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Interim Report

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**ASSISTANCE TO THE WEST AFRICA
RICE DEVELOPMENT ASSOCIATION**

AFRICA REGION

INTERIM REPORT



UNITED NATIONS DEVELOPMENT PROGRAMME



**FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS ROME, 1982**

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ASSISTANCE TO THE WEST AFRICA RICE DEVELOPMENT ASSOCIATION

A F R I C A R E G I O N

INTERIM REPORT

Report prepared for
the West Africa Rice Development Association
by
the Food and Agriculture Organization of the United Nations
acting as executing agency for
the United Nations Development Programme

UNITED NATIONS DEVELOPMENT PROGRAMME
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 1982

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The Food and Agriculture Organization is greatly indebted to all those who assisted in the implementation of the project by providing information, advice and facilities. The project enjoyed the hospitality of West Africa Rice Development Association (WARDA). The valuable support received over the past years from Dr J. Diouf and Mr S. Coulibaly (past and present Executive Secretary), and Dr L.A. Are and Dr Nah-Doe Bropleh (past and present Deputy Executive Secretary), also that of the heads and staff of the various departments and divisions, is gratefully acknowledged.

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LIST OF ABBREVIATIONS

CGLAR	-	Consultative Group on International Agricultural Research
CIDA	-	Canadian International Development Agency
CILSS	-	Permanent Inter-State Committee for Drought Control in the Sahelian Zone, Ouagadougou
EEC	-	European Economic Community
IDRC	-	International Development Research Centre, Ottawa
IFAD	-	International Fund for Agricultural Development
IITA	-	International Institute of Tropical Agriculture, Ibadan
MRU	-	Mano River Union
ODA	-	Overseas Development Administration, UK
OPEC	-	Organization of the Petroleum Exporting Countries, Vienna
TCDC	-	Technical Cooperation among Developing Countries, UN
TCP	-	Technical Cooperation Programme, FAO
USAID	-	Agency for International Development, Washington DC
WARDA	-	West Africa Rice Development Association

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The West Africa Rice Development Association (WARDA) is an intergovernmental organization which came into being in 1971 through the initiative of a few West African states which recognized the extreme dependence of the region on imports of food, especially rice, from other countries. Such had been the worsening situation of food production in the region that the regular shortages led to a drain on scarce foreign exchange.

The attempt to find a solution to the problems had first found expression at a meeting in Monrovia, Liberia in September 1969, of representatives of the governments of West African states, international funding organizations, friendly countries and foundations. This meeting of plenipotentiaries endorsed the idea of selfsufficiency in rice production with a regional approach and decided to establish an organization to promote rice development. Its Draft Constitution was to be prepared by FAO.

The Monrovia meeting was followed by another conference of plenipotentiaries in September 1970 at which WARDA was formally established, and a Constitution adopted. Eleven West African states represented at the Conference, signed the Final Act of the Association on 4 September 1970 1/.

WARDA comprises 15 Member States 2/. It is composed of technical departments and divisions with supporting services, including departments of research, development, training and administration and finance, and divisions of communications and documentation (Appendixes 1 and 2).

At its first session in Monrovia in September 1971, the WARDA Governing Council authorized the Executive Secretary to request assistance from the UNDP. The project was requested by 12 countries - Benin, the Gambia, Ghana, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo - which were then receiving assistance related to rice production from bilateral agencies.

1/ The Gambia, Ghana, Ivory Coast, Liberia, Mali, Mauritania, Niger, Senegal, Sierra Leone, Togo, Upper Volta.

2/ Benin, the Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, Upper Volta.

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1.2 OUTLINE OF OFFICIAL ARRANGEMENTS

Most of the UNDP/FAO projects maintain an identity and follow a work programme outlined in the Plan of Operation. In this respect, although the normal project operations may complement work undertaken in the country or by the recipient organization, the project's accomplishments can easily be identified. In the case of the present project, all its staff members were integrated into WARDA, to the extent that the project lost its identity but provided vital assistance to the Association. All project personnel were deployed to the various Departments and Divisions and carried out duties determined and assigned to them by WARDA. Project implementation was entirely through WARDA.

1.2.1 Phases I and II

This Interim Report covers two phases of the project 'Assistance to the West Africa Rice Development Association' - Phase I: RAF/71/220 (February 1972 to June 1975), and Phase II: RAF/75/022 (July 1975 to December 1981). A new phase has been accepted for the UNDP Third Cycle (1982-86).

The Plan of Operation for Phase I (RAF/71/220), was signed by the Executive Secretary WARDA and representatives of UNDP and FAO, the executing agency, in February 1973. Project personnel starting assuming duty early in 1972, before the document was signed. Project headquarters was Monrovia, Liberia, the seat of the Association. Duration of this phase, initially envisaged as two years, was subsequently extended to June 1975.

The Project Document contained provisions for personnel, training and equipment. The experts included:

- Team Leader/Liaison Officer and Adviser to the Executive Secretary
- Economist
- Storage and Processing Specialist
- Documentalist
- Data Processing Specialist
- Technical Photographer
- Translator
- Administrative Officer
- Consultants.

In addition, a subcontract was provided for computer processing of indexes, bibliographies, research results and economic data.

The initial UNDP contribution amounted to US\$ 918 500, while the counterpart contribution in kind and local costs came to US\$ 1 014 295. The revision extending the project to June 1975 increased the UNDP contribution to US\$ 1 116 887. This amount was later further increased to cover the Phase I period, to US\$ 1 179 574.

Phase II was approved at an expenditure of US\$ 1 139 000 for a duration of two years, 1975 to 1977, at the end of which period it was decided to extend activities to the end of 1978, using the unspent balance out of an already augmented total budget of US\$ 169 000 during 1978. A further extension to the end of 1981 brought with it an increase in budget first to US\$ 1 669 000, and then to US\$ 1 699 000 to allow for the inclusion of one UN Volunteer for the post of Legal Officer for two years. A further revision which took into consideration annualized expenditures reduced the total and final budget to US\$ 1 692 114.

The final breakdown in funding was as follows:

<u>Phase I</u>	<u>US\$</u>
Project personnel	594 646
Support personnel and missions	225 305
Training	66 614
Sub-contract and Miscellaneous	173 009
Equipment	120 000
	<u>1 179 574</u>
<u>Phase II</u>	<u>US\$</u>
Project personnel	1 491 422
Support personnel and missions	44 468
Training	96 216
Sub-contract and Miscellaneous	38 309
Equipment	21 699
	<u>1 692 114</u>

The main reasons for the series of revisions have been staff additions, staff extensions, mandatory increases and rephasing of delivery of project inputs as a result of delays in planned delivery or changes in work plan.

Throughout the two phases of the project considerable assistance was received by the Association through associate experts whose services were made available by their Governments through FAO. The fields they covered included economics, breeding, data processing, rice processing, mechanization and agricultural extension.

Project personnel, working as staff of WARDA, served in all departments and divisions, including the Executive Secretariat, and assisted in establishing and consolidating the Association.

Appendix 3 lists UNDP project personnel. WARDA staff as at September 1981 are shown in Appendix 4. Fellowships and equipment provided by the project are listed in Appendixes 5 and 6.

1.2.2 Project reviews

The mid-term review in October 1974 not only covered project activities but also dealt with WARDA as an institution, its programmes and activities and the further assistance it would require beyond the Phase I. Considerable attention was given to the structure of WARDA and its principal organs, its objectives and programme of work, as well as progress achieved.

Based on its studies and the need to further strengthen the institution, the review recommended an extension of the project for 30 months, July 1975 to 31 December 1977. The technical staff included the Team Leader, two Agronomists, a Rice Processing Specialist, an Irrigation Specialist, a Data Processing Specialist, a Documentalist and a Translator. Provision was also made for supporting functions including administration, training, computer processing and equipment. The total budget was \$ 1 139 000. The project document for this extension (Phase II) was signed in February 1977, 20 months after it became operational.

