APPENDIX 1

Case study of the Programme for Agricultural Information Services (PRAIS)

Programme for Agricultural Information Services

Pilot project: Final Report, 31 July 1999

In 1997, CTA commissioned an evaluation of its Question-and-Answer Service (QAS), which recommended the devolution of the service to appropriate institutions in ACP countries. QAS devolution was to favour the development of regional QAS services. In March 1997, CTA investigated institutions in Southern Africa to carry out QAS services in the region and selected the University of the Orange Free State (UOFS) as the leading institution, and the Agricultural Research Council (ARC) and Sabinet as back-up. On 15 July 1998, the contract for the establishment of information services on demand was signed by Dr Rodney Cooke, Director of CTA, and Mrs A.M. Dippenaar, Director of the UOFS Library and Information Services (LIS). The QAS SADC Agricultural Information Services on Demand has run a pilot project for one year.

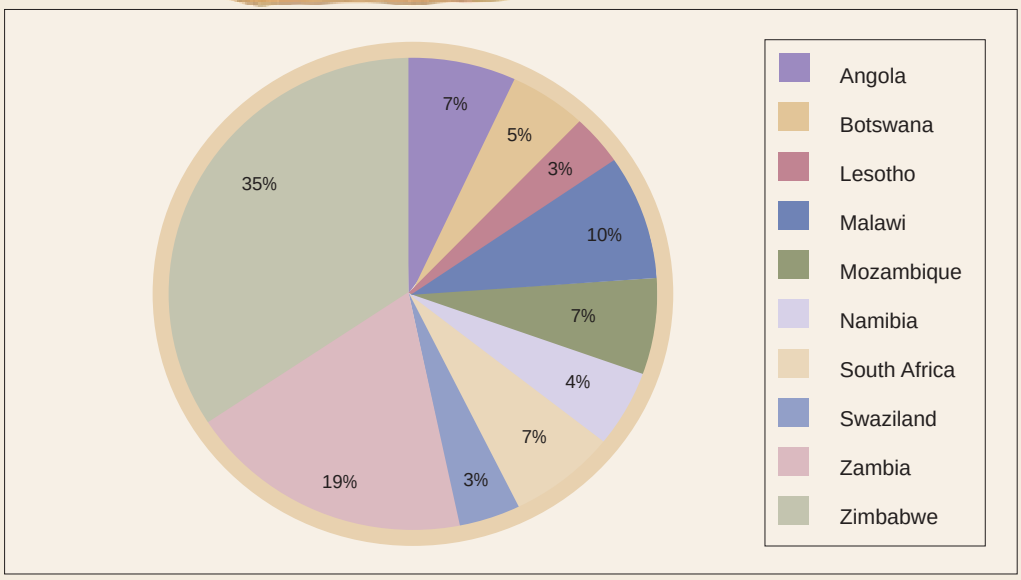
Logo and names

After consultation with the ARC and CTA, it was decided to name the service 'PRAIS: Programme for Agricultural Information Services'. A logo was chosen in the colours of the CTA logo, green and white, and names devised for its newsletter – *Agri-Outreach* – and its database – SADC Agribase.

Mailing list

A mailing list of about 1400 names and addresses was obtained from CTA in September 1998. It was input into an INMAGIC database, reduced to about 1380 names and has been augmented regularly as new people request inclusion. It is hoped to increase the mailing list to 2000 in the 1999–2000 period. Names from all countries served by PRAIS are represented: Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe, in the proportions shown in Figure A.

FIGURE A Mailing list names from SADC countries



Publications

Brochure

This was designed and produced with the cooperation of the ARC. The logo and names of the service and its various databases and newsletter were designed in consultation with CTA. The brochure was distributed to persons on the mailing list, together with the first two newsletters, and at conferences and other visits.

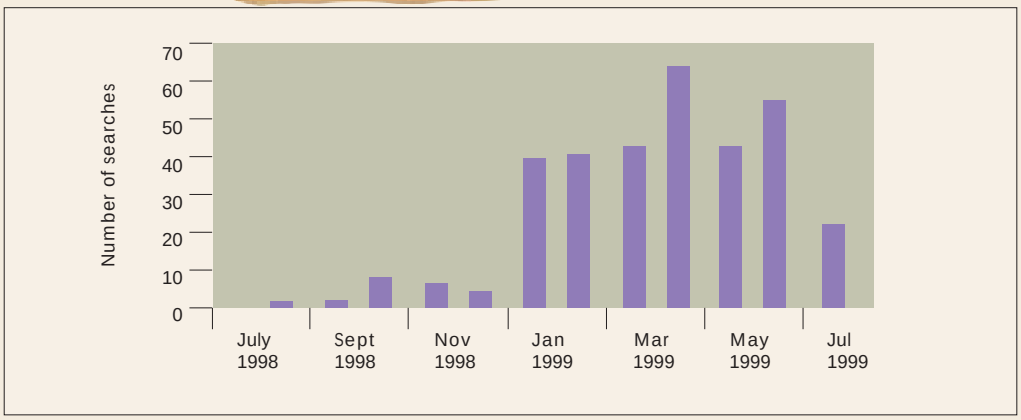
Agri-Outreach

Six numbers have been issued since September 1998. Starting with No. 3, November 1998, the PRAIS Information Search Request Form has formed part of the newsletter as a 'centrefold' which may be pulled out and used. Since then, a monthly average of more than 43 search requests has been received.

The newsletter's effectiveness is confirmed by:

- The number of information requests based on articles in it (22);
- The number of persons offering to become contact persons after an appeal was put out for such volunteers (43);
- The number of search requests received since November 1998 via the 'centrefold' form (380).

FIGURE B Search requests received per month, 1998–1999



Questionnaire

The questionnaire was designed to test the user base of PRAIS and was sent out at the end of September 1998. To date, 334 questionnaires (nearly 23% of the mailing list) have been returned.

Home page

The Internet home page, available on www.uovs.ac.za/lib/agric/assa.asp, was designed and placed on the Web in October 1998. It includes a simple search facility of the SADC Agribase, a local information database. An improved search engine is being worked on to expand access to records on the database. A counter was added to the page in November 1998 and since then the page has been visited 689 times.

Search result evaluation form

This was designed in November 1998, and is posted with all search results. To date, 62 forms have been completed and returned. Table A gives some of the suggestions made by clients to improve the PRAIS service.

Databases

The following computerised databases have been created:

Search results (AgSearch)

This database was started as soon as the Information Search Request Forms were received and processed.

Mailing list

Discussed above. It now holds 1420 names and addresses.

SADC Agribase

Conversion of the 3800 agricultural records contained in the UOFS LIS database KOVSIDEX was completed by December 1998. There are over 100 further records to be added in process. There have been several requests to broaden this database to include other SADC countries' records. For Web search facilities, see above.

TABLE A

SUGGESTION MADE BY CLIENTS TO IMPROVE THE PRAIS SERVICE	NUMBER
Where can it be obtained?	10
Thanks for service	20
Add illustrations	2
Newsletter more frequent	2
Local PRAIS branches	2
Fax or e-mail information	3
Mail slow: acknowledge receipt	3
Give field abbreviations	1
List study facilities	1
Other	8

