ciskei, a site outside will have to be found and rent (or purchase price) found. Running costs will depend on the scale of activities. Needs from R50,000 p.a. can be expected.

ANIMAL PRODUCTION PROJECT

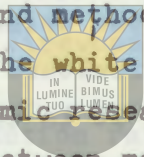
The means usually employed to improve African stock production is to introduce European breeds capable of high performance under good conditions and to try to improve the conditions to suit the stock's requirements. The reverse process of attempting to upgrade local stock and maintain their desirable characteristics has led to the development of the Shona, Matabele and Zulu cattle among others. However, even these types, hardy as they are, have minimum requirements and will not perform well under a deteriorating veld management. There is therefore a need to tie stock management in to the overall farming system as practised in peasant agricultural conditions where the transition has not yet been fully made from a nomadic to a sedentary agriculture. There is also a need to reconcile stock management with social and cultural practices such as lobola and communal grazing rights. This is a field of study of the utmost national importance.



A further aspect which could be of great importance is the development of a workable and acceptable method of raising small-stock on an intensive backyard system for regular meat and poultry production for home consumption. Such an intensive or semi-intensive system of meat and protein production also requires changes in the traditional method of running stock. The requirements of animals and the habits and customs of people have to be reconciled. Such an "agro/social" study would require a full-time researcher at a cost of R20,000 p.a. At least 3 years and probably 5 or more would be needed to develop a workable system of stock production capable of application under our existing homeland conditions. A permanent post would in fact be preferable. As all aspects of stock production could not be handled simultaneously in this time, one or two aspects would be selected for development.

CROP PRODUCTION PROJECT

It is difficult to bring about an agricultural revolution with only one or two crops, particularly when those crops are a) marginal for the area concerned, and b) beset with taboos and long-established habits and practices which must first be broken down or altered before any new practices can be introduced. Furthermore, a variety of crops is required if a successful rotational cropping programme is to be established. This means the establishment of several alternative crops for use in rotations under different conditions. It is necessary to develop varieties which are suited to the prevailing conditions and also a suitable marketing strategy before the introduction of any new crop can be attempted. Also, such a crop must fit the agricultural practices, equipment and methods in use, or suitable new equipment or methods must be developed. This must be done for existing peasant farming conditions as crops and methods designed for mechanised, large-scale farming conditions in the white areas are seldom applicable. Both Horticultural and Agronomic research is required as also research into the inter-relationship between modern agricultural methods and African beliefs and customs.



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A full-time researcher at R20,000 p.a. is required.

FISH FARMING PROJECT

The need for protein-rich food in the Homelands should need no stressing. The water resources and wet low-lying lands represent an unused potential.

A research project into Inland Fisheries is being started in the Transvaal. We believe that there is a need for a similar project to serve the Eastern Cape and Natal seaboard. There are two main directions to be pursued. One is back-yard fish farming in local dams and rivers, the other is commercial fish-farming in specially constructed ponds. It is proposed to establish a Fish Culturing Station to convert the basic research findings of the Department of Zoology at the University of Fort Hare into profitable fish farming practices for both peasant and commercial production and to maintain a stock of fingerlings for use as required. There is land and water available below the existing and proposed irrigation dams in the Keiskamma River Basin and elsewhere which the Ciskei Department of Agriculture and Forestry are keen to see developed for fish farming. It is envisaged that the Ciskei Government would eventually take over the running of the fish station when it and the fish farming industry have been successfully established.

The project would be run by a committee comprised of representatives of

- a) The Ciskei Department of Agriculture and Forestry
- b) University of Fort Hare Department of Zoology
- c) The Sponsor
- d) Head of Fish Station and
- e) Director of ADRI

It is estimated that the Fish Station including buildings, ponds, laboratory, apparatus and equipment could be established for R80,000 and that the running costs would be in the order of R20,000 a year for 3-5 years.

FOREST FARMING PROJECT

Only 13% of South Africa is arable. The remaining 87% is used chiefly as rough grazing although much of this area comprises deep, and sometimes fertile subsoils. Over vast areas the original tree cover has been removed so that only the top 5cm or so of the soil is utilized by grass roots and a considerable loss is then experienced in the conversion of grass to animal matter. Planting these areas with food-bearing trees such as fruit, nuts, berries or edible beans, will utilise the subsoil, often without detriment to the grazing, and will provide not only human food, but also jobs and a stock of potential animal fodder for times of drought. The development of suitable permanent tree or bush crops for use on marginal soils which should never have been ploughed will enable their usefulness to continue without detriment to the soils themselves. Tree crops are better able to withstand drought than are field crops and the use of suitable species in the drier areas is therefore indicated. **Firewood** and bee-keeping are associated advantages.



