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INSTITUT SENEGALAIS DE RECHERCHES AGRICOLES
NATURAL RESOURCES-BASED AGRICULTURAL RESEARCH PROJECT
(NRBAR)

ANNUAL WORKPLAN: 1995

APRIL, 1995

in collaboration with
The United States Agency for International Development (USAID)
USAID Project Number: 685-0285
and
The Consortium for International Development (CID)
USAID Contract Number: 685-0285-C-00-2329-00

ISRA Document: NRBAR 95/2A

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United States Agency for
International Development



Institut Senegalais de
Recherche Agricole



Consortium for
International Development



Howard
University

COOPERATIVE PROJECT OF:



Tennessee State
University



Oregon State
University



Development Alternatives
Inc.

- Utah State University
- Texas Tech University
- Katholieke Universiteit Leuven, Belgium

- Royal Tropical Institute, Netherlands
- Institut Francais de Recherche Scientifique Pour le
Developpement en Cooperation, France
- The Natural Resources Institute, England

SUMMARY

This report summarises activities planned for 1995, according to the four major programs of the project and the project's seven major resource components.

PROJECT PROGRAMS

The 1995 **RESEARCH PLANNING** program is summarised in Section 2 and centers on: (1) developing the ISRA strategic plan, (2) strategic and programmatic research priorities studies, (3) a mid-term review of ISRA undertaken by ISRA, its partenaires and donors, (4) a BAME microeconomics study, (5) a research impact study, (6) administrative reorganisation, particularly related to research stations, (7) implementation of the INFORM program, (8) design of the personnel evaluation system, (9) development of ISRA procedures manuals, and (10) development of ISRA's monitoring and evaluation system.

The 1995 **NATURAL RESOURCES MANAGEMENT** program is summarised in Section 3 and focuses on: (1) the review of present and assisting with the planning of future ISRA NRM Research activities so as to identify technologies that may be targeted for validation and recommendation; (2) the institutionalization of a multi-disciplinary farmer-participatory research planning method(s); (3) the establishment of a capacity in geographic information systems; and (4) providing program support to improve the quality of research and its analysis.

The 1995 **OUTREACH** program is summarised in Section 4 and focuses on: (1) the clear definition and delegation of outreach responsibilities within ISRA, based on the planning exercises of 1994 and early 1995, (2) establishing procedures and mechanisms of communication between researchers and their client populations, including the development and delivery of specific messages to farmers, (3) ensuring that agencies of extension and rural development are securely brought into the field testing and technology adoption process as it pertains to ISRA, (4) the enhancement of ISRA/partenaire monitoring skills and capacity, and (5) increasing the understanding of the potential client population.

The 1995 **FINANCIAL MANAGEMENT** program is summarised in Section 5 and focuses on: (1) improving financial management coordination activities, (2) medium and long-term financial planning, (3) the annual budget process, (4) transparent and efficient utilisation of resources, (5) the collection and storage of financial data, (6) processing and communication of financial information, and (7) strengthening financial control systems.

The four project programs will be supported by project-level management, administration, and monitoring and evaluation activities, as well as by the provision of financial services, as described in Section 6.

PROJECT RESOURCES

I. RESEARCH PROGRAM SUPPORT: approximately 5 new Collaborative Research Grants will be awarded, in addition to the expected continued funding of the existing 8 Grants which were awarded in 1993 and 1994. Up to 8 new Grants for Research on Senegal will be awarded, in addition to the expected continued funding of the existing 6 Grants which were awarded in 1993 and 1994. Protocols for the implementation of the Site Visit and Sabbatical programs will be developed.

II. SUPPORT FOR ISRA'S NATURAL RESOURCES PROGRAM: these funds cannot be accessed this year, as it is expected that ISRA will not become financially certified until 1996. In preparation for use of these funds in 1996, the financial certification process will be continued, and an assessment of direct/indirect research costs will be made.

III. LINKAGES TO INTERNATIONAL RESEARCH INSTITUTIONS: these funds cannot be accessed this year, as it is expected that ISRA will not become financially certified until 1996. In preparation for use of these funds in 1996, the financial certification process will be continued.

IV. PERSONNEL: it is anticipated that approximately 30 short-term consultants will be employed this year.

V. TRAINING: the long-term training plan will be revised, and the programs for 5 Ph.D.s and 4 M.S.s in the U.S. will be continued. The additional six M.S. participants will be selected and placed during the year. It is anticipated that approximately fifteen foreign short-term training events, and twenty local short-term training events, will be implemented during the year. The long-term training program for women to B.S. level at ENSA and IST will continue with the 10 candidates already in training.

VI. ISRA DIRECT SUPPORT: it is anticipated that ISRA will continue to provide the necessary physical support, and the necessary staff time and resources, to successfully implement the 1995 program.

VII. USAID DIRECT SUPPORT: it is anticipated that USAID will continue to provide the necessary funding and support for ISRA to successfully implement the 1995 program.

This workplan has been produced as an integrated effort by ISRA, USAID and CID. The proposals are oriented to building upon existing research achievements; the approach is to complement and develop current ISRA initiatives in areas of project focus, while incorporating parallel work such as the technology and financial studies sponsored by USAID, collaborating with other donor activities such as the World Bank Second Agricultural Research Project, completing unfinished work such as the unit cost study under ISRA/USAID SAR II, and institutionalising in ISRA new procedures such as the collaborative research grants program.

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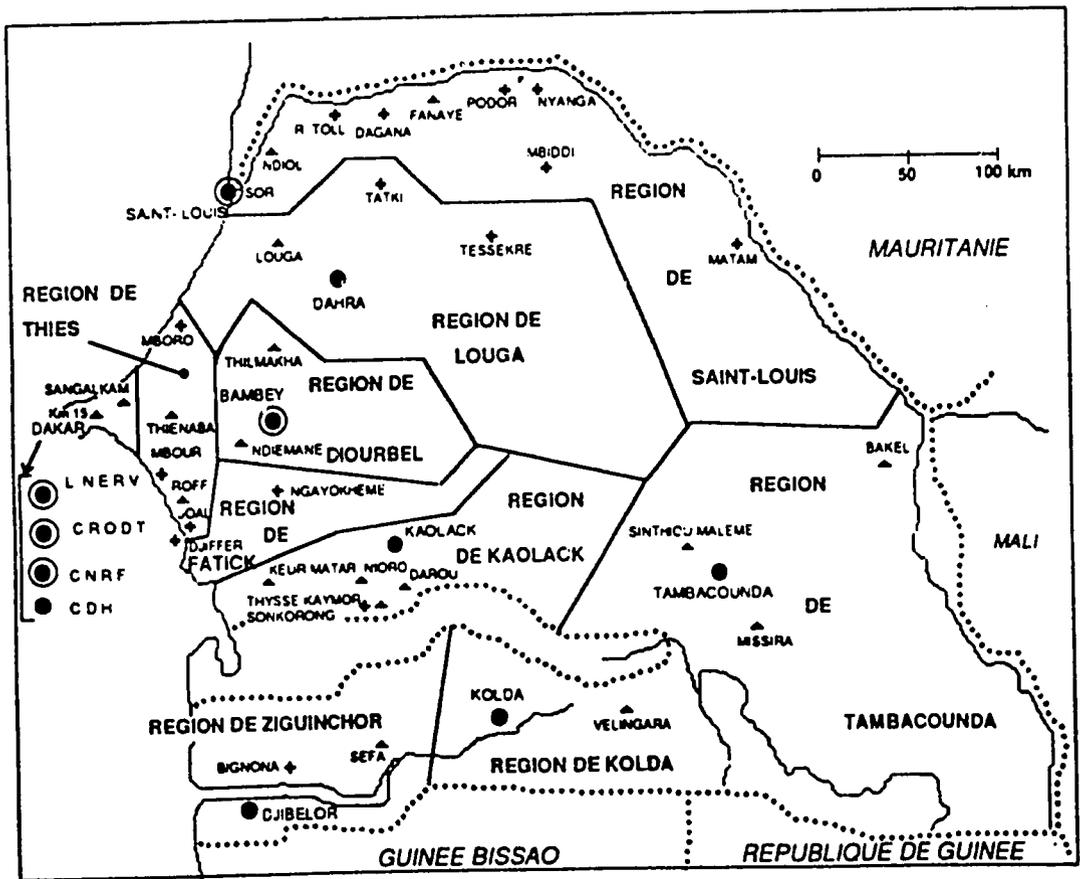
LIST OF ACRONYMS