FIGURE C Percentage search requests by country of origin

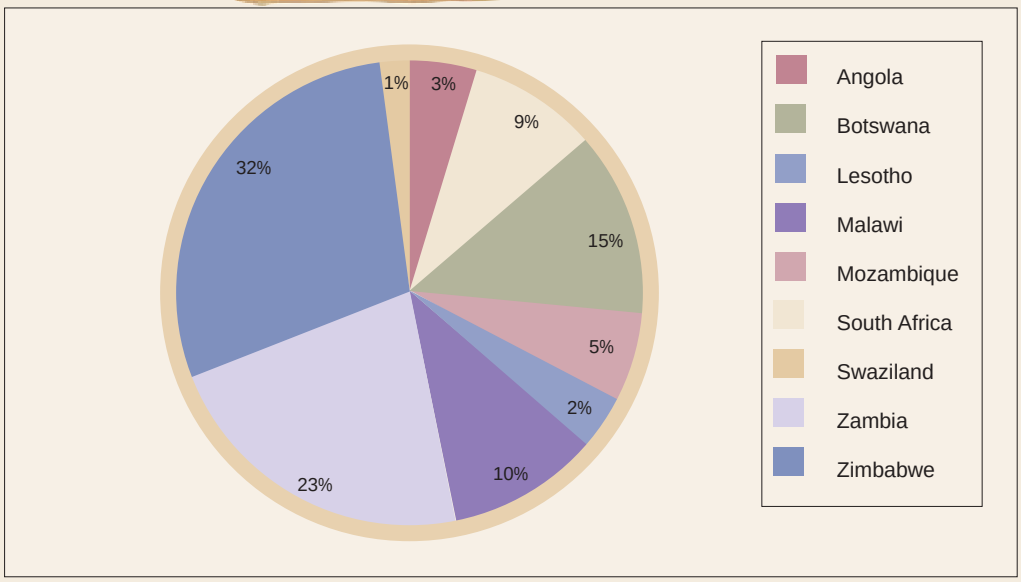


FIGURE D Percentage search requests by client occupation

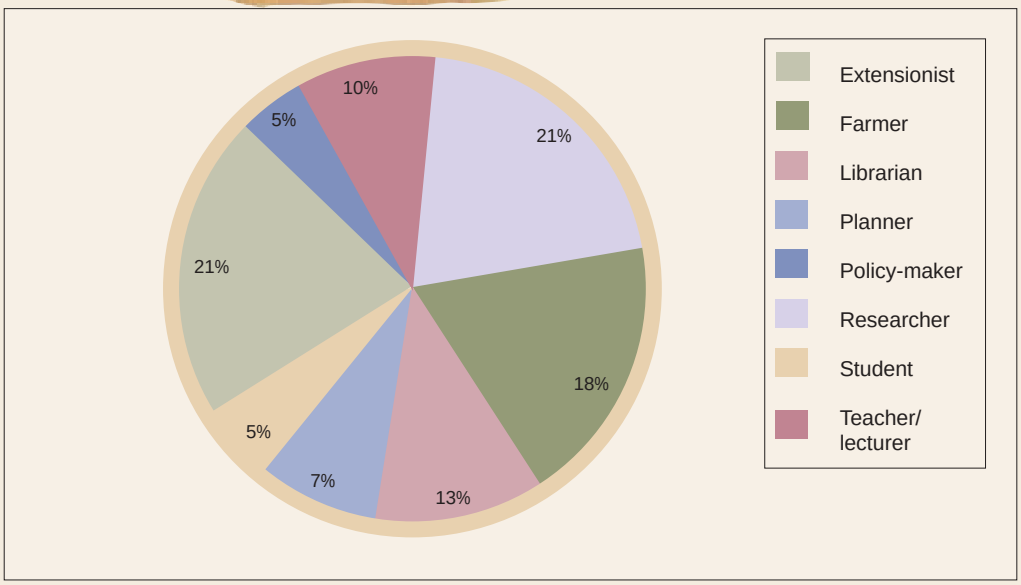
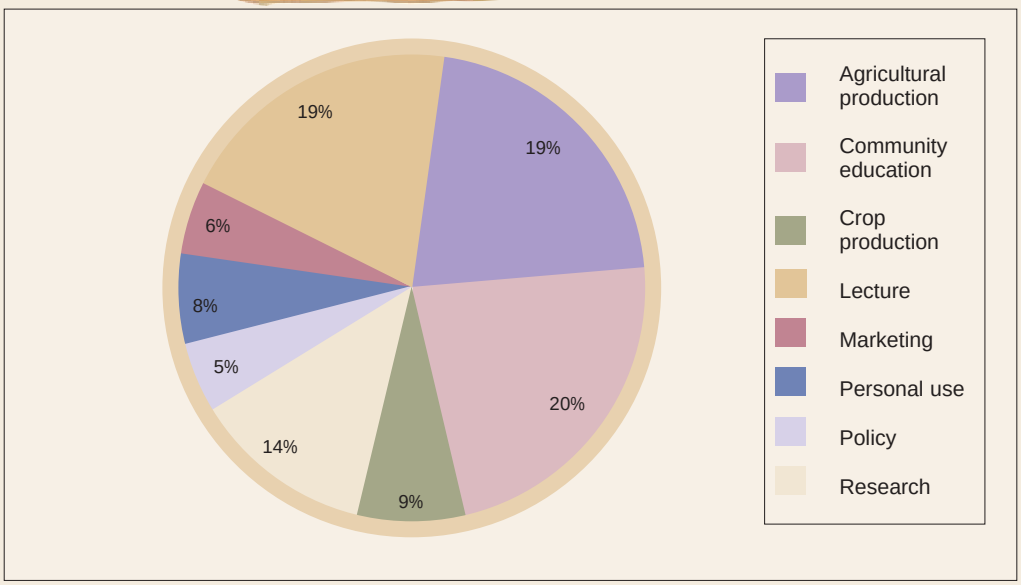


FIGURE E Percentage search requests and purpose for which needed



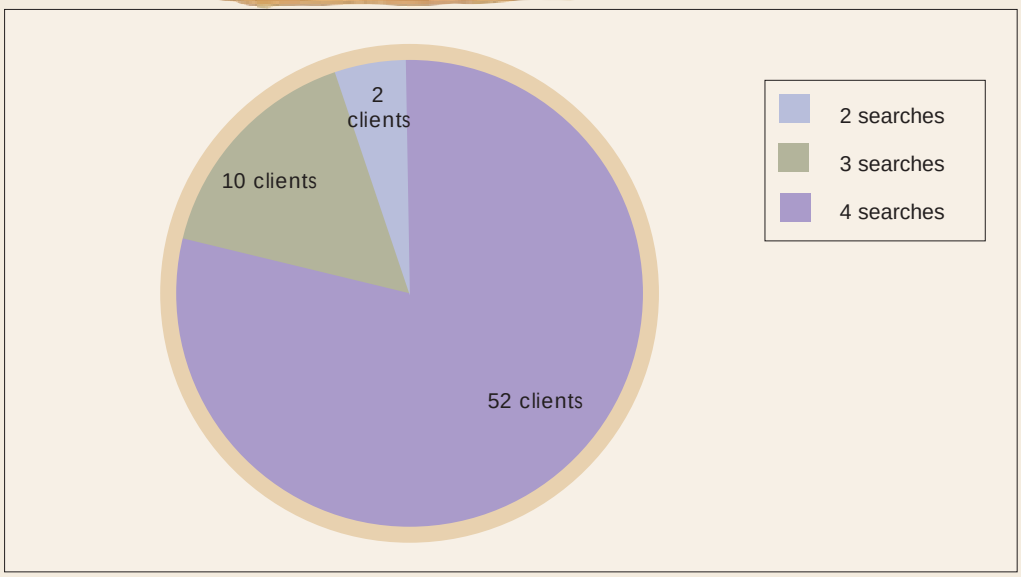
QAS: target of 250 requests

This was reached by mid-April 1999, principally due to the ready availability of the Information Request Form via the newsletter. At the time of writing this report, 376 searches have been done. Some 15 SDIs are also being run regularly against updates of the CAB

Abstracts database and the SADC Agribase. The success of the searches can be measured by:

- The number of customers returning for a second and even third search (64);
- The number of positive evaluation forms returned (62).

FIGURE F Number of clients returning for more searches



Visits to SADC countries

Mozambique was visited in October 1998, and Zimbabwe in December 1998. Full reports on these visits were submitted to Dr Niang, CTA.

Other visits

The Northern Province was visited in November 1998 and a poster presentation of PRAIS given. ARC library service head Mrs Lidia Coetser and a colleague visited the UOFS LIS in October 1998.

Conferences

The SCECSAL conference in Kenya was attended by Mrs Lombard in July 1998. Her report was attached to quarterly report no. 1. The success of her presentation on PRAIS was indicated by the immediate request for inclusion in the mailing list by several people.

Since then, a further four agricultural conferences in Africa have been attended by Agricultural Faculty members who kindly distributed the PRAIS brochure:

Professor L.K. Oosthuizen, LEVSA Congress, Namibia, 30 September – 2 October 1998
Professor S. Walker, Agrometeorology, 12th session, Ghana, 15–27 February 1999
Professor G. Osthoff, SA Society for Dairy Technology, South Africa, 1–3 March 1999
Mr A. Cronje, 19th SPAAR meeting, Botswana, 8–12 March 1999

After each conference, further information requests followed, as did requests to be included in the mailing list.

Reports

Reports on the visits to Mozambique, Zimbabwe, the Northern Province and the SCECSAL conference have been submitted, as well as four quarterly reports.

Finances

A financial statement has accompanied each quarterly report.

TABLE B

EXPENDITURE ITEM	AMOUNT
Stationery	R 1,389
Publications and printing	R 15,309
Phone, postage and copying	R 37,875
Travel, visits and courses	R 16,651
Staff honoraria	R 97,175
Sabinet subscription	R 2,810
Computer	R 10,931
Other	R 8,128
TOTAL	R 190,268

Staffing

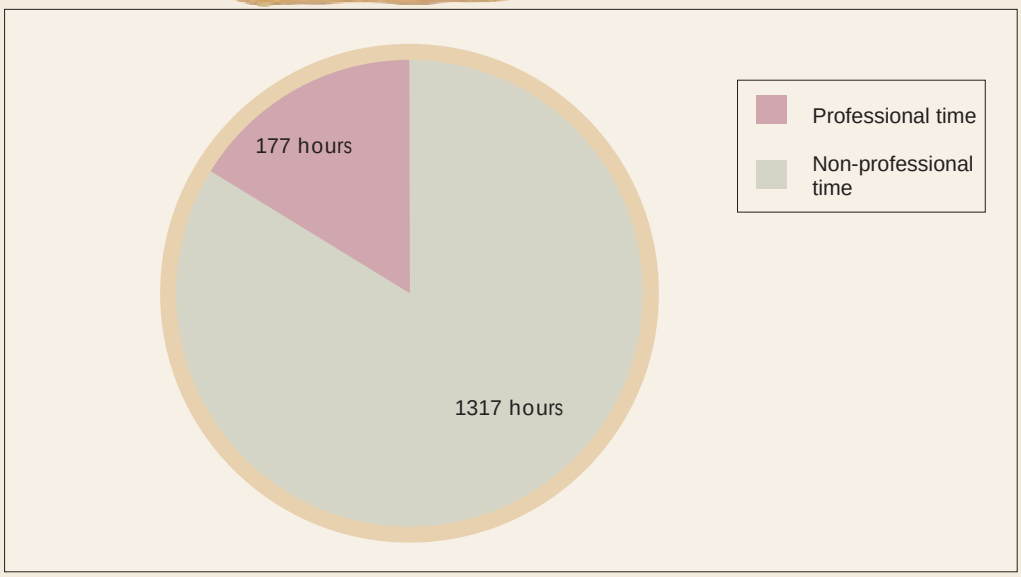
Several professional UOFS LIS staff members have been involved in the planning, promotion and QAS aspects of PRAIS. Others have carried out administrative tasks. The total number of staff hours from July 1998 to June 1999 are shown in Figure G.

New projects for 1999–2000

As is apparent from client communications and the evaluation of PRAIS, the greatest needs are for:

- Access to local technologies;
- Access to local funding for projects;
- Training programmes for a wide variety of clients in a variety of skills.

FIGURE G Hours spent on PRAIS, July 1998 – June 1999



In order to fulfill this need, *Agri-Outreach* nos. 3 and 4 asked volunteers to come forward to act as contact persons and local distributors of PRAIS information. They would also act as intermediaries in the information request process. Some 43 persons have come forward, but a corps of such contact persons may have to be recruited more formally in the various SADC countries. Newspaper advertisements, and a remuneration scheme based on number of customers recruited, newsletters distributed, information requests facilitated, etc. may have to be used to recruit a sufficient number of such persons in touch with the grassroots potential users of PRAIS – the indigenous small farmer and agricultural producer, male or female. In addition, the SADC Agribase needs to include local information from and about all SADC countries.