The use of tree crops for food production rather than for timber is a development which has recently started to attract considerable interest overseas and an International Forest Farming Institute is being formed in the United Kingdom. It will select and distribute promising cultivars from many different parts of the world in an effort to improve yields and eliminate undesirable characteristics. It is our intention to obtain and to try out as many as possible of these selected cultivars in as wide a range of climatic conditions as possible, and to include in the trials, all promising indigenous species. Results will be monitored and suitable species reproduced for planting.

It is not envisaged that a full-time researcher should necessarily be employed on this project although there is certainly scope for a plant breeder in this field and an effort would be made to appoint a full-time researcher if funds were available. Initial establishment costs would be high, but running costs thereafter would be low. R10,000 p.a. for the first two years and R 3,000 p.a. for a further 12 years is estimated for establishment and a further R5,000 p.a. for part-time or R20,000 p.a. for full-time supervision will be required.

ALTERNATIVE TECHNOLOGY/ENGINEERING DEVELOPMENT PROJECT

Our current agricultural technology is geared to the size and complexity of the white areas and based on European and African practice. It is inappropriate to small-scale peasant farming. There are two ways of overcoming this situation. One is to increase the size of holdings and the scale and complexity of management to suit the technology. This has been tried for a number of years with limited success through various re-allocation and co-operative schemes. The other approach is to alter the technology to suit the conditions under which it is to operate. This is what the Alternative Technology Development Group has done with seemingly far more success in many of the undeveloped countries. Little has been done on these lines in South Africa to date. Apart from agricultural equipment there is a need for improved food handling and storage, fuel supplies, water supplies, farm buildings, housing, processing and other decentralised industrial production and the development of small-scale industries and crafts to facilitate this small-scale production.



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It is our hope to establish a research fellowship for a suitable candidate to do research into and development of suitable technology in these spheres. There is scope for several researchers, but initially one researcher on the lecturer salary scale of R8,100 - R13,200 is envisaged. This will require an amount of at least R15,000 per annum for 3-5 years plus workshop facilities of a further † R10,000 to establish the facility.

AGRICULTURAL AND HOME ECONOMICS PROJECT

At the level of the peasant farmer, agricultural and home economics are all but indistinguishable, and both tend to merge with aspects of nutrition and education and are inextricably tied to social and cultural factors. In the past, agricultural economics has been approached from the point of view of the economist working in the mechanised white farming sector. We believe that the seemingly illogical practices which have proved so persistent in the peasant farming sector require closer study in relation to their social settings and that a far better understanding is required before areas of possible improvements can be identified or acceptable practices developed.

An agricultural economist/home economist appointed to undertake this aspect of investigation could also contribute to all other projects which will need some degree of costing and economic assessment.

It would cost R20,000 p.a. to keep such a person and at least 3 years would be required for him to gain a sufficiently deep understanding to be able to make prescriptions.



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SOCIO-CULTURAL CONSTRAINTS PROJECT

A number of social, cultural and psychological blocks are serving to put a break on the development of the rural African. These are not sufficiently understood and need a great deal of research before their effects can be accurately assessed, let alone sufficiently understood to allow us to prescribe successful solutions. The position is further complicated by changes which are occurring the population's outlook and values through contact with industrialised urban culture.

As these factors determine the way in which proposed changes are perceived, and therefore also the reaction to and acceptance of such changes, it is imperative that we gain a better understanding of them if we hope to affect any development in the rural homeland areas.

Investigating these social and cultural factors will of course form a most important part of any of our development projects, but this aspect is regarded as of such basic importance that it should be regarded and funded as a project in itself with a Sociologist, Anthropologist or Psychologist employed full-time for a 5 year period. This will cost R20,000 p.a.



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THE SPICES, HERBS AND PHARMACEUTICALS PROJECT

Spices and Herbs are often associated with arid or difficult growing conditions and many appear suitable for growing in the Ciskei. They are generally also labour-intensive, easily transported and save foreign exchange. The development of a spice, herb, or pharmaceuticals industry would therefore appear to be a highly suitable development for the Homelands. However, much basic research will be required before such an industry can grow to the extent of contributing substantially to the G.N.P. of these countries and it is felt that this basic research should be done as soon as possible. Development of much needed alternative crops and new industries is a basic method of improving and uplifting an area.

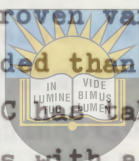
Spices and Herbs constitute one such possibility. To do the basic research needed, a full-time researcher will be needed plus facilities for at least 5 years at R25,000 - R30,000 per annum depending on the scope of the facilities and geographical spread of the trials. A close tie-up with the Centoil project is possible.

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THE CENTOIL (ESSENTIAL OILS) PROJECT

This project has been developed since 1974 by the Agronomy Department of the Agricultural Faculty. During the first phase, many known and unknown indigenous species were screened for suitable oil production under a variety of conditions. Peppermint was found to be well adapted to the Ciskei and there is a good local and export market. Of the local species, four "weeds" have proved suitable and as they currently have a negative value, their possible exploitation represents an opportunity of turning a liability into an asset. A good market already exists for one of these as a substitute for a West African oil which has a well established market. Economic returns on these "crops" could be very high. Several other "weeds" are being tested.