ACP	Agence Comptable Particulière
AFID	Africaine D'Ingenierie pour le Développement
AT	Assistance technique
BAME	Bureau d'Analyses Macro-économiques
CDH	Centre pour le Développement Horticole
CF	Conseiller Financier
CFA	Communauté Financière Africaine
CG	Contrôle de Gestion
CGO	Comité de Gestion des Octrois
CID	Consortium for International Development
CIRA	Centre International de Recherches Agricoles
CNRA	Centre National de Recherches Agronomiques
CNRF	Centre National de Recherches Forestières
COP	Chief of Party
CRODT	Centre de Recherches Océanographiques de Dakar-Thiaroye
CRSP	Collaborative Research Support Program
CST	Comité Scientifique et Technique
CV	Conseiller à la Vulgarisation
DAI	Development Alternatives Incorporated
DG	Direction Générale
DRCSI	Direction de Recherches sur les Cultures et Systèmes Irrigués
DRCSP	Direction des Recherches sur les Cultures et Systèmes Pluviaux
DRPF	Direction des Recherches sur les Productions Forestières
DRPH	Direction de Recherches sur les Produits Halieutiques
DRPV	Direction de Recherches sur les Productions Végétales
DRSAEA	Direction de Recherches sur les Systèmes Agraires et l'Economie Agricole
DRSPA	Direction des Recherches sur la Santé et les Productions Animales
DS	Directeur Scientifique de l'ISRA, (ISRA Scientific Director)
EDP	Electronic Data Processing
EEP	Examen de l'Exécution du Programme
ENSA	Ecole Nationale Supérieure d'Agriculture
FA	Financial Advisor
GIS	Geographical Information System
GRN(SP)	Gestion des Ressources Naturelles (et Systèmes de Production)
GRNSPZS	Gestion des Ressources Naturelles et des Systèmes de Production en Zone Sèche
GWC	Grants Working Committee
IARC	International Agricultural Research Centre
ICRAF	International Center for Research in Agroforestry
ICRISAT	International Center for Research in the Semi-Arid Tropics
IDA	International Development Agency
IITA	Institut International de Technologies Alimentaires
ILCA	International Livestock Center for Africa
INFORM	Information for Agricultural Research Management

INTSORMIL	International Sorghum and Millet Program
ISNAR	International Service for National Agricultural Research
ISRA	Institut Sénégalais de Recherches Agricoles (Senegal Agricultural Research Institute)
IST	Institut des Sciences de la Terre
KIT	Royal Tropical Institute, The Netherlands
LNERV	Laboratoire National d'Élevage et de Recherches Vétérinaires
M/E	Monitoring and Evaluation
MIS	Management Information Systems
NARS	National Agricultural Research System
NGO	Non-governmental Organisation (Organisation non-gouvernementale)
NRBAR	Natural Resources-Based Agricultural Research Project
NRI	Natural Resources Institute, The United Kingdom
NRM	Natural Resources Management
NRP	Natural Resources Planner
OA	Outreach Advisor
ONG	Organisation non-gouvernementale (Non-governmental Organisation)
OP	Organisation Paysanne (farmer organisation)
ORSTOM	Office de la Recherche Scientifique et Technique Outre-Mer
OSDIL	Organisation Sénégalaise pour le Développement des Initiatives Localisées
OSU	Oregon State University
PAPEM	Points d'Appui pour Essais Multilocaux
PIR	Project Implementation Review
PNVA	Programme National de Vulgarisation, (National Extension Service Proj.)
PR	Planificateur de Recherche
PRN	Planificateur des Ressources Naturelles
PVO	Private Voluntary Organisation
RP	Research Planner
SARH	Service de l'Administration et des Ressources Humaines
SARII	Senegal Agricultural Research II
SAS	Statistical Package for Social Sciences
SG	Sécretariat Général
S/E	Suivi et Evaluation
SIG	Système de Gestion Géographique Informatisée
SNRA	Système National de Recherches Agricoles
SOW	Scope of Work
SYSPAI	Computer-Based Payroll Management System
TA	Technical Assistant
TDY	Consultant de courte durée, (Short-term Consultant)
TOR	Terms of Reference
UNIVAL	Unité d'Information et de Valorisation
UPF	Unité de Programmation et Formation
USAID	United States Agency for International Development
WARDA	West African Rice Development Association