Intermediary training scheme

It is envisaged that all PRAIS contact persons in SADC countries need to be trained in their tasks. Moreover, many questionnaires, information requests, letters and evaluation forms reiterate the general need for training. It is envisaged that, instead of bringing potential trainees to the UOFS and training them here, a small training team should be developed at the UOFS LIS and sent out to various locations in SADC countries. The advantages would be:

- Trainee groups at specific venues would be more homogenous and easier to train;
- Local conditions could be studied at the same time;
- The cost would be much smaller; training funding would go further.

The training team, possibly consisting of the three persons, would present a basic course, which could be adapted to local conditions so as to address each trainee group's

potential for development specifically. Moreover, a questionnaire is now being designed for the basic potential PRAIS user and the service will be tailored with reference to information obtained in this way. The training team will distribute it to trainees and show them how to complete it and how to use it with the targeted PRAIS clientele. It is envisaged that the training team be selected, trained and funded for a trial period of one year. During this time, two SADC countries (such as Namibia or Botswana, and Lesotho or Swaziland) could be used as testing grounds. These countries are easily accessible by car and the English language serves as a general communication medium. People on the mailing list could be contacted for the most suitable venues, etc.

Expansion of the SADC Agribase

Addresses for local technologies, local funding agencies, local training courses, local action research and the consequent grey literature all need to be included in the SADC Agribase in order to improve the service and the information request answers. The addition of the more than 20,000 electronic records contained in the 9-volume *Agricultural Development in SADCC Countries* would already improve the database immensely. It is therefore suggested that, since PRAIS has already created the infrastructure, these electronic records be furnished by CTA, as already suggested by Dr Niang during his visit in November 1998.

The ARC is at present beginning to computerise its huge stocks – it will also be of great value to add these records to the *SADC Agribase* as soon as they are in electronic format. In addition, the contact persons mentioned above may be of value in obtaining addresses, Websites and other local data, such as traditional farming methods and technologies, and oral presentation thereof, to augment the information database.

Conclusion

The enthusiastic response to the questionnaires, the brisk inflow of search requests and the overwhelmingly positive comments made by PRAIS clients show that this QAS has proved to be outstandingly successful and can serve as a role model for the rest of Africa.

ANNEX 1

Report and recommendations on 334 completed PRAIS questionnaires

1. Occupation

Since 334 respondents gave 412 occupations, some respondents obviously ticked more than one category. The categories may be condensed into six basic ones:

Farmers and extension officers	138 (34%)
Management	84 (20%)
Teachers, trainers and lecturers	62 (15%)
Librarians (no doubt acting as intermediaries)	60 (15%)
Researchers	51 (12%)
Other	17 (4%)

PRAIS therefore supplies the following two basic groups with information:

Farmers / extension officers	34%
Management / research / educators / librarians, etc.	66%

When users are grouped like this, there is an imbalance which should be addressed. Although the latter group should theoretically have access to other adequate information sources, this might not be the case in some of the SADC countries. PRAIS will do well to supply them with information whilst attempting to increase services to the former group which is targeted as the primary user group.

Recommendation: In order to reach more farmers/extension officers/rural women's groups, it is proposed that contact persons in each region be found and trained to act as intermediaries and, if necessary, interpreters, between the primary user group and the PRAIS QAS. A questionnaire is being developed to investigate the information needs of, as well as possible contributions to the knowledge base by, the targeted primary user group.

2. Age group

Most users (303) are under 50 years old, which is encouraging since younger clients are more likely to make use of an electronic information service.

3. Gender

Since it transpires that many grassroots farmers are female, the imbalance of only 73 female clients should also be addressed and an attempt made to reach the rural women of the region.

4. Geographical region

Since a total of 359 regions was obtained from 334 questionnaires, it appears that some (NGO?) respondents indicated all their branches in the different regions in which they are active.

There is a rough correspondence between the number of returned questionnaires per region and the number of persons per that region on the mailing list (i.e., most of the questionnaires returned came from Zambia and Zimbabwe).

5. Languages

Predictably, the largest number of respondents chose English. Only a few persons chose Afrikaans, but 50 respondents asked for information in one of the European languages, especially in Portuguese (27). Some 97 respondents asked for information in one of 23 African languages. The largest group is Shona speaking.

Recommendation: It is strongly recommended that a move is made to collect indigenous language information, and in time funding should be sought to translate the more popular information sources into the more commonly used African languages in the region. A study of these language needs should be made.

6. Level of education

Some 283 of the respondents have some form of tertiary degree or diploma. This agrees with the preponderance of managerial and educational occupations (66%).

The high incidence of PhD degrees is worth noting, although it follows that more highly educated persons are more likely to complete and return questionnaires, being more articulate. It must be remembered that most extension officers have a tertiary education.

7. Working experience

Some 131 respondents have 15 years or more working experience; 110 have 6–10 years experience. This agrees with the age group breakdown of respondents.

8. Affiliation to institutions

The many affiliations to educational institutions (96), government and non-government organisations (201) and research institutions (98) again reflect the occupational breakdown of respondents.

9. Additional affiliations

The list of 189 other institutions/organisations to which respondents are affiliated is interesting and very varied. In addition, it is studded with unidentifiable acronyms. It agrees with the preponderance of highly educated respondents.

10. Purpose of information

Again consistent with the occupational distribution, most of the information is needed for the purpose of education/lectures/research (40%). Only 29% is required for policy development, marketing and economic advancement, whereas 31% is required for primary production, processing and self-improvement.

11. Subjects

The subjects on which information is required, ranked in order of importance, are: sustainable agriculture; agronomy and horticulture and crop production; agricultural management and marketing; small farming; meat, animals and poultry; fertilisers and manure; agricultural economics; water and irrigation; pest control; environment and ecology; traditional farming; soil science; dairy science; plant pathology and diseases; food science and processing and nutrition; fisheries; agricultural engineering; commercial large-scale farming; plant breeding; grassland science; agricultural meteorology and climate; ecotourism; datametrics and statistics; genetic engineering; agroforestry; veterinary science; education; and beekeeping. There were four requests for information on non-agricultural subjects.

Recommendation: It is recommended that book and journal acquisitions at the UOFS Agricultural Library be made with the above-ranked list of subjects in mind. Articles in the *Agri-Outreach* newsletter should also concentrate on these subjects.

12. Information format

Photocopies (336) of articles and books are, predictably, most in demand. However, there were 148 requests for pictorial and audio material and more information in these formats should be made available. It is interesting to note that over 100 respondents obviously have

access to a computer (29 of the questionnaires were returned via e-mail), and that nearly 100 obviously have access to other libraries in that they are interested in bibliographies from PRAIS.

13. Communication medium

Some 265 respondents used mail, 59 fax, 98 computer (e-mail) and 12 telephone. See also point 12 above.

14. Comments/suggestions

Many (29) of the comments pertain to workshops and other forms of training. It should be noted that those comments dealing with formal training have been passed on to the UOFS Faculty of Agriculture. Some 30 comments deal with various forms of information and for what purpose and in which format, and 30 deal with libraries, books, journals, publishing and the Internet. Another 36 comments deal with general matters: some request bursaries, funding or various types of equipment (computers, fax machines, trucks), some are concerned with document delivery delays in the post, some have obviously had experience with other QASs and hope this one will be successful. Many respondents wish us luck. Exchange visits have been suggested; others have suggested that PRAIS officials should visit and address them. Only a few of the comments could be used to adapt PRAIS.

Conclusion

The excellent response in the shape of completed and returned questionnaires indicates that the need for an information service is very real. Respondents are mainly positive and grateful for the service. Since their expectations are high, we must make sure that PRAIS does its best to meet them.

ANNEX II

Analysis of information search evaluation forms

Thirty-one evaluation forms were returned; 25 respondents felt that the information provided was of great use, five that the information was of some use and one respondent said that the information was of no use at all. Twenty-six respondents said the information was well presented, three that it was reasonably presented and one that it was not well presented. The comment from the dissatisfied respondent was that the address we had furnished did not reply to his request when he had written to the institution previously. All respondents said the information had been received in time.

Some of the information furnished had been known previously to some respondents. Eighteen respondents will use the information for training and research, six for practical projects and construction, two for background information, two for advising farmers and community development and one for reducing production costs.

Suggestions for improving the service include the furnishing of book prices so that respondents can buy them, a wish that we would lend our books to respondents and suggestions about sending our information as text files via e-mail. Two respondents want coloured posters and pictures. One respondent wanted information about distance education at the UOFS – his request was forwarded to the Faculty. A suggestion about giving the full field names of CAB Abstract bibliographic records will be realised in the next newsletter; one respondent also requested that the newsletter contain more material. Eleven respondents (one third of all respondents) praised the service, the information received and the speed of response. Even the one dissatisfied respondent said, “Thanks anyway. It was just a try from my side. I though the full regulations must be available somewhere.”

Conclusion

Although not many evaluation forms have been received as yet, the general tone is positive and some of the suggestions can help tailor the service to user needs. It is obvious that the service is necessary and useful.

Annex III

Analysis of information search evaluation requests

Numbers of requests received from the following countries:

Zimbabwe	80	Namibia	4
Zambia	53	Arab Emirates	1
Botswana	28	Germany	1
South Africa	28	Kenya	1
Malawi	26	New Zealand	1
Mozambique	13	Spain	1
Angola	8	Swaziland	1
Lesotho	4		

Clients can be divided into the following categories (the total is greater that 250 because some clients belong to more than one category):

Researchers	53	Teachers/lecturers	25
Extension officers	53	Planners	17
Farmers	46	Students	15
Librarians	34	Policy-makers	12

The information is needed for:

Community education	46	Crop production	21
Agricultural production	44	Personal use	16
Lecture/address	44	Marketing information	14
Research	32	Policy development	10

Subjects:

Agricultural economics/management/business
Agricultural extension
Agroforestry
Animal and poultry science/production/diseases/nutrition/breeding
Aquaculture/beekeeping
Growing and producing vegetables, citrus, tropical and subtropical crops, mushrooms
Information science
Marketing/export
More information on PRAIS
Pesticides/herbicides/fungicides
Research methods/analysis/proposals

REQUEST FOR INFORMATION FROM PRAIS

Please complete this form and submit it. We will respond as soon as possible.