The first tripartite review took place in January 1976. Since the Project Document for Phase II had not been signed at the time, the discussions centred around positions carried over from the Phase I, and the draft project proposals for Phase II.

The review was held during the UNDP budgetary crisis which started in 1975 and project expenditures, commitments, filling of posts and the use of unspent funds were carefully reviewed. It was recommended that the positions of Indexer and Technical Photographer should be phased out, to be followed by the elimination of the Administrative staff.

It was made evident at this review that normal fellowship training of junior professional counterparts to the experts could not be made since

WARDA had no provision in its own budget for recruiting such counterpart staff. In fact WARDA professional staff are as qualified as the project professional staff.

The second tripartite review was held on 14 April 1977, the year the Executive Secretary of WARDA, J. Diouf, was separating from WARDA. While staff departure and need for replacement were important topics of discussion, the main issue was the future of the project which was to terminate at the end of 1977.

The Regional IPF for the cycle 1977-81 had earmarked US\$ 777 000 for WARDA and there was a proposal to utilize it as follows: \$ 500 000 for both 1977 and 1978, the balance to be carried over to 1979. The review also recommended a carry-over of funds for the Bong Mining Company Computer Processing Sub-contract and a transfer of all UNDP equipment to WARDA.

The second meeting on 16 November 1977 of the tripartite review recognized that the number of UN-supported experts to WARDA, from the initial ten, had been reduced to three for 1978 - Team Leader, Agronomist and Translator. The team also included two UNVs and three Associate Experts, of whom the review recommended that more could be employed.

From uncommitted funds of about US\$ 237 000 the project was to continue in 1978, beyond which further assistance could not be foreseen. Other sources of financial support suggested were the FAO Technical Cooperation Programme (TCP), International Fund for Agricultural Development (IFAD), Technical Cooperation among Developing Countries (TCDC) and the Organization of the Petroleum Exporting Countries (OPEC) Special Fund.

As UNDP agreed in April 1978 to continue assistance to WARDA during 1979 at the 1978 level and also at a reduced level for 1980-81, a third UNDP/FAO/WARDA review mission was mounted in July 1978 to assess the work accomplished by the project, the impact of WARDA's total programme, the achievement of the departments/divisions assisted by the project, and to indicate the place of TCDC in the activities of WARDA. The mission was impressed with the work accomplished by the project. This, it may be noted, could not be isolated from WARDA's own activities. It recognized the need for strengthening the Development Department.

Concerning funding, the mission considered it important "that some form of UNDP and FAO association with WARDA be continued even after the termination of the project in 1981 in order to help maintain regional and international confidence in WARDA's stability and ensure maximum benefit to West Africa of UNDP's and FAO's investment in the Association".

It also recommended a UNDP project of TCDC for WARDA since the Association is essentially an instrument for TCDC in West Africa.

A few months before the fourth tripartite review meeting held on 20 July 1979, the 'TCDC Project for Rice Production in West Africa' RAF/78/075 had been approved by UNDP for WARDA, the Association being the executing agency. This tripartite meeting also reviewed the TCDC project.

For RAF/75/022, the meeting approved the appointment of a Legal Officer for two years. It is to be noted that a project revision earlier in the year had provided for the following personnel:

Senior Adviser and Liaison Officer
to end 1981

Agronomist I - 12 months

Agronomist II - 12 months

Translator to end 1979 (subsequently extended to December 1980)

Two UNVs to March 1980 (subsequently extended)

The review stressed the need for WARDA to produce a detailed and comprehensive plan of action which would lead to a self-sustaining growth with less and less dependence on external aid within a specified period of time.

The fifth tripartite review meeting held on 7 September 1980 in Banjul on the occasion of the Tenth Session of the WARDA Governing Council dealt also with the TCDC project, and considered detailed arrangements for the WARDA Donors' Conference including time and place of meeting, participation, documentation to be tabled for discussion and financial implications. The Conference was held in April 1981.

2. WARDA - ACTIVITIES

2.1 OBJECTIVES

The Constitution of the Association gives WARDA its mandate and stresses the importance of increasing rice production in order to meet the food needs of the people of the region while contributing to the development of their economies and improving their living standards. To quote from the Constitution, "The Association shall assist the Governments of Member States to achieve operational cooperation in the pursuit of the following aims:

- promotion of rice production within the countries of West Africa;
- increase of the quantity of rice produced;
- improvement of the quality of rice produced in West Africa;
- encouragement of production and use of varieties suited to the conditions of the countries in West Africa and to existing and prospective demand;
- exploration, introduction and extension of rational production methods adapted to the conditions prevailing in the countries of West Africa;
- promotion and implementation of measures for effective phytosanitary controls in relation to rice;
- promotion of storage and processing, as well as marketing of rice both within countries in West Africa and with respect to external trade in rice".

To achieve the objectives of promoting rice production, increasing the quantity and improving storage, processing, quality and marketing, Article I.3 of the Constitution provides that "the Association shall adopt or promote the adoption of the following measures:

- encouraging, coordinating and undertaking, as necessary, basic and applied research programmes in the scientific, technical, economic and sociological fields;
- collecting, analysing and disseminating information on methods applied, experience gained, and results obtained both within and outside West Africa;

- organizing or arranging for conferences, seminars and training facilities, securing fellowships and establishing, or assisting in the establishment of, advisory services and training and extension facilities;
- elaborating requests for special financial and technical assistance and receiving and administering separately such financial and technical assistance (including movable and immovable property, services and loans) as may be made available under the appropriate programmes of the United Nations, the specialized agencies, other organizations or governments desirous to support the aims of the Association;
- providing, as appropriate, regional rice research and development facilities;
- carrying out or promoting any other measures or activities at regional as well as national level, as determined by the Governing Council of the Association, for the purpose of developing rice production and marketing in West Africa".

In translating these aims and objectives into action, WARDA has classified them into: immediate; medium-term, and long-term.

While the long-term objective is to achieve selfsufficiency in rice production in the region, the medium-term objectives seek to:

- assist the governments in their efforts to increase rice production through project identification missions, project appraisal, issue of improved seed and other inputs and the development of appropriate technological packages;
- support the development of the rural community by providing training programmes, and issuing publications including extension aids.

The immediate objectives take into consideration the 700 000 farm families which provide the small-farmer community. These objectives are to:

- assist in the development of rice cultivation over an estimated 2 million hectares;
- establish the rice production potential by regional coordinated, standardized trials with local and improved rice varieties;
- establish the production potential by coordinated, standardized trials involving the application of fertilizer and plant protection techniques;

- reinforce the existing network of research stations in order to fill gaps in applied research and breeding programmes for varietal improvement;
- collect, catalogue and disseminate information on documents from the regional and from the world literature on rice of importance to rice development in the area, through bibliographies and indexes;
- collect and process data of importance to rice cultivation in the area in the form of statistics.

2.2 STRUCTURE OF WARDA

2.2.1 Principal organs

At the onset, the principal organs of the Association included the Governing Council, the Advisory Committee, the Scientific and Technical Committee, and the Executive Secretariat.

In 1975, the Advisory Committee whose function had somewhat overlapped the functions of the Scientific and Technical Committee was abolished. The roles of the organs are described below.

The Governing Council is the highest policy-making body of the Association. It consists of representatives of all Member States of the Association, each Member State appointing one representative who is normally the Minister of Agriculture or of Rural Development. It elects the Executive Secretary and Deputy Executive Secretary and appoints members of the Scientific and Technical Committee and the External Auditor. It approves the Association's programmes and budgets and reports which are submitted by the Executive Secretary and other organs of WARDA.

The Scientific and Technical Committee examines the scientific and technical content of WARDA programmes and formulates recommendations to the Governing Council. Initially composed of not less than three and not more than seven persons elected in their personal capacities, membership now consists of twelve members (not less than nine and not more than twelve members), seven of whom are from the Member States and five from cooperating states and organizations. Each member is appointed for three years and is eligible for re-appointment.