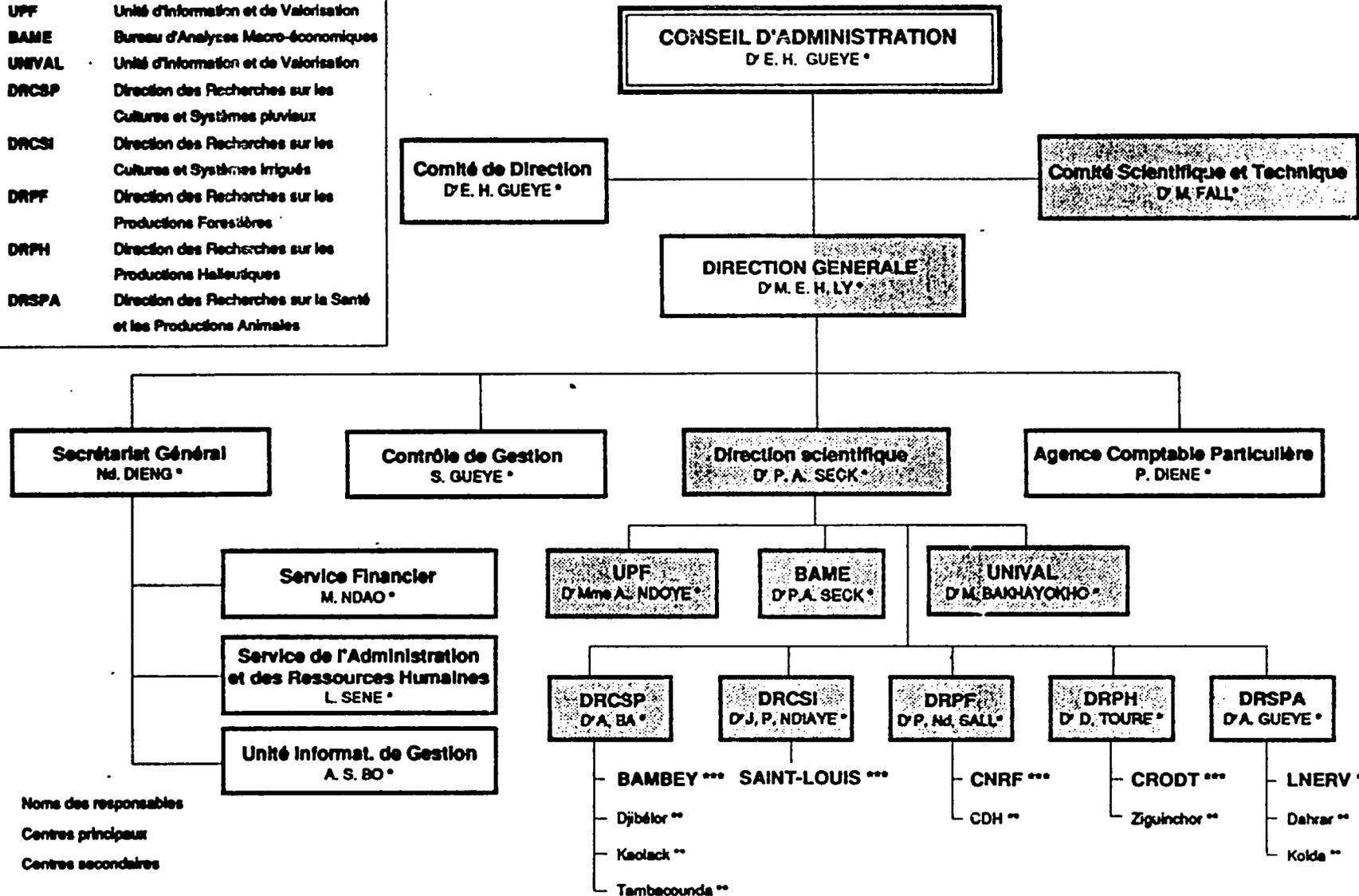
IMPLANTATIONS GÉOGRAPHIQUES DE L'I.S.R.A

<p>● 5 centres principaux, bases des Directions</p> <p>Dakar - LNERV pour la DRSPA</p> <p>Dakar - CRODT pour la DRPH</p> <p>Dakar - CNRF pour la DRPF</p> <p>Bambey - CNRA pour la DRPV</p> <p>Saint-Louis pour la DRSAEA</p>	<p>● 6 centres secondaires</p> <p>Kolda</p> <p>Dahra</p> <p>CDH</p> <p>Djibelor</p> <p>Tamba</p> <p>Kaolack</p> <p>▲ 18 stations et PAPEM</p> <p>◆ 15 points d'essai</p>
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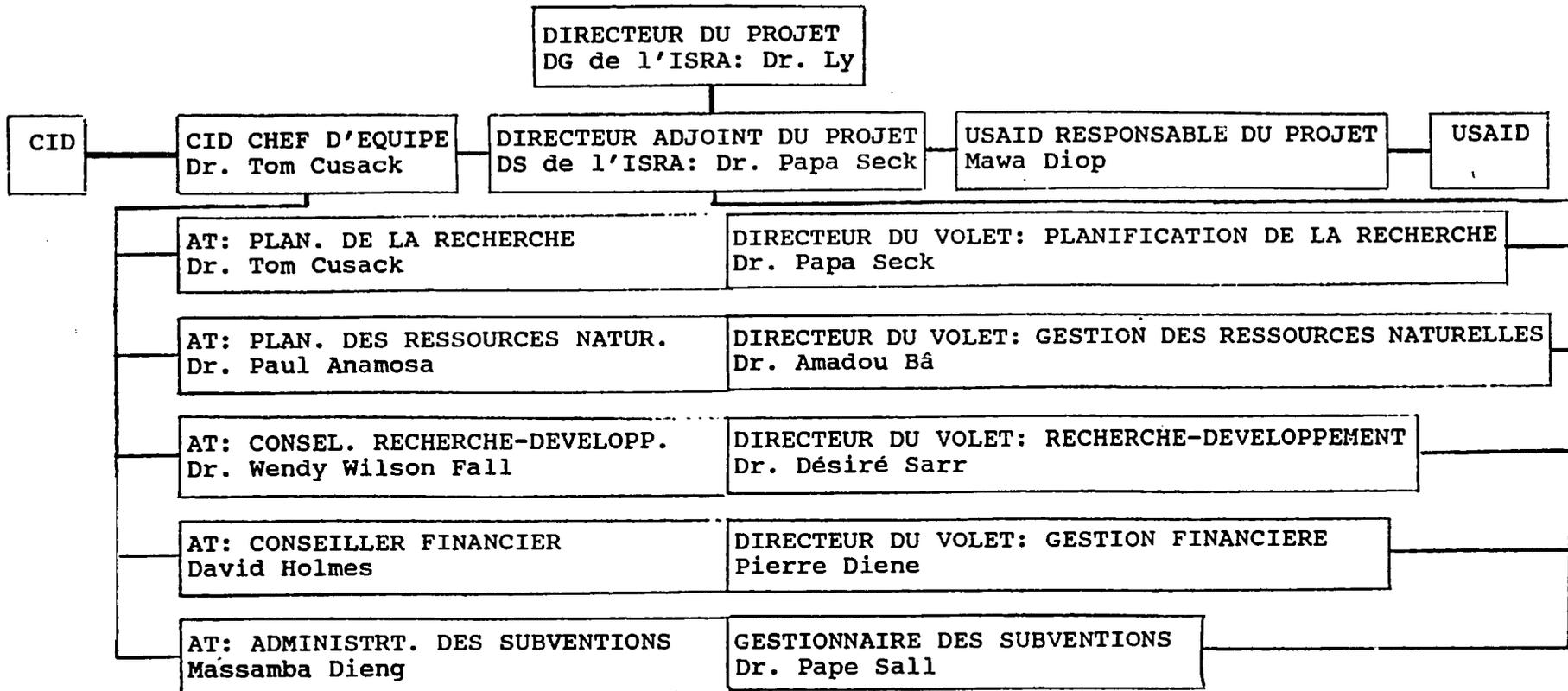
ORGANIGRAMME DE L'ISRA

UPF	Unité d'information et de Valorisation
BAME	Bureau d'Analyses Macro-économiques
UNIVAL	Unité d'information et de Valorisation
DRCSF	Direction des Recherches sur les Cultures et Systèmes pluviaux
DRCSI	Direction des Recherches sur les Cultures et Systèmes irrigués
DRPF	Direction des Recherches sur les Productions Forestières
DRPH	Direction des Recherches sur les Productions Halieutiques
DRSPA	Direction des Recherches sur la Santé et les Productions Animales



* Noms des responsables
 *** Centres principaux
 ** Centres secondaires

ORGANIGRAMME DU PROJET NRBAR
(principales relations fonctionnelles)



1. INTRODUCTION

1.1 BACKGROUND, OBJECTIVES AND ANTICIPATED OUTPUTS

In order to continue the development of the Institut Sénégalais de Recherches Agricoles (ISRA) as an effective research institution, ISRA and the United States Agency for International Development (USAID) have designed the Natural Resources-Based Agricultural Research Project (NRBAR). The project is detailed in the Project Paper dated 23 July, 1991, and was initiated by the NRBAR Grant Agreement between the Government of Senegal and the United States of America dated 31 July, 1991. The project is scheduled to be completed on 31 July, 1998. A five-years contract for NRBAR services (USAID Contract number 685-0285-C-00-2329-00) was awarded to the Consortium for International Development (CID) by USAID in July, 1992.

The principal problems addressed by the project are Senegal's need for low-cost natural resources-based agricultural technologies in order to increase the productivity of agricultural systems, and the need for ISRA to have a strong institutional capacity to undertake natural resources-based research. The project is designed to focus particularly on improving resource management practices which enhance the productivity and sustainability of cereals-based cropping systems in areas of Senegal having greater than 400mm annual rainfall.

OBJECTIVES

There are four overriding project objectives, expressed in terms of ISRA's development during the project period:

- (1) an improved natural resources-based research program in place,
- (2) natural resources-based technologies validated and available for adoption,
- (3) a strong farmer-participatory research system in place for designing, testing and validating research, and
- (4) improvements in research and financial management.

ANTICIPATED OUTPUTS DURING THE LIFE OF THE PROJECT

1. Effective, adaptive research program focusing upon cropping systems and resource management in areas of (i) soil and water management, (ii) forestry and agroforestry, (iii) improved cultural practices for millet, sorghum, rice and corn, and (iv) applied economics for production, marketing and policy issues relating to cereals cropping systems, such that:

1a. at least 15 technology systems will be validated for on-farm use during the life of the project.

2. Improved research planning, and improved research, financial and manpower management, such that:

**2a. research programs have clearly-defined objectives achievable in the medium term,
2b. systems are in place for periodically evaluating and revising research priorities and programs,**

2c. financial management systems are in place providing satisfactory accountability and control, and producing useful information to senior management,

2d. a merit-based personnel evaluation and promotion system is in place, and

2e. the size and composition of ISRA staff are aligned with research priorities and available resources.

3. Improved research-extension linkages, including feedback from farmers to ISRA on research results and from ISRA to farmers on appropriate and sustainable technologies, such that:

3a. ISRA collaborates with at least 15 private voluntary organizations (PVOs), farmer organizations and input suppliers to evaluate technology (including the use of signed protocols), and

3b. ISRA has developed methods for enhancing the roles of farmers' organizations, PVOs and private input suppliers to transfer improved technology to farmers.

4. Strengthened linkages with key domestic and international research institutions on natural resource management, cropping systems and adapted technologies, such that:

4a. protocols with network collaborators clearly support ISRA's research priorities, and define roles, responsibilities and resources.

5. Up-graded technical and administrative staff skills.

1.2 PROJECT RESOURCE COMPONENTS

In order to achieve the above objectives, the project has seven major resource components, which can be summarised as follows:

I. RESEARCH PROGRAM SUPPORT: a grants program to support effective ISRA/farmer collaboration and interdisciplinary research proposals from ISRA scientists, consisting of:

Ia. COLLABORATIVE RESEARCH GRANTS PROGRAM: funds available under the CID contract total \$1,612,500. ISRA provides a research grants coordinator for this program, and both ISRA (researchers) and CID (Technical Assistance) provide expertise. In addition, ISRA has established a Grants Committee, and CID is providing financial management services for the initial years of this program.

Ib. GRANTS TO ISRA RESEARCHERS: ISRA administers these grants through existing committees and CID provides financial management services for the initial years of the project. Funds to be provided directly by USAID, during the later years of the project, will be released after ISRA's financial system has been certified. There are three types of grants:

Ib.1: GRANTS FOR RESEARCH IN SENEGAL: funds available under the CID contract total \$225,500, and USAID will directly provide an additional \$450,000.

Ib.2: SITE STUDIES: funds available under the CID contract total \$101,250, and USAID will directly provide an additional \$45,000.