SUBJECT:
Give a detailed description of the kind of information you need. If it is a plant or insect, for example, the full Latin name is preferred. **SADC Agribase** only supplies information on specific topics.

Enter your request in the space provided below:

Level of information required:

◯ Elementary ◯ Advanced

Gender:

◯ Male ◯ Female

Age: ☐

REASON FOR REQUEST: (choose one)

◯ Personal use
◯ Crop production
◯ Agricultural production
◯ Marketing information
◯ Policy development
◯ Community education
◯ Lecture/address
◯ Research
◯ Other: ☐

URGENCY:
Your request is usually processed within 48 hours. Should you need the information sooner, please indicate urgency.

☐ Urgent

PERSONAL INFORMATION:
This information is needed to determine the type of user the information is supplied to.

I am a:

- ○ Farmer
- ○ Extension officer
- ○ Librarian
- ○ Planner
- ○ Policy-maker
- ○ Researcher
- ○ Student
- ○ Teacher
- ○ I need the information to help/understand my family/friend

Other: ☐

Tell us how to get in touch with you:

Name	
Address	
Code	
E-mail	
Tel.	
Fax	

Submit request

INFORMATION SERVICE RESPONSE – EVALUATION FORM

In order to ensure that the services we offer are of the highest quality, please take a few minutes to complete this form, and then return it to us by clicking on 'submit'.

Subject of query

Was the information provided of use?

○ Great use ○ Some use ○ No use at all

Was it well presented?

○ Yes ○ More or less ○ No

If not, how could it be improved?

Was the information received within the time it was needed?

○ Yes ○ More or less ○ No

What percentage of the information supplied was already known to you?

For what purpose will the information be used?

Have you any other suggestions to improve the service?

Name	
Address	
Code	
E-mail	
Tel.	
Fax	

Thank you for your time and trouble!

Submit comments | Clear form

Back to PRAIS Home Page

INFORMATION NEEDS ASSESSMENT QUESTIONNAIRE

The Technical Centre for Agricultural and Rural Cooperation (CTA) has for years provided a worldwide Question-and-Answer Service for the agricultural sector. It has now decided to launch a pilot project to regionalise this service. For the 10 countries of the Southern African region, it has chosen three institutions to found such a service: the University of the Orange Free State, the Agricultural Research Council, and Sabinet. The service will run as a pilot project from July 1998 to July 1999. We will issue an information brochure and a bi-monthly newsletter, and create a database of agricultural information. This database will be made available on the home page of the University, and will also incorporate a form which may be completed by anyone in the agricultural sector to request information on broad agricultural subjects.

We are now asking you, who are in some manner part of the agricultural sector, to complete a simple questionnaire so that we may find out what information will be of most use to you. Once we have had your input we can set about creating the database and service which will prove to be of maximum use to you and our whole region.

Please complete this simple form and click on 'submit' or e-mail agric@hbib.uovs.ac.za

I am a:

- ◯ Farmer
- ◯ Extension officer
- ◯ Librarian
- ◯ Planner
- ◯ Policy-maker
- ◯ Researcher
- ◯ Student
- ◯ Teacher
- ◯ I need the information to help/understand my family/friend

Other: _____

Age: ☐

Gender:

◯ Male ◯ Female

Geographical region:

- ○ Angola
- ○ Mozambique
- ○ Zambia
- ○ Botswana
- ○ Namibia
- ○ Zimbabwe
- ○ Lesotho
- ○ South Africa
- ○ Malawi
- ○ Swaziland

Language:

Please specify: _____

Level of education (choose one)**:**

- ○ Primary school (+ practical)
- ○ Secondary school (vocational level)
- ○ Secondary school (university entrance)
- ○ College/university degree/diploma (e.g., BSc)
- ○ Post-graduate degree/diploma (e.g., MSc)
- ○ PhD

Other (please specify): _____

Working experience:

_____

Affiliation to institution:

- ☐ School
- ☐ National NGO
- ☐ International NGO
- ☐ Commercial enterprise
- ☐ Cooperative/primary product association
- ☐ Bank (agricultural)
- ☐ National government association
- ☐ Supra-national organisation
- ☐ National policy organisation
- ☐ University or agricultural college
- ☐ Research station/institute
- ☐ Food science, processing, nutrition

Other (please specify): _____

Affiliation to networks/associations (specify):

_____

I need the information for (mark more than one if you wish):

- ☐ Elementary marketing
- ☐ Elementary primary production
- ☐ Elementary processing of primary goods
- ☐ Elementary policy development
- ☐ Elementary community education
- ☐ Elementary lecture/address
- ☐ Elementary research
- ☐ Elementary self-improvement
- ☐ Elementary economic advancement
- ☐ Advanced marketing
- ☐ Advanced primary production
- ☐ Advanced processing of primary goods
- ☐ Advanced policy development
- ☐ Advanced community education
- ☐ Advanced lecture/address
- ☐ Advanced research
- ☐ Advanced self-improvement
- ☐ Advanced economic advancement

Other: ☐

Subjects (mark more than one if you wish):

- ☐ Soil science
- ☐ Agricultural economics
- ☐ Pest control
- ☐ Datametrics and statistics
- ☐ Agricultural engineering
- ☐ Grassland science
- ☐ Plant breeding
- ☐ Ecotourism
- ☐ Traditional farming
- ☐ Water and irrigation
- ☐ Dairy science
- ☐ Fertilisers and manure
- ☐ Sustainable agriculture
- ☐ Plant pathology, diseases
- ☐ Agricultural management and marketing
- ☐ Agronomy, horticulture, crop production
- ☐ Agricultural meteorology and climate
- ☐ Food science, processing, nutrition
- ☐ Environment and ecology
- ☐ Small farming
- ☐ Commercial large-scale farming
- ☐ Fisheries
- ☐ Meat animals and poultry
- ☐ Genetic engineering

In what format do you want your information?

- ○ Photocopy of journal article
- ○ Photocopy of book extract
- ○ Picture strips
- ○ Tapes/tape slide series
- ○ Videos
- ○ Computer files
- ○ List of Internet addresses
- ○ Statistics/numbers
- ○ Additional reading: references to more books and journals (bibliography)

Communication medium preferred

○ Mail ○ fax ○ phone ○ computer (e-mail)

Have you any other comments/suggestions to help us create a service which will fulfill your needs?

Thank you for your help and interest in our project!

Submit comments | Clear form

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APPENDIX 2

Case study of the QAS provided by the Information and Advisory Service on Appropriate Technology (ISAT)

The Information and Advisory Service on Appropriate Technology (ISAT) provides services for all organisations and institutions working in development cooperation. It is a GATE project, a GTZ service provided for more than 20 years in the development, adaptation and dissemination of appropriate technology. ISAT focuses on organisations and development projects aiming at poor and marginalised target groups. It does not offer high-tech solutions, but emphasises the small-scale level. ISAT consists of:

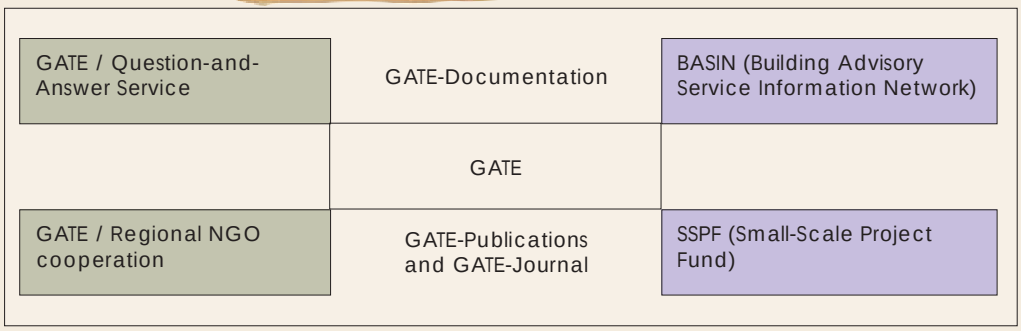
- GATE/Question-and-Answer Service;
- GATE/Regional NGO Cooperation;
- GATE-journal and publications;
- GATE-documentation.

Other ISAT-related GATE projects include:

- Small-Scale Project Fund (SSPF), aimed at promoting and disseminating promising models for appropriate technology;
- Building Advisory Service Information Network (BASIN), aimed at establishing an information network for the appropriate building sector. The focus of BASIN is on Internet/information technology

The major activities of GATE are shown in Figure H.

FIGURE H Major activities of GATE



ISAT is moving towards a decentralised structure. In the past there was substantial attention paid to research and development; now ISAT offers only information services, such as the QAS, training, magazines, networks, databases and South-South exchange. At present there is a financing problem, although an evaluation has indicated that many activities are excellent and should continue.

The current budget is for 3 years, but under the present GTZ policy a project is unlikely to run for more than 15 years, as ISAT does. ISAT is a project, not an institution, and as a project it has a relatively high budget. This implies that the different ISAT components are to be separated:

- The cooperation with NGOs is to be decentralised (GATE Regional NGO Cooperation);
- Since the beginning of 1999, the GATE-journal and GATE-documentation activities have been supported by the GTZ general budget. There are budget problems at present for GTZ which will influence the future of the magazine. The question is whether the free distribution can continue;
- The QAS will become a separate project to run for 6 years. It should be self-financing after 6 years.

The question-and-answer service concept

The GATE/QAS aims to provide development organisations dealing with poor and marginalised target groups in developing countries with information on small-scale technologies. In this way it compliments the other GATE/ISAT services and projects such as the documentation centre and the SSPF. It is a free service and aims at providing fast, quality replies adapted to local conditions.

Objectives

Short term

- To be an information service highly regarded by clients from the South, as well as by clients from development agencies. Indicators: high number of clients, high degree of client satisfaction, sponsorship of the service;
- To have an intensive dialogue with important clients;
- Good cost/benefit relationship of the service.

Medium term (after 6 years)

Institutionalised QAS as part of an information management system of GTZ or another German organisation.