The Executive Secretariat executes all the mandates of the Governing Council and implements all decisions taken by the Council. The Executive

Secretary and the Deputy Executive Secretary are elected for a three-year term of office on the expiry of which they are eligible for re-election in the same capacity for one further term of office.

2.2.2 Departments and divisions

The WARDA Secretariat includes four departments - Research, Development, Training and Administration and Finance - and two divisions - Communications and Documentation (Appendix 2).

The Research, Development and Training Departments carry out the technical programmes and activities of WARDA with support from the Department of Administration and Finance and Divisions of Communications and Documentation.

The Research Department is responsible for:

- research coordination involving planning, formulation and implementation of approved research projects;
- coordinated trials of varieties and crop protection at a network of locations in the region; and
- supporting the special research projects, giving direct assistance to national research institutions and covering research into:

mangrove swamp rice	- Rokupr, Sierra Leone
upland rice	- Bouaké, Ivory Coast
irrigated rice	- Richard Toll, Senegal
deep-water and floating rice (see Appendix 1)	- Mopti, Mali

The Development Department provides technical assistance to Member States in rice policy, planning, project preparation, implementation and evaluation; collection, processing and dissemination of rice statistics and the assessment and transfer of appropriate technology. Its activities include extension and seed multiplication.

The Training Department provides training and refresher courses to qualified trainees from the region. The courses are given at the Regional Training Centre in Fendall, Liberia or at other locations in the region where appropriate and adequate facilities are available. The courses so far covered are:

- Research Assistants Course;
- Rice Production Specialists Course;
- Project Managers Course;

- Water Management Course;
- Post Harvest Technology Course;
- Seed Multiplication Course;
- Extension and Communications Course.

Future courses (Appendix 11), will include:

- Farm Mechanization Course, and
- Prevention of Food Losses in Crops.

The Training Department is also responsible for advanced training of staff members and nationals of Member States in higher institutions overseas.

The Department of Administration and Finance provides supporting services in the areas of personnel, administration, procurement and finance.

The Communications Division looks after translation and interpretation into one or other of WARDA's two official languages (English and French) and does most of WARDA's printing, publication and public relations work.

The Documentation Division prints indexes and bibliographies on all aspects of rice production for Member States and others interested. It catalogues and stores all documentation related to WARDA's work. It runs a library and a Question and Answer service based on the indexes. It has a laboratory for microfilming, reprography and photography. Appendix 12 lists the main publications to date.

2.3 FUNDING OF WARDA

The financial contribution placed at the disposal of WARDA by its Member States is supplemented by contributions from bilateral and multilateral sources in line with the provisions of Article X.5 of the Constitution which permits the Association to accept gifts, legacies, grants, etc., if these are intended for the furtherance of the purposes of the Association. A number of donors contribute bilaterally to WARDA as well as through the Consultative Group on International Agricultural Research (CGIAR).

2.3.1 Member States

The assessment from Member States is used mainly to meet administrative expenses generally, referred to as Administrative Budget or General Fund. In 1976, the WARDA Fund was created in addition to the General Fund to finance positions initially financed by UNDP, or to fund posts and projects for which funding was delayed and to bridge budgetary gaps where funding

had terminated or where the Association regards the project as urgent. It is also to fund certain project elements if the regulations of donors prevent the financing of the whole project. There is a WARDA Reserve Fund which is built from unspent cash in the General Fund following the year in which audit of the final accounts was completed and also from miscellaneous income.

2.3.2 Donors

WARDA donors include national, regional and international organizations among whom may be mentioned: CGIAR ^{1/}, European Economic Commission (EEC), UNDP, FAO, International Development Research Centre (IDRC), United States Agency for International Development (USAID), Canadian International Development Agency (CIDA), Ford Foundation and Rockefeller Foundation.

The following bilateral donors have, at one time or another, contributed to the programmes of WARDA, and most of them still do so - Abu Dhabi, Belgium, Canada, France, Japan, Kuwait, Netherlands, Saudi Arabia, Switzerland, United Kingdom and the United States of America.

WARDA's expenditure, as distinct from the pledges made by Member States and donors, has risen in the following order:

1972-73	US\$ 1 307 672
1974	1 321 404
1975	1 681 184
1976	2 417 107
1977	3 869 360
1978	5 296 083
1979	6 298 055
1980	7 160 427

In 1981, pledges made amounted to US\$10 315 610 (Appendix 8).

The 1980 expenditure was contributed by:

CGIAR	US\$ 2 593 424 (36.2%)
Other donors	2 936 767 (41.0%)
Member States	1 630 236 (22.8%)

In addition to the above pledges several donors provide bilateral assistance in kind to WARDA. The estimate of the yearly contribution in this form is around US\$ 1.5 million.

The budget for 1981 is given in Appendix 9. Percentage contribution to the budget 1976-81 is shown in Appendix 7.

^{1/} Abu Dhabi, Belgium, Canada, France, Germany (Federal Republic), Japan, Netherlands, Sweden, IFAD, OPEC, USAID.

2.4 FIVE-YEAR DEVELOPMENT PLAN 1981-85

Following a recommendation in 1979 by the Quinquennial Review Mission set up by the Technical Advisory Committee of CGIAR and approved by the Governing Council, WARDA embarked on the preparation of a Five-year Development Plan 1981-85 which redefined and strengthened the core programmes in research, development and training and re-inforced the various linkages among these programmes.

The research programme gave adequate attention to upland rice production both in the savannah and the forest agroecological zones. This type of rice is the most widely cultivated in the region, although the least productive.

The programme in development included a technology assessment and transfer which assembled relevant research results from WARDA programmes as well as those of other institutions in order to develop packages for farmer field trials.

The training programme identified training needs of Member States, and strengthened training in communication and extension. An appreciable number of the courses were planned, to be given in Member States where facilities existed.

The budget required to execute the Plan is large (nearly US\$ 82 million), but WARDA has the capacity to implement the programmes (Appendix 10).

The Five-year Development Plan was discussed at a Conference of WARDA Donors co-sponsored by UNDP and FAO and held in Rome in April 1981. Fourteen WARDA Member States were represented, eight at Ministerial level. The donors included the co-sponsors, Belgium, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Sweden, Switzerland, UK, USA, and EEC and IFAD. Observers at the Conference were Australia, the International Institute of Tropical Agriculture (IITA), the Permanent Inter-State Committee for Drought Control in the Sahelian zone (CILSS), Mano River Union (MRU) and the Niger River Basin Authority.

There were favourable comments from the donors on the Plan and some of the delegates indicated the technical areas which they considered should be given priority in the region. A few of the donors pledged continued support and some proposed, as a bridge between research and application and the setting up of a Trust Fund, to finance follow-up pilot projects in Member States.

The interest of donors was evident in their request to attend the annual meetings of the WARDA Governing Council.

2.5 TCDC PROJECT 'RICE PRODUCTION IN WEST AFRICA'

The main aim of the TCDC project 'Rice Production in West Africa' RAF/78/075, executed by WARDA was to enable the judicious and effective use of the scientific, technical and scarce financial resources in West Africa to achieve regional selfsufficiency in rice. The long-term objective was to strengthen WARDA as a regional organization for rice development.

The project was for a period of three years with effect from January 1979. Its activities included a regional inventory of facilities (organization, personnel, equipment, etc.) with TCDC potential, setting up a TCDC information service including the production of a bulletin and the initiation of TCDC activities in the region which so far have included a review of the feasibility study of the Jakhally and Patcharr swamps in the Gambia, and the provision in Nigeria of the services of a rice mill engineer by the Anambra/Imo States Rice Project to the Ogun/Oshun River Basin Development Authority.

Because of certain difficulties and delays the project is to terminate a year later than planned, at which time it is expected to be absorbed into the normal activities of WARDA.