Ib.3: SABBATICALS: funds available under the CID contract total \$53,500, and USAID will directly provide an additional \$320,000.

II. SUPPORT FOR ISRA'S NATURAL RESOURCES PROGRAM: a grants program to support ISRA's core funding. Funds available directly from USAID total \$1,000,000. ISRA will administer these funds through existing committees, following ISRA's financial certification.

III. LINKAGES TO REGIONAL AND INTERNATIONAL RESEARCH INSTITUTIONS: a grants program to develop and strengthen ISRA's links with international institutions. Funds available directly from USAID total \$500,000. ISRA will administer these funds through existing committees, following ISRA's financial certification.

IV. PERSONNEL: the NRBAR Project Director is the Director General of ISRA, M. El. H. Ly, with the NRBAR Deputy Director designated as the ISRA Scientific Director, P.A. Seck. Project personnel consist of ISRA permanent staff, with the following responsibilities: P. Nd. Sall for NRBAR Grants Management, P. A. Seck for NRBAR

research planning, A. Bâ for natural resources programs, D. Sarr for outreach, and Pierre Diène for financial management. Additional personnel consist of four long-term external Technical Assistance staff and a project administrator, an assistant grants administrator, CID and USAID support staff, and numerous short-term external staff. External staff are provided by the CID contract, as follows:

IVa. LONG-TERM TECHNICAL ASSISTANCE:

IVa.1 RESEARCH PLANNER (1992-97): Tom Cusack is responsible to the ISRA Scientific Director and works primarily through the Direction Scientifique. Tom Cusack also serves as Chief of Party for execution of the CID contract.

IVa.2 NATURAL RESOURCES PLANNER (1992-97): Paul Anamosa is responsible to the Bambey Centre Director, and works primarily through the Direction des Recherches sur les Cultures et Systèmes Pluviaux (DRCSP) and the Direction des Recherches sur les Productions Forestières (DRPF).

IVa.3 OUTREACH ADVISOR (1992-97): Wendy Wilson is responsible to the ISRA Kaolack Research Station Director, and works primarily through DRPF, DRCSP, BAME and the Unité d'Information et de Valorisation (UNIVAL).

IVa.4 FINANCIAL ADVISOR (1993-96): David Holmes is responsible to the Secrétariat Général, and works primarily through the Secrétariat Général, the Contrôle de Gestion and the Agence Comptable Particulière. The financial advisor will provide short-term assistance after 1996.

IVa.5 PROJECT ADMINISTRATOR (1992-97): T.J. Quan is responsible to the CID Chief of Party, and undertakes necessary logistical, administrative and technical support to project personnel. The project administrator is assisted by the Assistant Administrator, Mme. Faty Ba, who is scheduled to work with ISRA during the period 1992-1997.

IVa.6 GRANTS ASSISTANT MANAGER (1994-97): Massamba Dieng is responsible to the ISRA Grants Manager and to the CID Chief of Party, and undertakes necessary logistical, administrative and technical support to ISRA's management of the NRBAR grants.

IVb. SHORT-TERM TECHNICAL ASSISTANCE: 99 person-months during the period 1992-97.

V. PARTICIPANT TRAINING: a grants program to support all project objectives. This program is funded under the CID contract, and is administered by ISRA and CID. CID will continue to provide financial management services during the life of the CID contract.

Va.LONG-TERM TRAINING: funding of \$1,575,000 for approximately five Doctorate and 10 Masters Degrees.

Vb.SHORT-TERM TRAINING AND CONFERENCES: funding of \$700,000 for approximately 35 programs outside of Senegal.

Vc.SHORT-TERM TRAINING IN SENEGAL: funding of \$192,677 for approximately 50 programs.

Vd.LONG-TERM B.S. TRAINING FOR WOMEN: funding of \$410,000 for 10 participants.

VI. DIRECT SUPPORT BY ISRA: ISRA will continue to provide resources valued at more than \$3,500,000 during 1991 - 1998 in order to support all facets of the project. The salaries of collaborating ISRA staff (including the Project Director and the Deputy Director), the provision of office space, and access to appropriate ISRA facilities and equipment currently represent most of these resources.

VII. ADDITIONAL MATERIAL SUPPORT BY USAID: USAID assigns in-house personnel to assist with project implementation, especially a NRBAR Project Officer and an Assistant Project Officer. USAID has also funded a technology inventory study, is presently funding a financial study, and will fund project audits. USAID directly provides office furniture, household furniture and major appliances for Technical Assistants, two computers with associated equipment for ISRA staff and Technical Assistants, five project vehicles, and other logistic support when necessary. CID provides under its contract with USAID other logistic support, office equipment, eleven computers, additional vehicles, and support for offices in the U.S. and in Senegal, including 24 person-months of a CID NRBAR Coordinator (David Acker of Oregon State University) and 45 person-months of clerical support at Oregon State University. Substantial support is also being provided by Howard University, Tennessee State University, and Development Alternatives Incorporated, who are partners under the CID contract.

1.3 PROJECT PROGRAMS

In order to use these seven categories of resources to achieve project objectives, the project is organized into four programs: research planning and management, natural resources programs, outreach, and financial management. Activities planned under each of these programs have been detailed in the 1994 Annual Workplan for NRBAR. Activities can be summarised as follows:

RESEARCH PLANNING

The aim of this facet of the project is to strengthen ISRA's planning and management systems by:

- (a) redefining the five-year plan,
- (b) establishing a program which matches priorities with human, physical and financial resource realities,
- (c) planning and implementing institutional reorganisation,
- (d) improving the research planning process with regard to the way decisions are made, budgeted for, and implemented,
- (e) improving manpower planning,
- (f) planning and coordination of ISRA-wide research and linkage activities at Departmental, station, on-farm and international levels,
- (g) reviewing priorities,
- (h) reviewing research methodology,
- (i) dissemination of results,
- (j) organising periodic peer and program reviews, and
- (k) undertaking other tasks consistent with project objectives.

NATURAL RESOURCES MANAGEMENT PROGRAMS

The aim of this facet of the project is to strengthen ISRA's natural resources-based agricultural research activities by:

- (a) planning, conducting and evaluating natural resources-based agricultural research,
- (b) developing a coherent strategy and program for natural resources-based agricultural research which fits into ISRA's long-term development strategy and plan,
- (c) developing inter-disciplinary, farmer-oriented and farmer-participatory approaches to research planning, execution and evaluation,
- (d) reviewing existing natural resources technologies available in Senegal and elsewhere, and
- (e) establishing a program to address priority natural resources management needs.

OUTREACH

The aim of this facet of the project is to strengthen ISRA's links with its clients by:

(a) developing a system of protocols and grants with NGOs, farmers organisations, and extension agencies, such that farmers participate in research needs assessment, research priority setting, execution and validation,

(b) organising its outreach program,

(c) establishing adequate outreach procedures,

(d) establishing monitoring systems, and

(e) ensuring effective field testing and adoption of technologies.

FINANCIAL MANAGEMENT

The aim of this facet of the project is to strengthen ISRA's financial management system by:

(a) developing adequate financial systems at ISRA,

(b) increasing the effectiveness of the computerised accounting system,

(c) strengthening indirect cost accounting processes,

(d) generating timely financial analyses in forms appropriate to decision-makers at all levels, and

(e) developing a system for tracking all donor and Government of Senegal contributions.

PROJECT SUPPORT ACTIVITIES

The activities summarised above are supported by management, administration, and monitoring and evaluation activities, as well as by the provision of financial services. Leadership and overall project support is provided by the Project Director, the Deputy Project Director and the Grants Administrator, as part of their ISRA duties. In addition, CID NRBAR staff participate in project support activities, with effort being concentrated at the Chief-of-Party and Project Administrator levels.

1.4 OVERVIEW

This third Annual Workplan for the NRBAR Project describes activities planned for 1995, and has been produced as an integrated effort by ISRA, USAID and CID. The format of this report closely follows those of the earlier Annual Workplans and of the Biannual Reports, in order to ensure adequate cross-referencing.

Sections 2 to 5 of this report detail activities proposed under the four major thrusts of the project: research planning and management, natural resources management programs, outreach, and financial management; each of these Sections consists of a separate report from the responsible ISRA/NRBAR team members. Section 6 details project support activities, including orientation, administration, management, monitoring and evaluation, and financial services. Section 7 summarises activities proposed under each resource component of the project, while Section 8 provides a summary of the budget and anticipated levels of expenditures.