Major changes in comparison with the actual QAS:

- Broadening the spectrum of topics;
- Free access to the service to be limited initially to target clients;
- More use of modern information and communication technologies, databases, and the Internet;
- Further development of quality management;
- Special attention to individual clients;
- Improvement and systematisation of the dialogue process;
- Dynamic marketing (presentation);
- Closer cooperation/links with regional information services of the South and the GATE regional project;
- Reducing the effort and cost of answering routine questions.

Target groups and priorities

Until now, all questions have been answered (about 2500 questions per year). A major criterion may be: "Is it an organisational or individual question?" Even this criterion is not easy to apply as there may be various individuals who ask a question because of their contacts with a development organisation. To ask for information on someone's background takes time and effort, requiring dialogue.

The present strategy is to answer different requests according to different priorities (as shown in Table C).

TABLE C

High priority	GTZ divisions and projects NGOs within development cooperation Development organisations	Answer/short message within 3 working days Best quality, comprehensive, accurate, specific regional/ technical information
Medium priority	Government and research institutions Private persons in developing countries Companies/consultants in developing countries	Answer/short message within 5 working days Comprehensive and fast reply, including corresponding literature, relevant contact persons, institutions, information sources
Low priority	Students in industrialised countries Companies/consultants in industrialised countries Private persons outside the development context	Standardised answers, within 7 days, More general reference to corresponding literature, home pages or contact addresses
	E-mail requests without background information and/or postal address	Standard e-mail with overview of ISAT services. Ask for postal address if relevant

The priority setting can be visualised by the Priority Matrix shown in Table D, using three major criteria: the relevance for the target group of ISAT, the existing relationship with ISAT, and the problems in accessing information

TABLE D

PRIORITY MATRIX	RELEVANCE FOR POOR TARGET GROUP	EXISTING RELATIONSHIP WITH GATE/ISAT	PROBLEMS IN ACCESSING INFORMATION	OVERALL PRIORITY
GTZ divisions and projects	High	Medium	Low	High
International development NGOs	High	High	Low	High
Local development NGOs	High	High	High	High
Government and research institutions	High	Medium	Medium	Medium
Private persons in developing countries	Medium	Low	High	Medium
Companies/ consultants in developing countries	Medium	Low	Medium	Medium
Companies/ consultants in industrialised countries	Medium	Low	Low	Low
Students in industrialised countries	Low	Low	Low	Low
Private persons outside the development context	Low	Low	High	Low

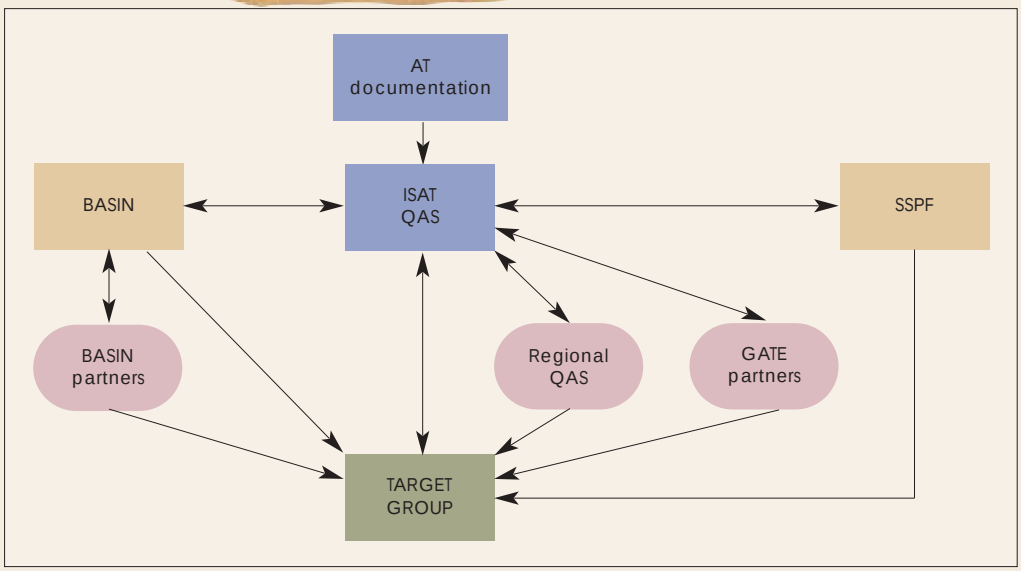
At present, some 2000–2500 questions a year are being addressed by the QAS. The staffing numbers do not allow any more to be addressed. With the new project and full staffing there will be more capacity to answer questions.

Stakeholders and partners

Institutional setting

The organigramme (Figure I) shows the main relationships of ISAT's QAS with internal and external bodies.

FIGURE I Main relationships between the ISAT QAS and internal and external partners



It is intended to streamline the links between GATE and its partners (timeliness and adequacy of information) and between GATE and regional QASs (decentralisation).

Internal partnership with other GTZ/GATE projects

Appropriate technology (AT) documentation

The AT documentation centre offers extensive background literature, now comprising more than 18,000 publications and numerous journals, in the field of appropriate technology.

The documents include:

- Project and conference reports;
- Appraisals;
- Scientific literature;
- Construction manuals;
- 'Grey' literature from NGOs and projects.

The documents are primarily available in English, French, Spanish and German.

AT documentation is divided into the following categories:

- Renewable energy (wind, solar, biogas, etc.);
- Water supply, sewage disposal, waste;
- Land use, forestry management, fisheries;
- Processing of foodstuffs;

- Trade and micro-industry;
- Construction;
- Health, medicine;
- Economics and development, ecology, transport, information, education.

The classification comes from SATIS. For agriculture, the simplified FAO system is used.

The fields of agriculture and biogas are particularly strongly represented. AT documentation is available free-of-charge to anyone in the field of development cooperation.

Literature is received from colleagues, through voluntary exchange (e.g., IDRC) and the book trade, and through business trips made by personnel in GATE and GTZ.

In the near future, more cooperation is expected with other QASs. It is expected that publishing will be done more and more through the Internet and that it will be increasingly important to guide clients through Internet sources and possibilities.

Building Advisory Service Information Network

BASIN was set up in 1988 to provide information and advice on appropriate building technologies and to create links with expert resources in the world for all those in need of relevant information. BASIN provides a comprehensive range of expertise, experience, knowledge and skills for the support of new initiatives in the low-cost building sector.

BASIN is an association of expert organisations, including: Shelter Forum, Kenya; GATE, Germany; ITDG, UK; SKAT, Switzerland, CRATerre, France; CEVE, Argentina; Development Alternatives, India.

An important component of BASIN is its information network, which is a database consisting of:

- Complete documents;
- Know-how (consultants/expertise);
- References on resources and equipment.

The database is accessible on the Internet, and decentralised per theme and per region. The databases used are developed by the project.

Until now, the information on the network has been centrally controlled (by GTZ). There are clear procedures to deliver the information which is centrally added to the network. An evaluation was carried out in 1996.

To include a new partner, the BASIN project can finance the purchase of computers and the software to connect with the databank, and part of the communication costs.

Small-Scale Project Fund

The SSPF of GATE aims at promoting and disseminating promising models for appropriate technology.

Projects funded under SSPF are meant for:

- Improving living conditions;
- Gaining experience for ISAT;
- Focus on innovative technologies;
- Gaining experience with methods and concepts for the management of small project funds.

The SSPF helps to make funds available for self-help groups so that they can test and apply 'small' innovations, while ISAT gains new knowledge. The SSPF started in 1986 and has funded over 250 highly diverse small projects in various AT fields. The average cost of the projects is DM 27,000. Each application is evaluated by at least two specialists in the field. If accepted, it is then submitted to a GTZ country desk or field office for further comment. For implementation, the project should have an advisor who should be known to GTZ or another German development aid organisation. This facilitates the implementation and reporting.

In order to strengthen South-South cooperation, in recent years the SSPF has begun to be regionalised. One example is the SIATA network (Service inter-africain sur les technologies appropriées) in francophone Africa, which has been in existence since 1994 and has assumed substantial responsibility for assessment, approval and supervision of small-scale initiatives. Applications from West Africa are now being submitted directly to SIATA whenever possible. Other applications are processed at the GTZ head office.

Service inter-africain sur les technologies appropriées

SIATA is a network of NGOs in West and Central Africa, supported by GTZ/GATE. SIATA has assumed responsibility for the SSPF and aims to link the experiences of different organisations in the network. Everyone contributes what he/she knows and SIATA facilitates collecting and distributing this knowledge.

SIATA has a board consisting of representatives of:

- The host country, Burkina Faso;
- Four representatives of NGOs in different countries;
- The ISAT representative.

The board meets twice a year to discuss project proposals. There are 50–80 proposals per year. The board discusses the list and sets priorities – what is important. The board can

decide up to DM 10,000. The major emphasis is on women's groups. A representative on the board cannot forward a project proposal to ensure independent judgement.

Conclusion

The activities of the different projects can be represented as shown in the coverage matrix in Table E.

TABLE E

ACTIVITIES	GATE DOCUMENT -ATION	GATE PUBLICATION	GATE QAS	BASIN	SIATA	SSPF
QAS			XXX	X	XX	
Documentation	XXX			XXX		
Database	XX			XXX		
Publication		XXX	XX	XX	X	
Project financing					XX	XXX

XXX = major attention; XX = substantial attention; X = minor attention

The different GATE projects form an interesting package and have various mutual benefits:

- GATE documentation and publications provide a clear link with the QAS;
- The SSPF helps to channel financial requests, and helps to implement innovative projects that generate new knowledge for the QAS;
- The network/Internet approach, especially of BASIN and ISAT, encourages the exploration of new ways of using modern communication technology in addressing questions;
- The SIATA example shows the possibilities of decentralised ownership of both the QAS and the SSPF. It provides a practical answer to the important aspect of South-South exchange.

It can be seen from the above that different information projects and activities can stimulate and improve each other's performance.

External networking activities

ISAT is involved in various external networking activities:

- German organisations: AT Forum;
- European level: various QASs such as ITDG, SKAT, ATOL, Agromisa, TaT, etc;

- Southern partners, NGO cooperation components;
- SIATA in West and Central Africa;
- RATIS in Eastern and Southern Africa;
- MAELA in Latin America and the Caribbean;
- CLADES in Latin America;
- RISE-AT in Asia.