2.6 OVERALL ACHIEVEMENTS

WARDA's achievements clearly establish its capacity and viability. Commencing 1974, some of these are listed below:

- tested 869 varieties or strains of rice of which 57 were found ideal for upland and 89 for irrigated conditions;
- selected six promising short-duration varieties for inclusion in coordinated trials;
- screened several hundred varieties for cold tolerance and nearly 200 varieties for mangrove conditions;
- through the special research projects and the offices of sub-regional coordination, gave support to national institutions in an attempt to reinforce national capability;
- conducted a socioeconomic and crop-loss study at the Office du Niger, Mali;
- produced and issued large quantities of foundation seed;
- worked on model seed legislation for West Africa;
- made a number of case studies on behalf of Member States;
- assisted Member States in carrying out project identification, preparation, appraisal and implementation;

- assisted Member States in improving rice milling techniques and storage;
- produced a study of political economy of rice in West Africa;
- produced current bibliographies and documents such as a rice statistics yearbooks, world rice references for West Africa, an index of rice development projects, and rice varieties recommended in the WARDA region;
- turned out 662 graduates from WARDA specialized courses;
- issued equipment and put up infrastructure for research work in Member States.

3. UNDP/FAO PROJECT - ACTIVITIES

3.1 ORGANIZATION OF TECHNICAL ASSISTANCE

Over the years the project experts have provided assistance to WARDA in several technical fields and some have assumed the role of heads in order to run Departments and Divisions as employees of WARDA. The following summarizes the areas in which project personnel have given assistance:

Executive Secretariat

Senior Adviser (acted for the Executive Secretary, in the absence of both ES and DES)

Legal Officer (UN Volunteer)

Department of Administration and Finance

Administrative Officer (as Head of Administration and Finance)

Bilingual Secretary

Research Department

Breeder (Associate Expert)

Development Department

Agronomists (one as Head of Department)

Economist

Economist/Mechanization (Associate Expert)

Rice Processing Specialists

Irrigation Specialist

Mechanization Expert (Associate Expert)

Extension Specialists (Associate Experts)

Training Department

Extension Specialists (Associate Experts)

Communications Division

Translator

Documentation Division

Documentalist (as Head of Division)

Data Processing Expert

Technical Photographers

Librarian/indexers (UN Volunteers)

While the Senior Adviser and FAO Liaison Officer (previously designated Team Leader) had advised and assisted the Executive Secretary in the discharge of specific duties, all the experts had carried out the assignments and duties of the Association. While acting as Heads of Departments or Divisions, the project personnel had taken the lead in preparing the programme of work and budgets for their respective units and assisted in the preparation of all documents for the Scientific and Technical Committee and the Governing Council. The Heads provided general supervision of work in their units and were responsible for discipline. All the experts undertook duty travel on behalf of WARDA to the Member States to collect information, identify and formulate projects and advise Member States on request on pertinent issues.

The Translator was responsible for arranging translation and for the printing of all documents for WARDA meetings at which he also acted as rapporteur.

With the departure of most of the project personnel WARDA has filled some of the more important positions, e.g., Director (Head) of Administration and Finance and Director (Head) of Development Department.

The activities of WARDA reflect project activities which were not restricted to specific areas since the assistance provided was shared by all Departments and Divisions including the Executive Secretariat. No attempt will therefore be made to identify activities which were exclusively those of the project.

Though project staff were also stationed in one of the special projects, at Richard Toll, Senegal, most of the assistance was given to the coordination and direction at Association headquarters.

The main lines of support may be summarized as follows:

- directing WARDA administrative and financial services and assisting in the executive direction of WARDA;
- undertaking missions for project identification and appraisal, often at the request of member governments;
- exchange of information and joint missions with bilateral and multilateral financing institutions;
- carrying out general and sectoral studies, often in cooperation with other institutions;
- collecting and processing rice statistics.
- preparation of training manuals and other documents for meetings, workshops and seminars;

- translation and revision of documents;
- editing and printing of documents;
- lecturing at the WARDA Training Centre;
- indexing, and providing library assistance.

3.2 MISSIONS, WORKSHOPS AND SEMINARS

In addition to various missions undertaken by project staff on behalf of WARDA to Member States to give advice or provide assistance, there were workshops, reviews and seminars organized by WARDA in which project staff participated. Important among the subjects discussed were general rice research, development and training of national staff, strategies for rice development in West Africa, integrated pest control, rodent and bird pests of rice, soil fertility and fertilizer use and breeding and varietal improvement.

These meetings provided a valuable opportunity for the technical personnel of WARDA to exchange views with technicians in the region and also to obtain a feedback on WARDA programmes and orientation. While favourable comments from donors have been received, the problem is to obtain pledges over a reasonably long period to enable forward planning to be made for the implementation of the programmes. Though a lot of goodwill was in evidence at the Donors' Conference in Rome, some of the countries had financial constraints and others could not give multi-year commitments. Most of the donors hoped a clearer situation would have emerged by the time of the next Governing Council. The donors at the Conference agreed to hold a mid-term review after two or two-and-a-half years following the implementation of the Plan in order to make adjustments where necessary.

3.3 FELLOWSHIPS TRAINING

Phase I of the project provided for short-term training of six months each in storage and processing, economics, and documentation. Training was meant to be given to project personnel, i.e., counterparts.

Since the WARDA staff members were as qualified as the project experts and could not be regarded as counterparts in the normal way, the fellowships were opened to qualified nationals in Member States even though they were not assigned to the project. It was however not possible to locate qualified nationals of the region who could take advantage of such short-duration fellowships, and the proposal was made and accepted to use funds under the

training component for language, administrative and financial training. Funds which were available under training during the Phase II of the project were similarly used.

The project staff were closely involved in the various training courses organized by WARDA at the Training Centre, Fendall, for trainees from the Member States. WARDA has also given post-graduate training overseas to a number of staff members and nationals of Member States.

WARDA is in the process of reviewing and evaluating its rice training programmes with a view to improving the courses.

A list of those who have benefited from training sponsored by the project is given in Appendix 5.

3.4 EQUIPMENT

The project equipment acquired from the inception of the project and at the initial stages of the Phase II was officially transferred to WARDA during the second half of 1977. The items included non-expendable and miscellaneous expendable supplies and carried an estimated value of about US\$ 56 000. They included microfilms, photographic equipment, office furniture and equipment, film laboratory equipment, air conditioners, vehicles, calculating machines, surveying equipment and textbooks.

A list of the major items - some of which have already been handed over to WARDA - is given in Appendix 6.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 VIABILITY OF WARDA

The slow start of the Association did not in any way affect the plans which the Secretariat made for promoting rice development in the region. It is true that WARDA had to compete on the open market for qualified technical staff, but the major factor which greatly affected the rate of progress and achievement of WARDA has been the availability of funds. Thus funds had determined which programmes could be implemented. The situation has no bright prospects since the Association cannot hope to marshal enough funds from its Member States, a fair number of which are among the most seriously-affected countries. It is foreseen that Member States will need all the assistance that they can get.

The Association has the capacity to operate at a level much higher than at present if the necessary funding can be made available.

A bold attempt to secure such funding is reflected in the Five-year Development Plan 1981-85 which envisages the utilization of an average of approximately US\$ 16 million a year over the five years. The proposals in the Plan have been accepted by the Governing Council.