The technical assistants will continue to work collaboratively with counterpart scientists and administrators in the relevant sections of ISRA. The emphasis is on strengthening ISRA as an institution, in those areas targeted by the project. Multidisciplinary and farmer-participatory approaches to research are being emphasised.

The proposals are oriented to building upon existing research achievements; the approach is to complement and develop current ISRA initiatives in areas of project focus, while incorporating parallel work such as the technology and financial studies sponsored by USAID, collaborating with other donor activities such as the World Bank Second Agricultural Research Project, completing unfinished work such as the unit cost study under ISRA/USAID SAR II, and institutionalising in ISRA new procedures such as the collaborative research grants program.

The final development of this workplan has been delayed to ensure that planned activities take account of the recommendations of the recent ISRA/NRBAR Mid-Term Evaluation and of the ISRA Mid-Term Review. Proposed activities are consistent with and take account of the proposals in the ISRA Action Plan, which was developed following the Mid-Term Review.

2. RESEARCH PLANNING

The aim of this facet of the project is to strengthen ISRA's planning and management systems. Scheduled research planning activities, summarised as (a) to (k) below, are particularly oriented to achieving Project Objective (4) and Anticipated Project Outputs 2a. to 2e. Activities proposed here have been developed by the ISRA/NRBAR research planning team, led by the ISRA Scientific Director (Papa A. Seck) and consisting of the SG, ACP, CG, BAME, UNIVAL, UPF and the CID NRBAR Research Planner. Activities are in accordance with the NRBAR Project Accord and were developed in collaboration with Dr. Ly (the ISRA DG and NRBAR Project Director) and other ISRA colleagues, and with the World Bank Second Research Project.

To date, the research planning team has emphasised the planning of a program of research management in the following areas: ex ante evaluation of technologies, ex post evaluation of technologies, evaluation of impact, external evaluations, a system for the administration and management of research stations, and the INFORM management data system. These programmatic thrusts will continue to be developed during 1995; however, special emphasis will be placed this year on strategic planning. In particular, an ISRA strategic plan will be developed during the year and will provide the basis for all of ISRA's activities from 1 January, 1996.

The following activities are proposed by the research planning team:

(a) defining the strategic plan,

(a):(1) During the first Quarter, a plan format, contents and implementation schedule for development of the plan will be developed with the assistance of ISNAR staff. In the second Quarter, in association with a strategic priorities study (see activity (b)), a first draft strategic plan will be written with the participation of ISRA's partenaires; this activity will be supported by a TDY, by a visit to ISNAR by three ISRA staff and by two national workshops. An analysis of ISRA's strengths, weaknesses, opportunities and threats (SWOT analysis) will be also completed with the assistance of a TDY, and the results incorporated into the first draft of the strategic plan; projections of ISRA's human, financial and physical resources will be made at this time.

(a):(2) In the third Quarter, the first draft Plan will be reviewed by ISRA and its partenaires; at the same time, the Plan will be used as a basis for the 1996 Action Plans of research teams and service units. Resource allocation decisions will be taken before the end of the Quarter, in order for the research and service teams to complete their definitive 1996 plans. In the fourth Quarter, the Plan will be finalised, incorporating the results of the research priorities/clients' needs work (see activity (b)), reviewers' comments on the first draft, and resource allocation decisions. These activities will be supported by a TDY and two national seminars. The Strategic Plan will be used as a basis for obtaining and allocating resources during the annual research and administrative planning exercises, beginning in 1995.

(b) establishing a program which matches priorities with human, physical and financial resource realities,

(b):(1) A strategic priorities study will be completed during the second Quarter, with the assistance of a TDY, a visit to ISNAR by two ISRA staff, and a national workshop. The results will be incorporated into the first draft strategic plan (activity (a):(1)). A client needs assessment, and determination of research priorities within programs and regions, will be initiated in the second Quarter and completed in the third Quarter with the assistance of two TDYs and eight regional workshops. The reports of the strategic and programmatic priorities studies will be incorporated into the second draft strategic plan which will be reviewed by the CST during the Fourth Quarter.

(b):(2) Historical, and future projected, comparisons between priorities and resource use will be made for the second draft strategic plan. However, projected strategic uses of resources will be related to draft strategic priorities in the first draft strategic plan by the end of the second Quarter.

(c) planning and implementing institutional reorganisation,

(c):(1) Proposals for financial reorganisation are discussed in detail later in this document: in Section 5, Financial Management.

(c):(2) Proposals for administrative reorganisation will be developed with the assistance of a TDY for the mid-term review during the First Quarter; an Action Plan for the development of research stations will be developed at this time. A workshop on the station needs for financial management will be held before the mid-term review, in conjunction with activity (c):(1). Adoption of an organigram relating station management to other ISRA functions, and confirmation of station personnel and their tasks, will be completed during the second Quarter. Research station management will be further strengthened during the second and third Quarters by an in-house workshop on the role and management of research station support services, two administrative staff will travel to the U.S. to participate in an on-station management short course, and site visits to major research stations of international and national agricultural research centres will be made. In particular, a site visit will be made to the agricultural research system in Mali, where a similar reorganisation has just been initiated.

An inventory of infrastructure and equipment at all ISRA sites will be constructed, and a technical survey of all inventoried materials will be completed with the assistance of a TDY during the second Quarter. The results will be used as a basis for resource allocation decisions during the third Quarter, and as a basis for the purchase of new equipment and for rehabilitation of priority facilities.

For Bambej, priority station equipment will be purchased through international bidding. Prior to this, the Bambej storage and maintenance areas will be rehabilitated, a maintenance and service plan for all stations will be put in place, and a procedures manual for station operations will be written and operationalised. These activities will occur during the second and third Quarters, with the assistance of a TDY. This will be supported by a training visit to the U.S./Canada/Europe for up to four key station personnel.

During the second Quarter, station operations and budgets schedules for the 1995 season will be finalised. Field days will be held for station activities at three of the stations during the growing season (third Quarter). During the fourth Quarter, following third Quarter decisions on which ISRA sites to develop and what level of resources should be devoted to each, stations operations schedules and budgets will be prepared for 1996 for all retained sites. The research budgets drawn up at this time will clearly distinguish between direct and indirect costs. These activities will be supported by a TDY, and a national technical services workshop in the fourth Quarter.

(c):(3) The ISRA-wide procedures manual will be revised during 1995, as part of the activities described above, and as part of the revision of the NRBAR Procedures Manual (see Section 6). This will include the development of standardised ISRA/partenaire contracts and the revision of ISRA statutes as a result of ISRA's reorganisation (see Sections 4 and 5). Particular emphasis will be placed in 1995 on the development of the accounting and financial management procedures manuals, and the research station procedures manual.

(c):(4) The improvement of key administrative and financial tasks will be targeted this year, with the assistance of TDYs, training events, and site visits: for example, procurement procedures and operations, and the internal audit.

(d) improving the research planning process with regard to the way decisions are made, budgeted for, and implemented,

(d):(1) The implementation of the INFORM research management data system will continue with the completion of Phase 3 and the initiation of Phase 4. The 1995 data collection exercise will be completed in the first Quarter. A pilot comparison between projected time allocations for 1995, and those actually incurred in 1995, will be made during the second Quarter of 1996. The Phase 3 program will be evaluated during the Second Quarter, with the assistance of a TDY. The Phase 4 program for the institutionalisation of INFORM in ISRA will be finalised in the First Quarter. Two ISRA staff will undertake a training course at ISNAR in the second Quarter, in order to develop the tools for using INFORM as a means of compiling the ISRA 1996 Annual Workplan. INFORM data for 1996 will be collected and analysed during the third Quarter in order to provide a secure basis for the 1996 programming exercise and for compiling the 1996 ISRA Workplan using the tools developed at ISNAR. In the fourth Quarter, the ISRA Workplan will be completed in time for the CST, with the assistance of a TDY. The potential for the output of INFORM to be used in monitoring and evaluation, financial management, annual planning and reporting documents, and in personnel evaluation, will be assessed before the end of the year.

(d):(2) During the first Quarter, a report on, and draft action plan for, developing ISRA-wide monitoring and evaluation capability will be presented to the mid-term review; this will be finalised during the Fourth Quarter, with the assistance of a TDY, with special reference to the needs of the strategic plan. Monitoring and evaluation will continue to be developed for both program and research project level activities, such that the methodology will be both developed and demonstrated prior to the finalisation of the strategic plan. Two ISRA staff will participate in foreign training on the monitoring and evaluation needs of research institutions.