Within the European network there is some discussion on specialisation (e.g., ITDG is good for food processing, ISAT is good for biogas). Different European and QASs met in September 1998 in Eschborn, Germany. They founded the International Network on Technical Information (INTI). Table F shows the areas of focus of the different QASs involved in the INTI network.

TABLE F

ORGANISATION	COUNTRY	E-MAIL ADDRESS	AGRICULTURE	FOOD PROCESSING	ENERGY	APPROPRIATE TECHNOLOGY	CONSTRUCTION
Agromisa	Netherlands	agromisa@wxs.nl	X	X		X	
ATOL	Belgium	ATOL@ngonet.be	X		X		
INPhO/FAO	Italy	inpho@fao.org		X	X		
GRET	France	taquet@gret.org		X	X	X	
GTZ/GATE	Germany	unt@poenitz@gtz.de	X	X	X	X	X
ITDG	UK	infoserve@itdg.org.uk		X	X		
SKAT	Switzerland	info@skat.ch		X	X		X
TaT	Germany	tatgermany@aol.com			X		X
WOT	Netherlands	wot@tdg.utwente.nl			X	X	

Networking strategies

Collaboration models

For cooperation between partners in the QASs, three models can be distinguished: decentralisation; information network; and partner as consultant.

1. Decentralisation

Advantages:

- Intensive South-South dialogue;
- Minimised expenditure on work at GATE.

Disadvantages:

- No uniform quality standards;
- Question of financing the partner over the long term.

2. Information network

Advantage:

- Access to various sources of expertise (North and South).

Disadvantages:

- High expenditure (cost intensive);
- Complex, non-transparent structure for the client.

FIGURE J Collaboration model: decentralisation

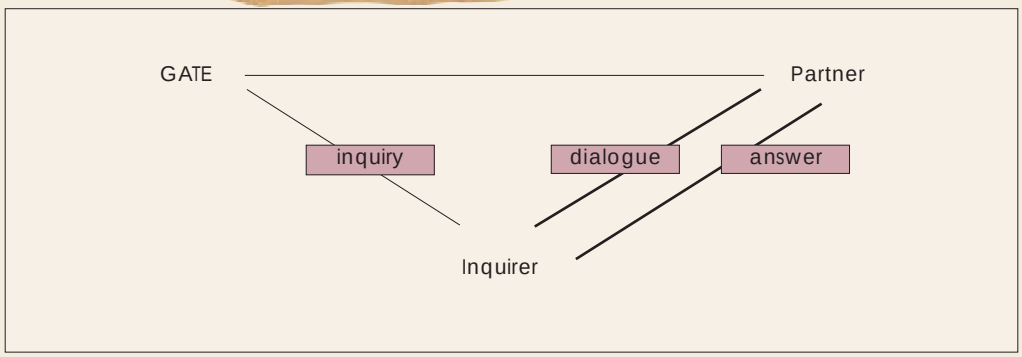


FIGURE K Collaboration model: information network

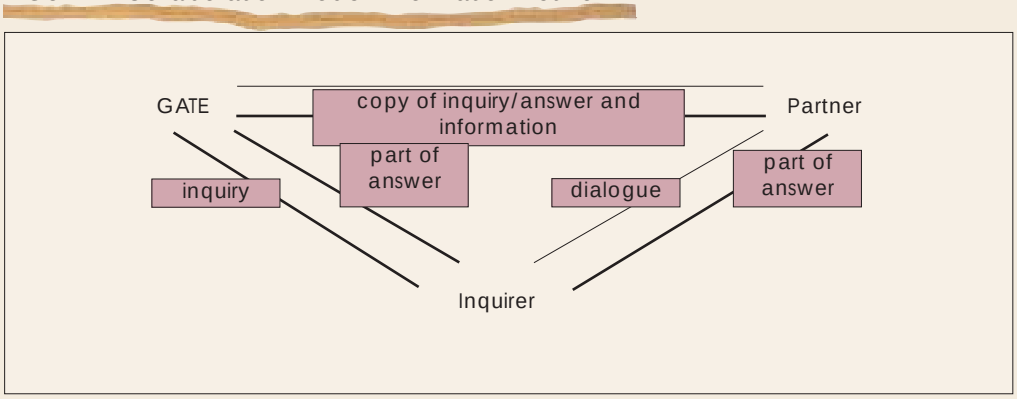
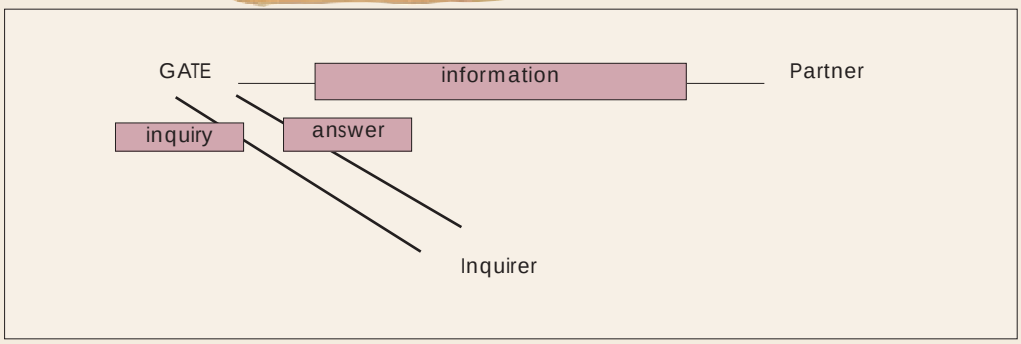


FIGURE L Collaboration model: partner as consultant



3. Partner as consultant

Advantages:

- Uniform quality standards;
- Access various expert partners.

Disadvantage:

- Very high expenditure (cost intensive).

Tentative conclusion: The three models will probably work for different partners.

Comparing centralised and decentralised QASs

Both centralised (North) and decentralised (South) QASs have advantages and disadvantages (see Table G).

A combination of central and regional QASs seems to offer the best service.

TABLE G

NORTH	SOUTH
Better access to scientific and international knowledge	Applied knowledge in region (local)
Contact with experts and written evaluation	Information is visible
Easy access to information centres	
Quality management (pressure from donors)	
Chance to sell part of services to other organisations	Often too expensive (in South), few cases of autonomous QAS established and functional (RATIS, West Africa)
	Limited feedback

Information resource base

The ISAT QAS makes use of the following major information sources:

- The GATE documentation centre;
- The BASIN database;
- Databases, documentation and expertise of partners in the European network;
- Documentation and expertise of partners in the INTI and southern networks;
- Expertise of GTZ staff;
- Internet sites.

Work processes and flows

QAS process

Registering an inquiry

Inquiries are registered in the QAS database by the QAS secretary. This allows for monitoring as well as for management information. Financial inquiries are forwarded to the SSPF expert.

Scanning all letters is now under consideration. This would reduce the filing system and facilitate the use of e-mail in contacts with other experts. There is still a problem with handwritten letters.

Answering a routine inquiry

Routine inquiries for publications or general information/standardised answers are being dealt with by the QAS secretary.

Answering a financial inquiry

Financial inquiries are dealt with by the SSPF expert.

Answering a technical inquiry

Technical inquiries have to be answered with specific survey information, didactical materials, and expert know-how. For these technical inquiries the QAS expert can make use of a network of experts: GTZ and FAO experts, consultants, regional experts and local partners.

Classification of answers

The QAS expert classifies the answers in terms of the following possibilities:

- No follow-up;
- Starting a dialogue with the client: client is actively approached after a certain time;
- Impact monitoring: a questionnaire on impact is sent after some time.

Filing

Inquiries suitable for dialogue or impact monitoring are filed in a preliminary file. All other answered inquiries are filed in a permanent file.

This procedure can be represented in a flow chart (Figure M):

Quality management and monitoring

Quality management chart

The different quality aspects, requirements and indicators of a QAS are represented in Figure N, which includes some of the major norms of the ISAT programme.

Monitoring

It is important to monitor the quality of the answer and the client's opinion on the applicability of the answer. Currently, what is being monitored is time efficiency, cost efficiency and client satisfaction level.

A major indicator for time efficiency is the time/duration of an answer (the number of days/weeks it takes to answer an inquiry).

A major indicator for cost efficiency is the time spent on an answer. At present, about 90% of inquiries are answered within 2 hours, most of them within 40–50 minutes.

Client satisfaction is measured by sending a questionnaire together with the answer. Currently, it appears that about 80% of clients are very satisfied or satisfied. Only a few are dissatisfied. However, it is thought that many people who are not satisfied do not return the questionnaire. It is therefore very important to monitor any shifts in the satisfaction levels.