4.2 RECOMMENDATIONS

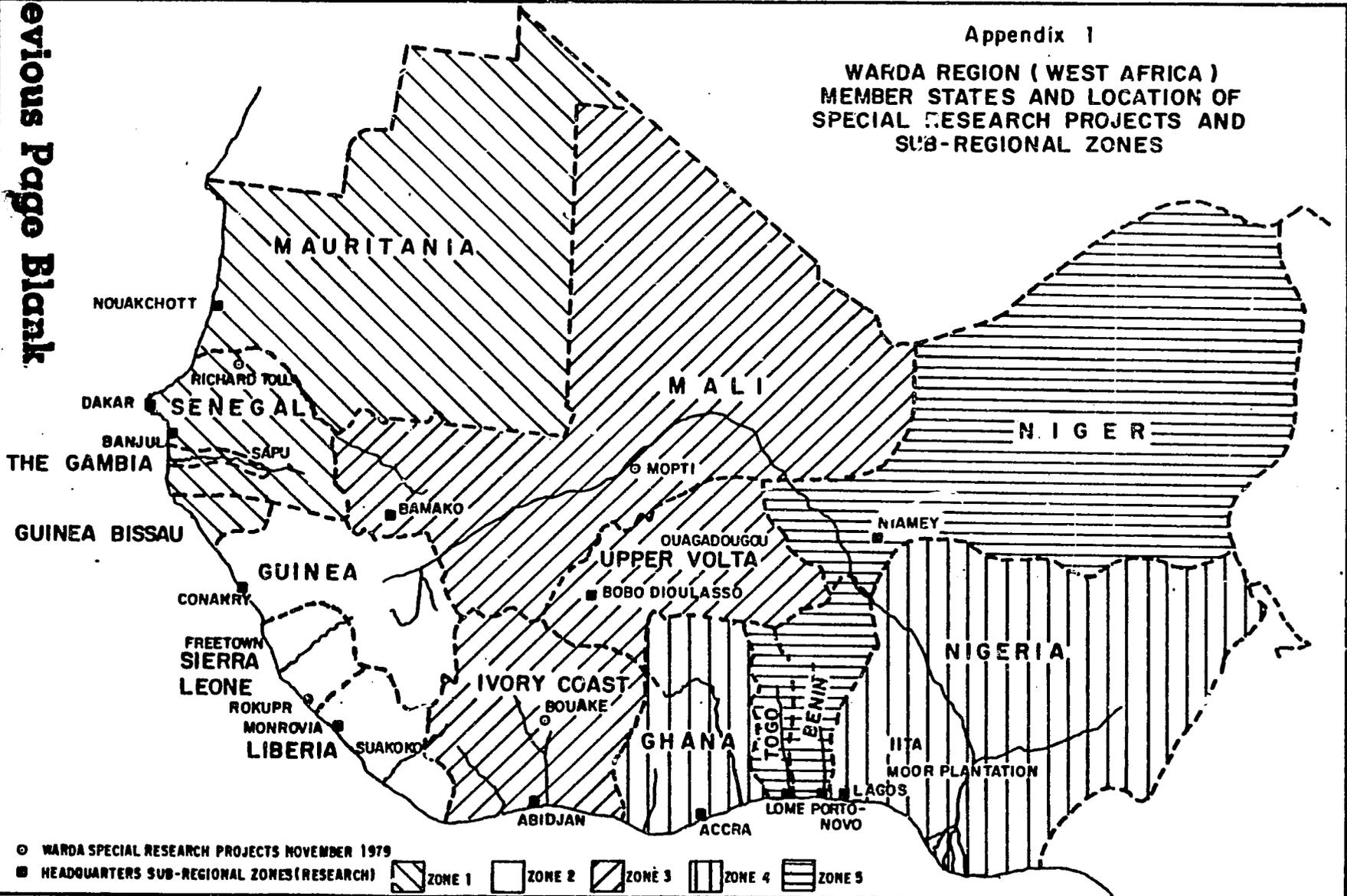
The recommendations given here are meant to complement or emphasize those already given to WARDA by several review missions over the years. These should not be regarded as criticisms but as pointers to areas requiring urgent and critical attention.

1. It should now be obvious that the yearly financial requirements to carry out the programmes in the Five-Year Plan may not be realized and it is therefore suggested that a fresh look be taken at the core programmes and a sharper identification and classification into priority areas be made.
2. The recommendations made in the field of administration and personnel management by various consultants should be closely studied with a view to their implementation, bearing in mind that in most cases package implementation is more likely to produce the desired results than selective implementation.

3. WARDA should engage in discussions with donors for the eventual formation of a consortium in order to simplify the budgeting, audits, and reporting to donors and eliminate the series of independent technical reviews carried out by donors. Such a move may also ensure long-term and stable funding.
4. To make WARDA a more effective instrument for TCDC activities in the region, the creation of WARDA representatives in the region to monitor all WARDA activities while establishing and maintaining contacts with the national research, development and training activities must be pursued.
5. Member States should be encouraged to make timely contributions. Presently it takes five years for all Member States to pay their assessments for any one year (see Appendix 7). The delay in making payments has created cash flow and liquidity problems.
6. The scientific staff at Headquarters should play a bigger role in rice development in the Member States even if it means a planned decentralization of staff to the field.
7. WARDA should assist Member States more effectively in identifying and formulating projects for implementation, and suggest sources of funding.
8. Specific terms of reference must be laid down by the Governing Council and included in the Basic Texts for the Deputy Executive Secretary who is appointed by the Governing Council. This would actively involve him in the day-to-day administration of the Association.
9. All decisions taken should be in accordance with the Rules of the Association.

Appendix 1

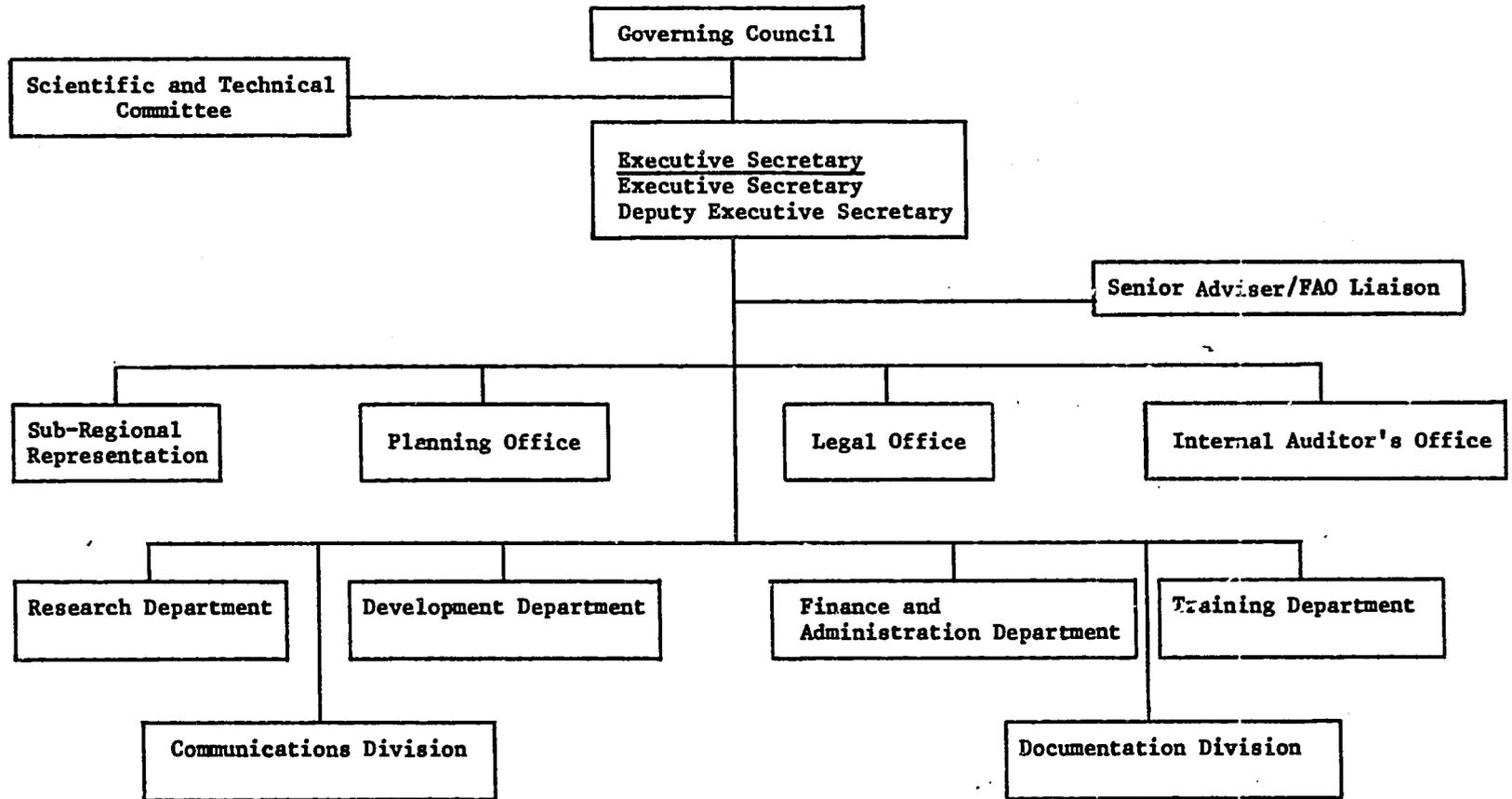
WARDA REGION (WEST AFRICA)
MEMBER STATES AND LOCATION OF
SPECIAL RESEARCH PROJECTS AND
SUB-REGIONAL ZONES