(d):(3) The ISRA research impact study will continue with the completion of the methodology report, using cotton as an example, in the second Quarter. The rice study will be completed during the third Quarter, after having incorporated the review comments received on the 1994 draft report; this will be assisted by a TDY and by a visit to Purdue University by ISRA staff. Also in the third Quarter, the final data needs of the sorghum, millet and maize studies will be met through a diffusion study; these reports will be completed in the fourth Quarter with the assistance of TDYs. During the Fourth Quarter, a synthesis research impact report, drawing on the results of the five commodity research impact studies, will be initiated; following completion of this exercise in 1996, a two-day seminar will be implemented to present and discuss results, with the assistance of a TDY.

(d):(4) In addition, two senior research/administrative personnel will participate in foreign courses on the development of non-technical management functions. Following the approval of the strategic plan, ISRA will implement two team-building exercises in order to improve internal coordination and communication, and to improve ISRA-partenaire relations, with the assistance of TDYs and seminars/workshops organised in Senegal. Also, approximately six technical visits of senior ISRA staff to collaborate with staff of foreign research institutions, and approximately six technical visitors to ISRA from foreign research institutions, are anticipated during the year on specific technical subjects or on combinations of technical and management subjects. More detailed proposals for technical visits and training events are described in Section 3.

(e)improving human resources planning,

(e):(1) The NRBAR long-term training plan will be redrafted to reflect the changed training priorities at ISRA; this will be used as a blueprint for a similar institution-wide plan. The human resources component of the ISRA strategic plan will be developed, in conjunction with activity (a), with the assistance of a TDY. A training needs assessment will also be undertaken in the second half of the year, consistent with, and following, the resource use decisions made in the first draft strategic plan.

(e):(2) The ISRA personnel evaluation system, designed in 1992, will be reviewed during the Third Quarter, and a system for the 1996-2000 period will be proposed, with the assistance of a TDY. In the Fourth Quarter, the proposed system will be pilot-tested, before final recommendations are made in the strategic plan. During

1996, an action plan to test the system in one Direction de Recherche, and including administrative and financial staff, will be written and one training workshop held in Senegal (one week, 5 participants), with the assistance of a TDY. This will be followed by a system test in one Direction, two staff members will visit ISNAR to analyse the test results, and a plan for revising and extending the system to other Directions will be completed before the end of 1996.

(f) planning and coordination of ISRA-wide research and linkage activities at Departmental, station, on-farm and international levels,

(f):(1) During the year, a databank of existing international research linkages will be compiled, and a terms of reference developed for an international linkages study. A linkages study will be completed during the Fourth Quarter, including implementation of a two-day seminar and with the assistance of a TDY, in time to provide a basis for planning to use the NRBAR "Linkages to Regional and International Research" funds in 1995. Following this study, a specific visit to the national agricultural research service in Morocco is being planned.

(f):(2) Approximately six ISRA management committee meetings will be held during the year at research stations throughout the country, in order to focus management effort on problems and needs of specific sites, to meet with farmers and partenaires on research planning, and to support the other programmatic thrusts described in this workplan.

(f):(3) Approximately two three-day open days are planned for major research sites, in order to encourage research feedback from the clients of research specific to the zone concerned, to identify important farmer concerns, and to strengthen researcher/partenaire linkages. In addition, approximately two research workshops will be held at field sites, each concerned with specific themes related to natural resources management: for example, agriculture/livestock research needs in the context of mixed farms, and composting. The major linkages thrusts are described in Section 4 of this report, and the major technical thrusts in natural resource management are described in Section 3.

(f):(4) ISRA's procedures and documentation for planning and coordination of its research and administrative functions will be thoroughly reviewed during the process of redesigning communications systems (Section 4, in conjunction with UNIVAL). As part of this process, and as part of the process of strategic planning described elsewhere in this section, ISRA's planning documentation needs will be assessed, and proposals for format and procedural changes made before the end of the year.

(g)reviewing priorities,

The research planning team members will continue to participate in various ISRA and unit level planning meetings, designed to provide a secure planning base for the 1995 and future programs. These activities will become particularly effective following the implementation of the strategic priorities study referred to under item (b).

(h) reviewing research methodology,

(h):(1) The team will continue to assist with reviews of the technology inventory and other research reports, with the research impact methodology, and with the Ernst and Young financial study reports.

(h):(2) A review of economics methodology for the research planning and analysis of natural resources technologies will be undertaken during the Third Quarter, with the assistance of a TDY. A report of recommended methodology will be written in time to assist with the planning of the 1996 season work. During the second half of the year, two BAME economists will undergo foreign training in the assessment of natural resources technologies.

(i) dissemination of results,

(i):(1) Major activities will center on the linkages events proposed under activity (f) and on the research impact studies (under activity (d)). Major dissemination activities are discussed under Section 4 of this report.

(i):(2) ISRA's procedures and documentation for reporting of its activities and results will be thoroughly reviewed during the process of redesigning communications systems (Section 4, in conjunction with UNIVAL). As part of this process, and as part of the process of strategic planning described elsewhere in this section, ISRA's reporting documentation needs will be assessed, and proposals for format and procedural changes made before the end of the year (see Section (f):(4)).

(j) organising periodic peer and program reviews.

(j):(1) External reviews of research are planned in each of five Research Programs. However, these may not be implemented this year, in view of the priority given to the strategic planning exercise, and to the ISRA mid-term review which will itself contain external evaluations of research programs. An evaluation report for each of the five Programs will be written, and this activity will be assisted by three external reviewers for each Research Direction. The NRBAR will fund a maximum of four of these positions, in association with other project financing. The mid-term review of ISRA will be conducted jointly between ISRA and major donors, in order to provide a secure basis for the ISRA strategic plan, and eventually for further funding of ISRA; this will include TDY support, local training, the provision of TDYs directly by USAID for the specific evaluation of the NRBAR project, and direct CID assistance (see Section 6). A mid-term review report and a NRBAR mid-term evaluation report will be written, and these will be followed by the development of an ISRA Action Plan during the First Quarter. Extensive peer review of research themes and priorities, and of strategic and research plans submitted to the CST, will continue this year, with TDY and training support as necessary.

(j):(2) The team will participate in planning functions on ISRA grants committees for NRBAR resource components. A program of planning meetings prior to compilation

of the 1995 ISRA workplan will also be implemented, in conjunction with the programmatic thrusts indicated elsewhere in this Section.

(j):(3) In addition, four strategic planning meetings are planned for BAME, in order to develop a 5-year planning document for this unit. This activity will be undertaken with the assistance of a TDY.

(k)undertaking other tasks consistent with meeting project objectives in an efficient manner,

(k):(1) A program of applied economics for production, marketing and policy issues related to cereals systems will be developed, with the assistance of a TDY during the second half of the year. Socio-economics thematic studies on cereals over the next several years will focus on the priority problems of soil fertility, seed production and water availability, with the assistance of TDYs and training events. BAME agro-economists will continue to work on the economic analyses of NRBAR grants technologies, in conjunction with the methodology work described under activity (h). BAME agro-economists will also review the AFID technology inventory and implement an economic evaluation of the technologies concerned, with the assistance of a TDY. Two agro-economists will take a foreign short course on the evaluation of agricultural technologies. During the second half of the year, the BAME agro-economists will assist with the implementation and socio-economic review of the NRBAR grants projects, as parts of multidisciplinary teams working at farm level, and will write socio-economic reports, in conjunction with TDYs. These activities will be undertaken in association with the work proposed in Sections 3 and 4.

It is unlikely that all of these activities will be attempted and/or completed during 1995, in view of the possible administrative overload as a series of substantial structural changes to ISRA are implemented, and in view of staff time constraints. The proposed list of activities constitutes a menu from which the highest priority activities will be selected, as the need arises during the year. Some of these activities will be undertaken as part of, or complementary with, the work of the financial management, natural resources planning and outreach facets of the project. Implementation of the principal research planning activities will be undertaken with the special partnership of ISNAR and the World Bank Second Research Project.

Proposed 1995 activities are summarised and placed on a time schedule in the attached table, using the same classification of activities presented in the text. The program for the first six months of 1995 will concentrate on peer reviews of ISRA's technical, administrative and management activities, on strategic planning, and on strategic priority-setting. Strategic planning will continue to dominate the second half of the year. However the other programmatic thrusts of research planning will continue to be implemented, particularly: the ex ante evaluation of technologies, the ex post evaluation of technologies, evaluation of impact, external evaluations, a system for the administration and management of research stations, and the INFORM management data system.