In the past the monitoring was done by a secretary who was not fully involved in the project. Therefore, there was not enough focus on following up the consultants. Now, one

FIGURE M QAS process flow chart

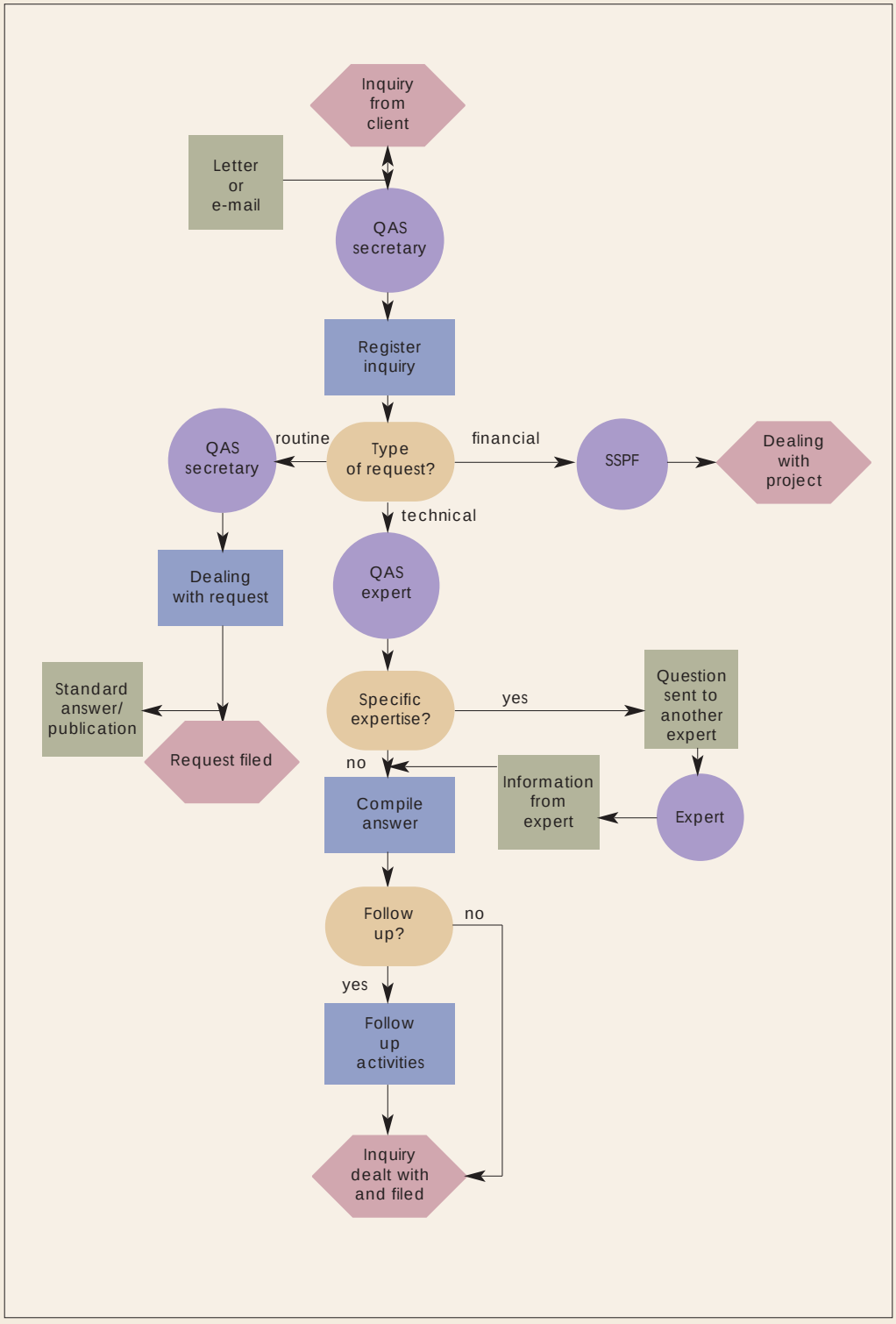


FIGURE N Quality management chart

	QUALITY ASPECTS	QUALITY REQUIREMENTS	POSSIBLE INDICATORS	ISAT NORM
QAS	INFORMATION	Adequate information on type of services	% of requests that cannot be dealt with	
		Adequate information on procedure	% of clients asking questions on procedure	
	APPLICATION PROCEDURE	Ease of application procedure	% of incomplete/ unclear requests	
		Information on progress	% of clients receiving initial reply too late	2 days high priority 7 days low priority
		Duration of the procedure	No. of days before receiving final answer	Average is 10.5 days
	ANSWER	Cost efficiency	Time spent on an answer	90% answered within 2 hours
		Applicability of the answer	No. of people not implementing the answer	
		Comprehensiveness of the answer	No. of people not satisfied with the answer	80% satisfied
	FOLLOW-UP	Timeliness of the answer	No. of people not satisfied with the itme taken	
		Timeliness of the follow-up	Average time it takes to address follow-up issues	
		Adequacy of the follow-up	Satisfaction with follow-up service	

person is responsible for the monitoring and follow up, which has improved the follow-up results.

Some cases are selected for impact monitoring in order to identify answers that are being implemented. Currently, there are some 87 cases of dialogue. Out of these cases, 25 questionnaires were returned. Seven cases for impact follow-up were selected to get additional information on the utilisation of information. The time lapse before sending the impact questionnaires appears to be important. This was 6 months, but is now 9 months, giving clients more time to implement the activities. It is also important to find the right contact person, who can provide adequate information.

Promotional activities

The ISAT programme is not currently carrying out active promotion of the service as the capacity is limited. In the future, however, when there is full capacity, substantial attention will be given to promotion.

APPENDIX 3

Case study of the Questor QAS

The Dutch agriculture-based consultancy company STOAS has developed a software system for an electronic question-and-answer service (QAS) named Questor. This system has been installed in two agricultural research stations in The Netherlands, where many requests for information are received from farmers. Questor is used as an aid in answering these questions in an efficient and cost-effective way.

Description of the Questor system

Questor is a Website-based information and communications system. It comprises a databank containing previously asked questions and their answers related to specific themes. An inquirer can pose a question for attention by experts in the organisation, and the answer is sent to the client as well as to others who have indicated their profiles of interest in specific themes. As the answer is then added to the databank, it develops itself; and clients receive only the information they do not already have, and that which they have requested.

The system also makes it possible to bring information up to date, and for clients to find basic data without searching through Websites or piles of publications. A client can also acquire new information from the questions asked by others, and thus discover the topics that are the current concern of colleagues or competitors.

The quality of Questor is as good as the organisation that manages it. The answers given by the experts are exposed to criticisms from users, in that users who do not agree with the quality or depth of the answer can directly question the expert.

Access

The Questor system has three methods of access to help users find the relevant information easily.

In the first method, users can search by theme or topic. After selection, they are provided with the most relevant questions. If their questions are included, they can easily retrieve the answer and print it out. If the answer is not included, another button provides a questionnaire. The question is forwarded to an expert, and the answer is sent to the user by mail.

The second method provides access to the most recent questions and answers, and the most frequently asked questions (FAQs) over a specific period.

The third method leads to a continuous exchange of questions and answers. Users can include their personal profiles in Questor with their fields of interests. They are then informed as soon as each new question arises in one of these fields listed.

Example of Questor in operation

Questor software has been installed in the Floriculture and Glasshouse Vegetables research station in The Netherlands and, since January 1999, it has been responding to questions concerning glasshouse climate and energy.

At the first approach a client can access Questor as a 'visitor'. You do not need a password, and you can become acquainted with the system and the type of questions asked. However, you do not have access to all questions in the data bank, and you cannot ask a question yourself. For that purpose you will have to register by describing your profile of interests and pay an annual subscription of Dfl 100. After subscription you will receive a password and a user's name, and will have access to all questions and answers. You can ask five new questions. The answers are then sent on paper (up to one page of A4 size) within 5 working days. For an additional Dfl 25 a user can be informed about all new questions and answers related to the subjects indicated in his or her profile.

The Questor website is http://www.agro.nl/appliedresearch/PBG. More information can be obtained from:

STOAS
PO Box 78
6700 AB Wageningen, The Netherlands
Tel. (31) 317 472 711; fax (31) 317 424 770
E-mail efr@stoas.nl; Website http://www.stoas.nl

APPENDIX 4

MANAGEMENT WORKBOOK FOR A QAS *For setting up or reviewing a QAS*
Name of organisation
Type of organisation
Present products/services and target groups of the organisation
Department underwhich the QAS functions
Reason for setting up or operating the QAS
If already operational. when started?
Strengths and weaknesses of the present services

1. THE CONCEPT OF THE QAS
Core assignment (general type and scope of the QAS services and how target groups will benefit)
Core approach (major QAS information services, major target groups, geographical coverage, link with other services of the organisation)
Core values (those that are felt to be important in operating the QAS)
Long-term objective of the QAS (5–10 years)

2. ANALYSIS OF USERS' NEEDS: DEFINING THE SCOPE OF THE SERVICES

2.1 Define the 5 major types of organisation to focus on:

- Governmental organisation
- National NGO
- International development agency
- University/agricultural college
- Research institute
- Commercial company
- Bank
- Farmers' cooperative/association
- Private farm/business
-

Remarks:

2.2 Define the 5 major functions/ocupations of the users to focus on:

- Farmer
- Trader
- Agroprocessor
- Extension worker
- Librarian
- Researcher
- Planner
- Politician
- Trainer/teacher
- Student
-

Remarks:

2.3 What is the educational level of the major users?

Major users	Average educational level
1 2 3 4 5	

2.4 What are the priority topics that major users are interested in (see Table 1)?

2.5 What is the expected use of the information (see Table 2)?

2.6 What are priority target groups (see Table 3)?

What are the major selection criteria for setting priorities (maximum of 3)?

-
-
-

High priority	Medium priority	Low priority

2.7 What information services should be offered, considering user requirements, costs, and availability (see Table 4)?

Which services should be improved?

2.8 How to improve information on user needs?

- Information from the operation of the existing QAS
- Questionnaire to present and potential users
- Additional interviews with selected existing and potential users
- Group discussions with selected beneficiaries
- Interviews/discussions with partner organisations
- Statistical data from ...
-

TABLE 1 Matrix of information needs

USERS: TOPICS						

XXX = major interest; XX = substantial interest; X = some interest

TABLE 2 Use of information matrix

MAJOR USERS: USE OF INFORMATION						
Primary production						
Agroprocessing						
Marketing information						
Policy development						
Educating and training others						
Lecture/address						
Research						
Project formulation						
Personal use/own education						

XXX = major use; XX = substantial use; X = some use

TABLE 3 Priority-setting matrix

What are the major selection criteria (maximum of 3)?

- The priority of the user in relation to the development goals of the organisation;
- Present relationship of the organisation with this user group (easy access);
- Access of the user group to other information sources;
- Potential for replicating/distributing information;
- Potential for practical application of the information;
- Capability of the user group to pay/contribute.