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Appendix 2

WARDA ORGANIZATIONAL CHART, FIVE-YEAR PLAN (1981-85)



1981-1985

Appendix 3

LIST OF UNDP/FAO PROJECT STAFF

<u>Name</u>	<u>Function</u>	<u>Dates of Service</u>	
		<u>Starting Date</u>	<u>Concluding Date</u>
P.G. de Boer	Team Leader	11 Oct. 1972	7 Nov. 1978
E. Quartey-Papafio	Senior Adviser/FAO Liaison Officer	7 Jan. 1979	31 Dec. 1981
D.S. Wild	Economist	11 March 1973	1 July 1975
J. Vianen	Economist/Associate Expert 1/	21 Oct. 1973	30 June 1975
H.P. Rozeboom	Rice Processing/ Associate Expert 1/	21 Oct. 1973	20 Oct. 1977
H. van Ruiten	Rice Processing Specialist	11 Sept. 1975	30 June 1977
D. Aw	Agronomist	23 Jan. 1974	18 Jan. 1979
C.E. Tagoe	Agronomist	25 July 1975	30 Sept. 1977
S. Botchey	Agronomist	12 Dec. 1979	11 Dec. 1980
D.S.C. Spencer	Agronomist	1 Jan. 1980	31 Dec. 1980
Y.H. Dzang	Irrigation Specialist	1 Aug. 1975	15 June 1976
J. Dome	Breeder/Associate Expert 2/	22 Oct. 1978	22 Oct. 1981
J.P. Hubert	Mechanization Economics/ Associate Expert 2/	13 Feb. 1979	31 Dec. 1981 ^v
P. de Schryver	Mechanization, Associate Expert 2/	20 Feb. 1977	6 Jan. 1980
A. Britton	Extension/Associate Expert 3/	3 Jan. 1975	7 Jan. 1979
C. Simmons	Extension/Associate Expert 3/	6 Jan. 1977	30 Oct. 1978
W.J. Baulkwill	Documentalist	1 July 1972	1 Sept. 1973
K. Hoppe	Documentalist	1 July 1974	31 Dec. 1976
W. Sachers	Data Processing/Associate Expert 4/	1 July 1973	1 April 1975
A.P. Gerard	Data Processing Expert	31 Jan. 1974	30 June 1975
A.P. Gerard	Data Processing (Consultancy)	1 July 1975	31 Dec. 1975

1/ Netherlands

2/ Belgium

3/ USA

4/ Federal Republic of Germany

<u>Name</u>	<u>Function</u>	<u>Dates of Service</u>	
		<u>Starting Date</u>	<u>Concluding Date</u>
E.A.R. Neblett	Technical Photographer	15 Dec. 1972	31 March 1975
G. Boccara	Translator	1 April 1973	31 Dec. 1980
Ilona Cafuir	Librarian/Indexer, UN Volunteer <u>1/</u>	20 March 1977	20 March 1981
S. de Lima	Librarian/Indexer, UN Volunteer <u>1/</u>	16 Dec. 1977	31 Dec. 1981
F. Abebe	Legal Officer, UN Volunteer <u>2/</u>	23 Oct. 1979	31 Dec. 1981
A. Bardisbanian	Administrative Officer	1 Feb. 1972	1 Sept. 1973
G.J. Miquel	Administrative Officer	1 Oct. 1973	31 Jan. 1976
A. Borghi	Bilingual Secretary	4 Feb. 1973	2 July 1975

1/ Philippines

2/ Ethiopia

Appendix 4

**WARDA STAFF LIST AS AT SEPTEMBER 1981
(FULL TIME)**

<u>Name</u>	<u>Function</u>	<u>Date of Entry</u>
<u>Executive Secretariat</u>		
S. Coulibaly	Executive Secretary	31 July 1977
Nah-Doe Bropleh	Deputy Executive Secretary	9 Jan. 1978
B.D. Senegal	Chief, Planning and Audit	29 June 1977
<u>Research Department</u>		
B.A.C. Enyi	Director of Research	10 Jan. 1977
G.A. Paku	Agronomic Statistician	2 March 1977
A.O. Abifarin	Senior Rice Breeder and IITA/WARDA Liaison Scientist	14 Sept. 1978
M.A. Choudhury 1/	Senior Rice Breeder	3 Feb. 1976
D. Das Gupta 1/	Senior Agronomist	1 July 1975
E.A. Akinsola	Entomologist	18 Jan. 1980
A.K. Koroma	Assistant Plant Breeder	21 Jan. 1980
B. Larinde	Seed Technologist	23 July 1974
L. Kandakai	Assistant Seed Technologist	1 March 1978
G. Varango	Architect	31 July 1978
N.S. Bangula	Assistant Plant Pathologist	11 Dec. 1978
V. Awoderu	Senior Plant Pathologist	1 Aug. 1981
<u>Outreach Programme</u>		
E. Jones 1/	Soil Chemist and Head (Rokupr)	15 Jan. 1976
M. Agyen-Sampong	Entomologist (Rokupr)	21 Nov. 1976
J. Dallard 1/	Agronomist (Bouake)	8 Oct. 1974
H. van Brandt 1/	Soil Scientist and Head (Fanaye)	9 April 1977
S. Koli	Agronomist	7 July 1979
A. Coly	Team Leader (Richard Toll)	1 July 1981
<u>Sub-Regional Representatives</u>		
S. Asseginou and M. Diakite	Ivory Coast Mali Upper Volta	1 Dec. 1977 15 Dec. 1979

1/ Not from the region.

<u>Name</u>	<u>Function</u>	<u>Date of Entry</u>
<u>Sub-Regional Representatives (Cont'd)</u>		
J.O. Olufowote and C. Pankani	Ghana Nigeria	1 Aug. 1981 2 Jan. 1979
R. Kagbo and K. Shambuyi <u>1/</u>	The Gambia Guinea-Bissau Mauritania Senegal	14 July 1977 10 Feb. 1980
Managed from Headquarters Koffi-Tessio Comlan and M. Daffe	Liberia Sierra Leone Benin Niger Togo Guinea	4 Aug. 1973 1 Feb. 1981 23 Dec. 1979
<u>Development Department</u>		
D.S.C. Spencer	Director of Development	3 March 1977
D. Sanni	Deputy Director of Development	6 June 1978
P. Sessou	Rural Engineer	1 Sept. 1976
S. Botchey	Agronomist	14 Dec. 1979
A.O. Adewusi	Rice Processing Expert	17 Jan. 1980
M. Kita <u>1/</u>	Rice Processing Expert	20 Nov. 1980
L. Kone	Loans Expert	7 Jan. 1980
Mamadou Diallo	Agronomist	31 March 1980
P. Asante	Agricultural Economist	1 Oct. 1980
M. Samake	Economist	11 Aug. 1980
K. Sarfo	Agricultural Economist	1 Oct. 1980
M. Briat <u>1/</u>	Mechanization Expert	17 Jan. 1980
Z. Anevoh	Rural Engineer	13 Oct. 1980
<u>Outreach Programme</u>		
A. Diop	Head, Seed Multiplication Centre, Richard Toll	1 April 1977
P. Diouf	Assistant Head, Seed Multiplication Centre, Richard Toll	1 March 1977
<u>Training Department</u>		
D.K. Awute	Director of Training	3 Nov. 1978
M.K. Conteh	Chief, Training Centre	15 Dec. 1978
Lois Zanoni <u>1/</u>	Special Assistant to the Director	1 May 1980
T. Seddoh	Interpreter/Translator	24 Jan. 1977
J. Nketsiah	Interpreter/Translator	14 Dec. 1977
A. Maiga	Training Officer/Francophone	18 Jan. 1977
K. Akintayo	Training Officer/Anglophone	30 May 1980
T. Cole	Training Officer/Pathology	23 June 1977

1/ Not from the region.