TABLE 1. SUMMARY AND ANTICIPATED TIMING OF 1995 WORKPLAN ACTIVITIES FOR RESEARCH PLANNING. (page 1)

Activité	Jan.	Fév.	Mars	Avri	Mai	Juin	Juil	Aout	Sept	Oct.	Nov.	Déc
(a) DEFINING STRATEGIC PLAN												
(a):(1) first draft plan		TDY	ISNAR VISIT									
(a):(2) final draft plan								ST TRAINING	TDY			
(b) RESEARCH PRIORITIES AND RESOURCES												
(b):(1) define strategic research priorities and programmatic priorities												
(b):(2) priorities/resource use compared												
(c) INSTITUTIONAL REORGANISATION												
(c):(1) financial reorganisation												
(c):(2) research station manag.	ST TRAIN/TDY				ST TRAIN/TDY			US TRAIN/TDY		FOR. TRAIN/TDY/SITE VISIT		
(c):(3) procedures manual												TDY
(c):(4) improving key admin. operations												
(d) RESEARCH PLANNING SYSTEM												
(d):(1) INFORM						TDY	ISNAR VISIT	ST TRAIN				TDY
(d):(2) monitoring/evaluation	TDY						TDY	FOR. TRAIN				
(d):(3) research impact							TDY	TDY	US TRAIN		TDY	
(d):(4) manag/tech training												
(e) HUMAN RESOURCES PLANNING												
(e):(1) human resources plan									TDY	ST TRAIN		
(e):(2) personnel evaluation									TDY	ST TRAIN		

TABLE 1. (continued) SUMMARY AND ANTICIPATED TIMING OF 1995 WORKPLAN ACTIVITIES FOR RESEARCH PLANNING.

Activité	Jan.	Fév.	Mars	Avri	Mai	Juin	Juil	Aout	Sept	Oct.	Nov.	Déc
(f) LINKAGES												
(f):(1) international linkages											TDY	ST TRAIN
(f):(2) foster linkages	continuous _____											
	TDY/S.T. TRAINING						VISIT TO NARS					
(f):(3) client linkages	continuous _____											
											S.T. TRAINING	
(f):(4) linkages/communications	continuous _____											
	S.T. TRAINING						TDY		TRAINING			
(g) REVIEWING PRIORITIES	continuous _____											
(h) REVIEWING RESEARCH METHODOLOGY	continuous _____										FOR TRAIN	TDY
(i) DISSEMINATION AND IMPACT	continuous _____											
	TDY/S.T. TRAINING						TDY/S.T. TRAINING					
(j) RESEARCH REVIEWS	continuous _____											
	TDY		S.T. TRAINING						TDY			
(k) OTHER TASKS	continuous _____											
(k):(1) economics/multidisciplinary teams	continuous _____											
	S.T. TRAINING						TDY		TDY		S.T. TRAINING	

3. NATURAL RESOURCES MANAGEMENT PROGRAMS

OBJECTIVE

The objective of the Natural Resource Management Program is to strengthen ISRA's capacity to generate agricultural technologies that sustainably manage the natural resource base for its clients by:

- (a) planning, conducting, and evaluating, natural resources based agricultural research;
- (b) developing a coherent strategy and program for natural resources-based agricultural research which fits into ISRA's long-term development strategy and plan;
- (c) developing inter-disciplinary, farmer-oriented, and farmer participatory approaches to research planning, execution, and evaluation; and
- (d) reviewing existing natural resource technologies;
- (e) establishing a program to address priority natural resources management needs.

The Director of Research for Rainfed Cropping Systems (DRCSP) and the Natural Resource Planner (NRP) are primarily responsible for developing project activities to meet these objectives.

FOCUS

The Natural Resource Program activities for 1995 will focus on: (1) the review of present and assisting with the planning of future ISRA NRM Research activities so as to identify technologies that may be targeted for validation and recommendation; (2) the institutionalization of a multi-disciplinary farmer-participatory research planning method(s); (3) the establishment of a capacity in geographic information systems; and (4) providing program support to improve the quality of research and its analysis.

A Natural Resource Management Research Strategy was completed in 1994. The NRM Research Strategy has elaborated the procedures and institutional support that will be needed to implement a multi-disciplinary and farmer participatory approach to natural resources research planning, execution, and analysis.

Even though the NRM Research Strategy is a pilot activity with the Program GRNSPZS, other ISRA programs will be implicated because of their institutional collaboration. For example, the Cereals and Legume Programs furnish varietal, pest management, and agronomic research for the technologies developed by the Program GRNSPZS. The Agroforestry Program of the DRPF places researchers at every research station of the DRCSP for collaboration with other programmes, and the

Bureau des Analyses Macro-Economique (BAME) place some of their researchers directly in the GRNSP programs.

The NRM Research Strategy reinforces this collaboration, and for this reason includes personnel of the other programs in its participatory research approach, training, and site studies activities. All programs in the DRCSP and the programs of other directions implicated in the NRM Research Strategy have been invited to provide comments during the Strategy's review and participate in the Strategy's implementation.

ISRA has a long history and a currently active effort on conducting natural resources based technological research. Many potentially good technologies that have been researched over the past years are ready or near-ready for validation, valorization and recommendation. These technologies will be identified by the concerned ISRA Programs and project resources target to get the technologies to the recommendation and release stage.

The activities to be addressed in this workplan are summarized in the attached Workplan Activity Table. The numbers in the text enclosed in parenthesis (Act. #) correspond to those activities listed in the table.

TECHNOLOGY VALORIZATION

The transfer of research results from research to outreach agent is a key and often weak link in the technology development chain. This is because the transfer is frequently between people in different organizations and people of different educational levels. Therefore, the packaging of the technology is important so that it is both really ready for the transfer and implementable by the development agent. To strengthen the transfer process several activities will be programmed.

The first of these activities is the development of an institutionalized procedure to validate technologies (Act. 1). This validation process consists of developing a standard set of characterization criteria by which a technology will be judged. These criteria include both biophysical as well as socio-economic information concerning such issues as: effects to yields, effects on soil fertility and physical properties; effects on water utilization; degree of increased or decreased exposure to environmental risk (droughts, insects, diseases, etc.); demands for labor; demands for variable inputs (fertilizer, seeds, water); demands for fixed inputs (plows); etc. These criteria will be evaluated by ISRA in conjunction with the research team (researcher, development agent, and farmer) to determine: (1) if additional research should be performed; (2) the research topic should be dropped; or (3) the technology is of sufficient quality to be recommended to other farmers with similar production environments and aspirations. This process will both reduce the number of single issue technologies (i.e. varieties) that may be recommended by a single researcher, thereby, increasing the comprehensive nature of future recommendations, and allow ISRA to assert its institutional control over recommendations that carry its name.

The second step in the valorization process to be addressed will be the packaging of the technology. Presently, ISRA issues Fiche Techniques that are of varying quality to present and transfer its technologies. Some are no more than a few pages of data tables indicating yield increases. Some are animated frames that attempt to communicate information related to both the benefits and the implementation procedures of a technology. Improvements in the packaging of recommended technologies will be addressed in a study being lead and developed by the Research and Development (Outreach) component of the project. Subsequent project activities will depend on the recommendations of the marketing study. The NRP will play a collaborative role in this activity (Act. 2).

Several activities are planned to review the extent to which past and present ISRA research holds good potential to result in recommendable technologies. As each activity develops and potential is determined, the research or technology will be targeted for project resources to get it to the validation and/or valorization stages.

The ISRA/NRBAR Project is presently funding eight collaborative and six researcher grants. They are expected to eventually result in the development of validated technologies. These grants will be followed closely to review upcoming field-work especially related to farmer managed trials and the research project's development and capacity to provide a validated technology (Act. 3).

Several natural resource management topic areas have received considerable research over many decades, however due to attrition and research reporting many studies are not being used to plan future activities. To further improve the access to information among researchers, literature reviews will be commissioned (Act. 4) to summarize decades of research on a selected number of topics pertaining to management of the natural resource base. These will complement similar efforts already initiated on other topics (varieties, agronomy). These literature reviews will be presented to the ISRA *Comité de Lecture* for approval for publication by UNIVAL in the *Etudes et Documents* series, thereby putting it into a more permanent and available document. Several topics have already been suggested to and accepted by researchers in the areas of; (1) composting and on-farm organic matter management; and (2) agroforestry technologies for soil and water management. Literature reviews will be conducted and results subjected to the technology characterization criteria to prepare the material for valorization as training material.

These summaries of the literature will also be evaluated to help determine the direction of future research in the area, and determine if sufficient information is presently available to develop and release technological recommendations on the subject. Each principal author will submit to his/her Research Director for approval an implementation program with names of associate authors, a draft outline, and a timetable for completion.