How the potential user groups relate to the criteria:

CRITERIA: POTENTIAL USERS				OVERALL PRIORITY

High = high priority on this criterion; medium = medium priority on this criterion; low = low priority on this criterion;

TABLE 4 Information services to offer

CRITERIA: TYPE OF INFORMATION SERVICES	REQUIRED BY PRIORITY TARGET GROUPS	COST OF THE SERVICE	PRESENT AVAILABILITY/ ACCESSIBILITY FOR PRIORITY TOPICS	
	+ = high +/- = medium - = low	+ = low +/- = medium - = high	+ = easy +/- = medium - = difficult	
Pictures/strips/illustrated brochures				
Books/documents				
Photocopies of journal/article/ book extracts				
Tapes/tape-slide series				
Videos				
CD-ROMs/computer files				
Statistical data				
Reference lists of books and journals				
Contact addresses of experts/ consultants				
List of Internet addresses				
Advice on a specific topic or problem				
Information on financial support				
Information on training and advisory support				
Upcoming conferences				

XXX = major interest; XX = substantial interest; X = some interest

3. STAKEHOLDERS AND PARTNERS

3.1 What should be the position of the QAS in the institutional setting (see Figure 1, organisational chart)? Which relationships should be strengthened for improved services and/or improved cooperation?

3.2 What are the possibilities for cooperation and coordination with other organisations already in contact with similar target groups (see Table 5) or other organisations with information services (see Tables 6 and 7)? What are the areas of competition?

FIGURE 1 Organisational chart

TABLE 5 Coverage matrix for user groups

INFORMATION SERVICE ORGANISATION: MAJOR USER GROUP						

XXX = major attention; XX = substantial attention; X = minor attention

TABLE 6 Coverage matrix for topics

INFORMATION SERVICE ORGANISATION: TOPIC						

XXX = major attention; XX = substantial attention; X = minor attention

TABLE 7 Coverage matrix for type of information service

INFORMATION SERVICE ORGANISATION: TYPE OF INFORMATION SERVICE PROVIDED						
Pictures/strips/illustrated brochures						
Books/documents						
Photocopies of journal/article/ book extracts						
Tapes/tape-slide series						
Videos						
CD-ROMs/computer files						
Statistical data						
Reference lists of books and journals						
Contact addresses of experts/ consultants						
List of Internet addresses						
Advice on a specific topic or problem						
Information on financial support						
Information on training and advisory support						
Upcoming conferences						

XXX = major attention (major activity); XX = substantial attention; X = minor attention

4. NETWORKING STRATEGY

4.1 Who will be the major partner(s) of the QAS; and for what activities?

4.2 What will be the major favourable and unfavourable factors in this partnership (see Table 8)? What should be done about the unfavourable factors?

4.3 How should the partnership de developed? If there is a contract, what are the major points requiring attention?

TABLE 8 Collaboration matrix between ... and ...

ORGANISATIONAL ASPECTS	FAVOURABLE FACTORS (CONTRACTUAL OBLIGATIONS)	ASSESSMENT OF STRENGTH FACTOR ← +	– →	UNFAVOURABLE FACTORS
Environment				
Objectives				
Output				
Inputs				
Internal organisation				

5. INFORMATION SOURCES

5.1 Sources of documents (books, articles, videos, etc.). To what sources of documents do you currently have access?

5.2 Who can assist in updating the documentation?

- Users of the QAS
- Own staff, the organisation, or consultants used by the organisation
- Other projects or organisations working in relevant fields of development
- Students/universities
- Publishing houses

How will you encourage them to assist?

5.3 Which major databases of other organisations could be relevant?

- International organisations (e.g., FAO)
- Universities/research institutes
- Bureaux of statistics
- NGOs, development organisations and projects
- Ministries
- Sectoral organisations (e.g., branch organisations)

How can you guarantee access to them?

5.4 What Internet sources are of major relevance to the QAS?

6. WORK PROCESSES AND FLOWS

6.1 Describe the work process of the QAS

The process begins when the inquiry is received, and continues until the client follow-up stage. In the flow chart (see Figure 2), include beginning and ending activities, responsibilities, major decision-making moments, and the inward and outward flow of information.

6.2 Identify actual and potential bottlenecks, and indicate what can be done to minimise them (see Figure 2)

6.3 Calculate the cost-effectiveness of the different QAS products (see Work process calculation sheets (Tables 9, 10, 11 and 12)

6.4 What could be done to improve the cost-effectiveness?

FIGURE 2 QAS work process flow chart

Conclusions about bottlenecks:

TABLE 9 QAS work process calculation sheet (1): costs and cost per question in general

OVERHEADS	RELEVANT LIBRARY COSTS	PERCENTAGE ALLOCATED TO QAS	COSTS OF QAS	NUMBER OF QUESTIONS	COST PER QUESTION
Personnel Building rental Equipment Stationery Postage Administration Other costs			..... +		
Total overheads					
Contracts Contracts with partners			..... +		
Total contracts					
Other direct costs Photocopies Books/documents CD-ROMs Tapes Tape-slide series Videos					
Total direct costs					
Total cost					

TABLE 10 QAS work process calculation sheet (2): time spent per question (in hours)

PROCESS ACTIVITY	NUMBER OF QUESTIONS	TOTAL HOURS SPENT	HOURS PER QUESTION
Reception and registration Elementary search Advanced search Contacting experts Compiling answer Registration and sending Follow-up Promotion and management			
Total number of hours per question			

TABLE 11 QAS work process calculation sheet (3): cost per hour

Overheads Staff time spent			
Overhead cost per hour			

TABLE 12 QAS work process calculation sheet (4): costs per type of question (in hours)

	HOURS PER QUESTION			
PROCESS ACTIVITY	TOTAL	ELEMENTARY SEARCH	ADVANCED SEARCH	EXPERT ADVICE
Reception and registration Elementary search Advanced search Contacting experts Compiling answer Registration and sending Follow-up Promotion and management		……+	……+	……+
Total number of hours per question				
Cost of overheads per hour	……x	……x	……x	……x
Cost of overheads per question				
Contracts with experts per question				
Direct costs per question	……+	……+	……+	……+
Total costs per question				
Number of questions	……+	……+	……+	……+
Costs				

7. PROMOTIONAL ACTIVITIES

7.1 What aspects of the QAS should be emphasised in publicity materials?

7.2 Which promotional methods should be used, amd aimed at which target groups?

Promotional methods	Target group
Brochures distributed via: ■ ■ ■	
Advertisements in: ■ ■ ■	
Websites: ■ ■ ■	
Networks, conferences: ■ ■ ■	
Word-of-mouth:	

7.3 Which organisations/persons should be used to publicise the QAS?

8. QUALITY CONTROL FOR THE CUSTOMER

8.1 Define the quality requirements in the QAS offered from the client's point of view and formulate the indicators and norms to monitor

	SERVICES	QUALITY REQUIREMENTS	POSSIBLE INDICATORS	ACCEPTABLE NORMS
QAS	INFORMING CLIENTS ABOUT THE QAS			
	SENDING REQUEST			
	ACKNOWLEDGEMENT AND DIALOGUE			
	RECEIVING THE ANSWER			
	FOLLOW-UP			

8.2 Define the quality requirements and monitoring indicators for the major steps in the process of developing and implementing the QAS

MAJOR PROCESS STEPS	QUALITY REQUIREMENTS	MONITORING INDICATOR	ACCEPTABLE NORM
Target group needs analysis			
Development of information resource base			
Informing the clients			
Registration of requests			
Classification of requests			
Information search			
Involvement of experts			
Compiling answers			
Registration of answers			
Evaluation and follow-up			

9. INFORMATION SYSTEMS

9.1 Which information elements are needed at operational level in order to be able to answer a question?

- Basic information on the various topics
- Frequently asked questions related to these topics
- Information on reference material related to these topics (books, reports, etc.)
- Information on experts on these topics (contact addresses, etc.)
- Information on suppliers of technology (inputs, equipment, software, etc.)
- Information on relevant documentation centres and other sources of information (e.g., databases)

Which systems are already available?

What material can be filed manually and what should be computerised?

9.2 What information elements are needed at management level to monitor performance?

- Satisfaction of clients
- Timeliness of answers
- Performance of partners under contract
- Time spent on answering questions
- Costs involved in answering questions
- Cost-effectiveness

Which instruments will be used to collect the information?

How will the information be registered?

How often should it be reported?

9.3 What major management questions need to be answered at management level for making strategic choices (which target fgroups, which topics, which partners, etc.)?

Which data will be needed and how will they be collected?

How will the information be registered?

How often should it be reported?

Acronyms and abbreviations

ACP	African, Caribbean and Pacific Group of States
Agricola	Agricultural On-Line Access
ARC	Agricultural Research Council (South Africa)
ATOL	Aangepaste Technologie Ontwikkelingslanden (Belgium)
BASIN	Building Advisory Service Information Network
CABI	Centre for Agriculture and Biosciences International (UK)
CARDI	Caribbean Agricultural Research and Development Institute
CEVE	Centro Experimental de la Vivencia Economica (Argentina)
CLADES	Consorcio Latinoamericano sobre Agroecologia y Desarrollo
CRATerre	International Centre for Earth Construction (School of Architecture, Grenoble, France)
EC	European Commission
FAO	Food and Agriculture Organisation of the United Nations
FAQ	frequently asked question
GATE	German Appropriate Technology Exchange
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IICA	Inter-American Institute for Cooperation on Agriculture
ILO	International Labor Organisation
INTI	International Network on Technical Information
ISAT	Information and Advisory Service on Appropriate Technology
ISNAR	International Service for National Agricultural Research
IT	Intermediate Technology
ITDG	Intermediate Technology Development Group
LIS	Library Information Services (UOFS)
NGO	non-governmental organisation
PRAIS	Programme for Agricultural Information Services (Southern Africa)
QAS	question-and-answer service
RATIS	Regional Appropriate Technology and Information Service (East and Southern Africa)
RISE-AT	Regional Information Service Centre for South East Asia on Appropriate Technology
Sabinet	Southern African Bibliographic Information Network
SADC	Southern African Development Community
SCECSAL	Standing Conference of Eastern, Central and Southern African Librarians
SDI	selective dissemination of information
SIATA	Service inter-africain sur les technologies appropriées
SKAT	Swiss Centre for Development Cooperation in Technology and Management
SPAAR	Special Program for African Agricultural Research
SSPF	Small-Scale Project Fund
UNESCO	United Nations Scientific, Educational and Cultural Organisation
UOFS	University of the Orange Free State (South Africa)
WTO	World Trade Organisation