<u>Name</u>	<u>Function</u>	<u>Date of Entry</u>
<u>Department of Administration and Finance</u>		
G. Coleridge-Taylor	Director of Administration and Finance	1 April 1978
J.N. Quaye	Chief of Administration	3 Sept. 1978
C.B. Dunbar	Personnel Officer	8 Oct. 1974
S.J. Merchant	Liaison Officer	16 June 1975
G. Olaopa	Finance Officer	1 Oct. 1980
V. Cooper <u>1/</u>	Budget Officer	1 March 1980
<u>Communications Division</u>		
T. Asongwed <u>1/</u>	Translator	17 Nov. 1978
D. Gaye	Translator	1 Dec. 1980
W. Godderis <u>1/</u>	French Teacher	31 Sept. 1977
A. Fahnbulleh (Ms)	Junior Translator	1 Sept. 1979
<u>Documentation Division</u>		
L. Guindo	Senior Indexer	1 Aug. 1976
E. Neblett	Technical Photographer	1 June 1978
A. Mbarquie	Technical Photographer	8 Oct. 1979

1/ Not from the region.

Appendix 5

FELLOWSHIP TRAINING

<u>Name/Function</u>	<u>Training</u>	<u>Duration</u>
E.A.R. Neblett Technical Photographer	Microfiche photography, Senegal and France	1 Feb. 1973-31 Feb. 1973
L. Guindo Indexer	Indexing, Italy and Morocco	1 April 1973-19 May 1973
A. Diop Assistant Seed Specialist	Seed multiplication, Bouaké, Ivory Coast	27 March 1975- 1 Aug. 1975
C.B. Dunbar Personnel Officer	Personnel, FAO, Accra	28 April 1975-28 May 1975
L.A. Are Deputy Executive Secretary	French language, France	1 May 1975- 1 June 1975
C.S. Kumodzi Procurement Officer	Procurement, FAO, Rome	1 May 1975- 1 June 1975
H. Will Research Coordinator	French language, France	1 Aug. 1975-30 Aug. 1975
A.K. Djadoo Chief, Administration and Finance	Administration, FAO, Rome	31 Oct. 1975-11 Nov. 1975
H.G. Ankoma-Sey Finance Officer	Finance, FAO, Rome	2 March 1976-24 March 1976
C.B. Dunbar Personnel Officer	Personnel, FAO, Rome	2 Sept. 1979- 3 Oct. 1979
V. Duchein Administrative Secretary	Travel documentation, FAO, Rome	25 Sept. 1979- 5 Oct. 1979
A. Larbi Budget Assistant	Budget, FAO, Rome	25 Jan. 1980-25 Feb. 1980

Appendix 6

EQUIPMENT INVENTORY

Vehicles

Peugeot 404 sedan
Peugeot 404 station wagon
Peugeot 404L station wagon

Laboratory equipment

Camera, microfiche 'Diplomat' 1968 (rebuilt),
complete with standard equipment

Developing machine 'Sebafilm' with cooling unit, water
filter and transformer/stabilizer

Printer developer 'Bell and Howell', Model 404 complete
with standard equipment

Microfilmer, 'Recordak Starfile', Model RV2 plus lens
Model 227 and Filmust CV plus transformer 300 W 220/110 V

Autoload electrographic microfilm reader-printer paper (10 boxes)

Office equipment

Secretarial desks	(10)
Executive desks	(10)
Executive chairs	(10)
Electric typewriters	
'Olivetti Editor 4'	(3)
Air conditioners	(3)

Appendix 7**WARDA BUDGET 1976-81 - PERCENTAGE CONTRIBUTION**ADMINISTRATIVE BUDGET

<u>Percentage Contribution</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
January - June	29.33	21.02	19.33	19.48	38.02	4.83
July - December	21.63	14.24	28.52	20.45	17.62	-
	50.96	35.26	47.85	39.93	55.64	4.83
Arrears paid in 1977	23.88	-	-	-	-	-
1978	19.61	31.97	-	-	-	-
1979	-	23.13	24.99	-	-	-
1980	5.55	4.01	16.74	51.70	-	-
1981	-	-	-	-	23.41	-
as at 30 June 1981	100.00	94.37	89.58	91.63	79.05	4.83

WARDA SPECIAL FUND

<u>Percentage Contribution</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
January - June					21.09	12.12
July - December					9.11	-
	17.67	6.34	7.25	7.28	30.20	12.12
Arrears paid in 1977	8.13	-	-	-	-	-
1978	17.19	21.91	-	-	-	-
1979	-	10.16	28.67	-	-	-
1980	56.98	59.30	34.70	31.48	-	-
1981	-	-	25.19	37.09	-	-
as at 30 June 1981	99.97	97.71	95.81	75.85	30.20	12.12

Appendix 8

WARDA FUNDING 1972-81
(US\$)

<u>Donor</u>	<u>Pledge</u>	<u>RECEIPTS</u>		<u>Expenditure</u>
		<u>CY 1/</u>	<u>PY 2/</u>	
		<u>1972 and 1973</u>		
Members - General Fund	821 404	604 883	-	397 270
Ford Foundation	30 000	30 000	-	30 000
France	160 000	20 370	-	20 370
Netherlands	100 000	74 000	-	72 986
UNDP/FAO	513 137	513 137	-	513 137
USAID	625 000	280 000	-	273 909
Sub-total	2 249 541	1 522 390	-	1 307 672
		<u>1974</u>		
Members - General Fund	499 018	383 066	173 209	409 385
France	84 694	84 694	-	18 881
Netherlands	-	-	-	-
UNDP/FAO	268 209	268 209	-	268 209
USAID	-	153 230	-	128 812
CGIAR	654 660	359 014	-	487 670
Kuwait	150 000	150 000	-	8 447
Sub-total	1 656 581	1 398 213	173 209	1 321 404
		<u>1975</u>		
Members - General Fund	497 738	324 569	125 300	491 900
France	71 700	-	-	62 027
Netherlands	-	-	-	-
UNDP/FAO	421 364	421 364	-	421 364
USAID - Training/Rokupr	737 000	306 254	-	306 254
CGIAR	555 000	439 408	-	355 243
Saudi Arabia	300 000	100 000	-	-
Abu Dhabi	50 000	50 000	-	10
Kuwait	-	-	-	44 386
Sub-total	2 632 802	1 641 595	125 300	1 681 184

1/ CY - Current year

PY - Prior year (Members only)

RECEIPTS

<u>Donor</u>	<u>Pledge</u>	<u>CY</u>	<u>PY</u>	<u>Expenditure</u>
		<u>1976</u>		
Members - General Fund	577 300	294 150	190 066	509 219
- WARDA Fund	1 020 442	-	-	-
France	148 530	243 685	-	171 763
Netherlands	65 000	65 000	-	65 000
UNDP/FAO	456 370	456 370	-	456 370
USAID - Training/Rokupr	445 000	476 963	-	611 638
- Mopti	665 000	-	-	-
Saudi Arabia	200 000	-	-	3 245
CGIAR	827 000	642 261	-	485 765
Switzerland	85 156	50 000	-	36 914
IDRC	182 750	71 913	-	29 812
Belgium	32 580	-	-	18 838
Kuwait	-	-	-	24 905
Abu Dhabi	-	-	-	3 638
Sub-total	4 705 128	2 360 342	190 066	2 417 107