In order to establish these proven varieties on the overseas market, larger amounts of oil are needed than would be produced by research plantings. Therefore the CNDC has taken over the production on a field scale of these varieties with a view to building up an Essential Oils industry.



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However, an Essential Oil industry recently established in the Transvaal has currently run into some trouble. It is therefore necessary to continue research into the basic production techniques and distilling methods if these problems are to be avoided, and to conduct a thorough market research as well as continued research into new varieties, one of which incidentally shows promise of producing exceptional quality oil. For this purpose a full-time researcher will be required. He would probably work in close conjunction with the proposed Spices, Herbs and Pharmaceuticals project, or could possibly run both provided that he had suitable help.

Although not strictly an ADRI project, ADRI would be closely associated with the Centoil project, especially if it were to be associated with the Spices, Herbs and Pharmaceuticals project. An estimated R30,000 p.a. for 3-5 years will be required.

AGRICULTURAL BULLETINS AND PAMPHLETS

It is intended to produce agricultural Bulletins on the same lines as those produced by the Department of Agricultural Technical Services, each Bulletin dealing with a specific topic or crop, and illustrated with colour photographs. However, these Bulletins will largely be written for the peasant farmers in the homelands and both subject matter and language will be suitably adapted. They are intended to act as hand-books to the peasant farmers and also to the extension staff and will therefore be comprehensive in treatment and of a high standard of finish.

It is estimated that such Bulletins will cost in the region of R2,000 - R5,000 per edition.

In addition to the Bulletins, it is also intended to issue a series of pamphlets. These will vary greatly in their degree of complexity and in their subject matter and will range from tips for peasant farmers to technical papers aimed at distributing the results of research to those engaged in the technical aspects of development.

It is estimated that such pamphlets will cost in the region of R500 per edition.



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AGRICULTURAL STATISTICS

We have been approached by a homeland Government to establish, try out and implement an adapted agricultural statistics system. A system has been developed by the Agricultural Economics Department of the Faculty of Agriculture and has been accepted by the Agricultural Committee of the Plural Relations Commission. However, adaptation to and integration into the individual homeland's agricultural and economic structures remains to be done. People will have to be trained in interviewing and handling statistics and the whole system must be integrated into the National Plans and overall development policies of the respective homelands. At the lower scale, this project will mesh with the agricultural/home economics project and can be seen as a section of a broad agricultural and development economic study which would concentrate on the peasant and small-scale farmer and relate his development to regional and national policies. It would also include large development schemes.



A post-graduate Research Fellow will run the project at a cost of R20,000 p.a. His field staff should be provided by the Governments of the homelands concerned, but their training will be done by ADRI. It is also highly probable that outside, and possibly foreign expertise will need to be consulted on several topics. No estimate can be made at this stage of consultation costs which could run to R20, 000 or more with transport and would mainly fall in the first year. The project will take from one to three years depending on depth of study and time of commencement.

LIVESTOCK MANAGEMENT AND POLICY

We have been approached by a homeland Government to advise on national policy concerning livestock, specifically increasing the annual offtake from the national herd. This request is presently in the discussion stage, but should be developed into a fully fledged project in its own right. It is a subject which is of crucial importance to all homelands. It concerns not only livestock management, but also the role of livestock in the cultural and religious lives of the people on the one hand and its integration into national policy on the other. It would mesh well with the Animal Production Project and also the Socio-Cultural Constraints Project.

As this investigation would entail statistical analysis and personal interviews with officials of the homelands concerned, but little or no direct field work and would not be dependent on the seasons, a researcher should be able to complete the statistical work within a year, but the social and technical aspects could only be completed after sufficient findings from the above projects and the Agricultural Statistics project become available.



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Timing of the different phases of work on this project would have to be decided between the Government of the homeland or homelands concerned, the researcher, ADRI and the donor.

ADRI : MISCELLANEOUS PROJECTS

Most donors naturally wish to support a specific project in a field in which they are interested. However, there are overheads and running costs which are not attributable directly to any specific project and for which money must be found. Also, apart from the foregoing proposed projects, there are some 13 projects currently under way in which ADRI is directly concerned, and over three hundred research projects which fall under other University Departments and in any of which ADRI could become involved at a later stage. Then there are ad-hoc occurrences and approaches made to ADRI in connection with other individuals, institutes or organisations who request help of some sort with their own projects. For us to be able to rise to these demands and operate with sufficient flexibility, we need funds which are not tied to specific projects.

This could be termed the "Help ADRI to Function Effectively Project", and all contributions to this "project" will be very gratefully received. (ADRI is a self-funding Institute and is presently operating in large measure on a loan account made available by the University).



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