1977

Members - General Fund	710 829	250 602	181 424	711 315
- WARDA Fund	1 180 508	170 972	180 344	-
France	714 100	470 538	-	470 674
UNDP/FAO	228 776	228 776	-	228 776
USAID - Training/Rokupr	443 000	598 926	-	598 926
- Mopti	449 000	497 570	-	497 570
CGIAR	1 275 000	985 494	-	673 887
Saudi Arabia	-	-	-	106 220
Switzerland - II	182 500	122 056	-	124 631
IDRC	83 300	178 055	-	224 307
Belgium	32 200	-	-	11 970
CIDA	350 000	352 111	-	175 385
Abu Dhabi	-	-	-	23 890
Kuwait	-	-	-	21 809
Sub-total	5 649 213	3 855 100	361 768	3 869 360

RECEIPTS

<u>Donor</u>	<u>Pledge</u>	<u>CY</u>	<u>PY</u>	<u>Expenditure</u>
		<u>1980</u>		
Members - General Fund	1 148 470	639 050	709 474	1 347 978
- WARDA Fund	1 207 388	484 559	2 091 823	282 258
France	279 530	243 042	-	240 978
UNDP/FAO	298 241	298 241	-	298 241
USAID - Training/Rokupr	680 700	649 089	-	649 089
- Mopti	319 300	318 368	-	318 368
- Studies	-	27 489	-	27 489
CGIAR	2 768 000	2 504 006	-	2 593 424
Switzerland	292 700	15 549	-	261 635
IDRC	154 445	189 324	-	178 129
Belgium	380 700	124 041	-	275 183
UK	139 500	139 500	-	139 500
Japan	200 000	200 000	-	154 769
Rockefeller	8 250	8 250	-	9 535
EEC	561 715	273 187	-	258 151
UNDP-TCDC	129 975	129 975	-	125 700
Sub-total	8 568 914	6 243 670	2 801 570	7 160 427

1981

Members - General Fund	1 844 731
- WARDA Fund	1 207 388
France	259 259
UNDP/FAO	109 067
USAID/ - Training	854 700
- Rokupr	276 800
- Mopti	529 600
- Studies	-
- Ext./Liaison	338 900
CGIAR	3 085 000
Switzerland	353 310
IDRC	152 309
Belgium	361 443
Japan	300 000
EEC	489 940
UNDP-TCDC	79 063
UK	74 100
<u>Total</u>	<u>10 315 610</u>

Appendix 9

WARDA BUDGET SUMMARY 1981 - HEADQUARTERS

(US\$)

	Executive Secretariat	Research	Develop- ment	Training	Admin. and Finance	Documenta- tion	Communica- tions
BELGIUM							
Azolla	-	-	-	-	-	-	-
Irrigated rice	-	-	-	-	-	-	-
Seminars and courses	-	-	-	125 000	-	-	-
Headquarters	-	-	-	-	-	-	4 237
CGIAR	-	2 354 000	45 000	68 000	151 000	86 000	87 000
EEC	-	-	266 740	-	-	-	38 600
FRANCE							
Headquarters	-	-	259 259	-	-	-	-
IDRC	-	-	-	-	-	-	-
JAPAN	-	-	300 000	-	-	-	-
MEMBERS STATES							
General Fund	406 707	-	112 509	147 925	871 351	123 119	183 120
WARDA Fund	50 000	-	160 230	96 500	-	-	-
USAID	-	-	338 900	854 700	-	-	-
Socioeconomic studies	-	-	105 340	-	-	-	-
Switzerland	-	-	85 500	267 710	-	-	-
UNDP - FAO	93 907	-	-	-	-	15 160	-
UNDP - TCDC	-	-	79 063	-	-	-	-
UK - ODA	-	-	-	-	-	-	-
Total	550 614	2 354 000	1 752 541	1 559 935	1 022 351	224 279	312 957

	Rokupr	Richard Toll	Mopti	Bouaké	Suakoko	Other	Total
BELGIUM							
Azolla	13 640	13 640	-	-	14 750	10 000 <u>1/</u>	117 800
Irrigated rice	-	114 406	-	-	-	-	114 406
Seminars and courses	-	-	-	-	-	-	125 000
Headquarters	-	-	-	-	-	-	4 237
CGIAR	57 250	57 250	29 250	29 250	-	121 000 <u>2/</u>	3 085 000
EEC	88 600	-	96 000	-	-	-	489 940
FRANCE							
Headquarters	-	-	-	-	-	-	259 259
IDRC	-	152 309	-	-	-	-	152 309
JAPAN	-	-	-	-	-	-	300 000
MEMBER STATES							
General Fund	-	-	-	-	-	-	1 844 731
WARDA Fund	-	64 000	37 000	75 000	-	724 658 <u>3/</u>	1 207 388
USAID	276 800	-	529 600	-	-	-	2 000 000
Socioeconomic studies	-	-	-	-	-	(105 310) <u>4/</u>	-
Switzerland	-	-	-	-	-	-	353 310
UNDP - FAO	-	-	-	-	-	-	109 067
UNDP - TCDC	-	-	-	-	-	-	79 063
UK - ODA	-	74 100	-	-	-	-	74 100
Total	436 290	541 475	691 850	104 250	14 750	750 318	10 315 610

1/ Allocation for scientist at Louvain University

2/ Working Capital

3/ Difference in assessment and approved budget

4/ Balance available from prior years

Appendix 10

WARDA FIVE-YEAR DEVELOPMENT PLAN
SUMMARY OF PROPOSED BUDGET 1981-85
(US\$ '000)

	1981	1982	1983	1984	1985	Total
Executive Secretariat	1 537.5	1 624.1	1 651.8	1 784.0	1 718.3	8 315.7
Research Department	6 448.2	5 729.1	5 398.5	5 490.7	5 400.7	28 467.2
Development Department	3 080.1	4 062.0	3 703.1	3 901.7	4 125.6	18 872.5
Training Department	2 404.1	2 589.7	2 760.1	2 833.4	3 162.1	13 749.4
Finance and Administration Department	903.0	1 008.6	992.1	1 095.6	1 151.9	5 152.2
Communications Division	990.7	1 092.1	1 134.5	1 194.8	1 256.8	5 668.9
Documentation Division	298.0	298.4	315.4	332.9	349.2	1 593.9
Total Budget	15 661.6	16 404.0	15 956.5	16 633.1	17 164.6	81 819.8

Appendix 11

PROPOSED COURSES - 1981-85 PLAN PERIOD

The following table gives the various courses proposed for the Plan period 1981-85.

Year	Courses to be held at Training Centre							Outside Courses <u>1/</u>				
	RPSC	RAC	PHTC	RCM	SMC	PMC	WMH	FMC	PLC	A-V	RRAC	RRP
1981	X	X	X			X	X	X				X
1982	X	X	X	X	X	X	X					X
1983	X	X	X					X	X	X	X	X
1984	X	X	X		X	X	X					X
1985	X	X	X	X					X	X		X

1/ Courses that cannot be held at the Centre because of time constraints.

KEY

- RPSC - Rice Production Specialist Course (6 months)
- RAC - Research Assistants Course (8 weeks)
- PHTC - Post Harvest Technology Course (6 weeks)
- RCM - Refresher Course on Milling (2 weeks)
- SMC - Seed Multiplication and Certification Course (6 weeks)
- PMC - Project Management Course (6 weeks)
- WMC - Water Management Course (6 weeks)
- FMC - Farm Mechanization Course (6 weeks)
- PLC - Prevention of Losses in Crops (6 weeks)
- A-V - Audio-Visual and Extension Communication (6 weeks)
- RRAC - Refresher Course for Research Assistants (2 weeks)
- RRP - Refresher Course for Rice Production Trainers (2 weeks)

Appendix 12

LIST OF WARDA PUBLICATIONS 1/

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