A verbal Presentation of Research Results - *Animation Scientifique* (Act. 5) will be conducted to increase the access to information and foster the critical analyses of research results among researchers, especially inter-program exchanges. The DRCSP has had a long, but intermittent history of presenting research results to peers in an open forum. Improving this type of information exchange will not only allow

researchers in production systems and breeding programs to better understand each others activities and objectives, but also encourage closer collaboration in the conceptualization and execution of technological research.

NATURAL RESOURCE MANAGEMENT RESEARCH PLANNING

Participation of the farmer and agents of development (NGOs, farmer groups, and/or government agents) in ISRA's planning, execution and analysis of research is fundamental to the NRM Research Strategy and NRBAR Project Objectives. A Cellule de Reflexion en Méthodologies de Recherches en Milieu Réel was created in 1994 to address the institutionalization of a farmer-participatory approach to research planning, execution, and analysis. The Cellule has met several times in 1994 and attended the Symposium in Systems Oriented Research in Montpellier France in Nov 1994. Several activities will be programmed to improve ISRA's capacity to meet the Cellule's objective. Training in participative methods in technological research will be provided to improve skills related to: working on multi-disciplinary teams, working with outreach agencies, listening to farmers, group diagnoses of production problems, and multi-disciplinary team research planning (Act. 6).

The Cellule will organize a conference at the Djibélor Station in April to review the wide assortment of participatory and technology testing methods that ISRA researchers have used (Act. 7). This conference will attempt to highlight the strengths, weaknesses, and certain characteristics which have contributed to or deterred a farmer participatory research process with and without intermediary partners.

ISRA/CG has been working on developing an ISRA-wide Monitoring and Evaluation Plan to assist researchers and administrators to better plan and monitor research based on clearly defined objectives. The basis of a Monitoring and Evaluation Plan is the elaboration of Logical Frameworks, which is the logical progression of setting objectives based on goals and establishing output indicators that are able to verify that an objective has been met. The development of Logical Frameworks has been initiated with the grantees of the NRBAR Collaborative Grants Program. However, they will also be established throughout ISRA to logically link goals and objectives of the Directions with those of the Programmes and the activities of research. The C&G will work with the GRNSPZS and GRNSPZH to elaborate Logical Frameworks for the 1996 planning cycle (Act. 8).

Since the beginning of the project, the finances under the budget line item Support for Natural Resources Program has not been available pending financial certification of ISRA's accounting procedures. It is envisioned that this line item will be available by January 1996. Therefore, planning of 1996 research activities to be financed by this line item will be included in the 1995 planning cycle (Act. 9).

The planning process will be conducted with the two Programmes for Research on Natural Resource Management and Production Systems (Dry and Humid Zones) of the DRCSP and the Agroforestry Programme in the DRPF. Researchers will be solicited to suggest technological research already in progress or identified in farmer

participatory research planning processes that has a good potential for adoption. Depending on its state of development, applied and adaptive validation research will be funded to forward the technology to the recommendation phase.

The personnel of the Agroforestry Programme is stationed among other programme personnel of other Directions. Their role is to conduct research leading to technologies based on better management of trees in the farm system. Their present research planning process relies on farm level diagnostics, but does not explicitly include the researchers from other disciplines that also work in the same agro-ecological zone. The Agroforestry programme would like to better integrate its members into the research planning process of the programmes with which it shares objectives so as to create more comprehensive farm level diagnostic studies and to foster closer research collaboration (Act. 10).

On-farm testing of technologies has become a mainstay in the technology development process. Although their designs are often more simple, the planning of on-farm trials can be rather complex to assure that sufficient information is obtained to assess not only yield and labor performance, but also yield stability and exposure to risk. ISRA presently encourages its researchers to conduct on-farm trials. However, the research conducted and procedures employed are not always conducive to efficiently and effectively using farmers as testers of technology. Many research teams are uni-disciplinary (such as breeders testing a new variety), and many do not conduct sufficient planning or follow-up to assure that field designs are beneficial for both the researcher and farmer, and that the farmers interest and labor are not abused. Training in the statistical, biophysical as well as social aspects of on-farm experimentation techniques will be programmed to address these issues and complement the training in participatory methods in technological research (Act. 11).

There are two scientific exchanges components in the Grants to ISRA Researchers Program. The objective of the Site Visits component is to support travel to see technological research or outreach activities that may be transferred in whole or in part to natural resource research activities in Senegal. Activities related to the Site Visits component for 1995, will be the identification sites and assuring host institutions and ISRA researchers are properly prepared to benefit from the exchange (Act. 12).

The Sabbatical component is slated to begin in 1995. Its objective is to support ISRA researchers in short-term exchange programs (4-6 months) with foreign scientist to conduct research and or learn new techniques that will support their research in natural resource management with ISRA (Act. 13).

INFORMATION CHARACTERIZATION AND MANAGEMENT

A Geographic Information System (GIS) will be a key element of the information characterization and analysis process. Presently, much of ISRA's agronomic and survey research data is digitized in a computer based format. However, due to the limitations of ISRA's present software capacity, data from different survey work is difficult to manipulate and compare. GIS is a tool which will provide the basis for

simultaneous analyses of survey as well as satellite information so as to improve its access and meaning to researchers and administrators.

A GIS Needs Assessment was performed in May 1994, and consists of an institutional analysis of ISRA's present capacity in GIS; the potential capacity of GIS as a research planning, execution and analysis tool; a series of recommendations concerning software, equipment, personnel and training that is needed to install a GIS in ISRA; and an implementation plan that organizes the installation activities into their chronological order. Upon approval of the implementation plan by ISRA, installation of the GIS will be initiated (Act. 14).

The GIS is a tool, but requires information to be useful. The most inexpensive way to access information is to collect information that already exist and is available for free or for a minimal charge. Therefore, once the ISRA initiates the installation of the GIS, it will also need to initiate data collection among its own researchers and development partners (Centre de Suivi Ecologique, ORSTOM, FAO, donors). In addition ISRA will need to digitize some existing information so that it may more useful, such as technology utilization zones (to be compared to agro-ecological zones), NGO activity zones, etc. (Act. 15)

Another limitation to research results analysis often cited by researchers is the difficulty of integrating the results of multi-disciplinary research. This problem will become more evident as ISRA reinforces its multi-disciplinary farmer-participatory research approach. Modeling multifaceted systems is one of the more common methods to assist with the integration of a multi-disciplinary research. Models are conceptual tools that help the researchers to take a more comprehensive view of a system, and better understand the inter-relations of resource movements in a farm, village, or regional system. The ability to quantify or even qualify the magnitude or mechanisms of the relations varies greatly within a model. Although, some aspects are poorly understood (access to land, measurement of risk), many of the more bio-physical aspects are well known and can be described with mathematical equations (water and nutrient availability, soil erodibility, organic matter decomposition). Several researchers (Systems Modeling Group) have expressed interest in better integrating their research results to better understand impact and relational aspects of one sub-system on the other. Technical assistance and training programs will be provided to reinforce these researchers' capacities to better view their discipline within the realm of a whole farm system (Act. 16).

GENERAL PROGRAM SUPPORT

ISRA has had a longstanding relations with several well-respected American scientists associated with the USAID Collaborative Research Support Programs (Bean-Cowpea and INTSORMIL). These relations support the germplasm development programs which provide new varieties or specific management practices to the GRNSP Programs. Maintaining these relations is relatively inexpensive. Short-term periodic support to the cereal breeding program was started in 1994, and will continue in 1995 (16). In addition the GRNSP-ZS Programme will also solicit short-term expertise in soil and water management (Act. 17).

The two Grants Programs (Researcher and Collaborative) will continue to support research projects as well as select new research proposals. The Natural Resource Program will provide technical oversight to the management of these grants which will include, but is not limited to: (1) review and modification of protocols; (2) assisting researchers to develop and refine proposals; (3) evaluate proposals; (4) visit research sites and review progress; (5) evaluate technical progress reports; (6) serve as a conduit to help solve technical or management problems associated with the research grants. In addition, with the implementation of the ISRA Monitoring and Evaluation (M&E) Plan each grant will prepare a Logical Framework and M&E Plan. The NRP will assist each grantee with the development of the M&E plans and selection of verifiable indicators (Act. 18).

Statistical analysis of research data is an indispensable part of the research process. The analysis requires both the knowledge of which analysis need to be performed and the mathematical capacity to perform the calculations. In 1994 ISRA received about 40 relatively powerful (DX486) desktop personal computers. ISRA has also been contemplating standardizing its statistical software so as to obtain economies of scale from the purchase of reference materials (software manuals), as well as assist researchers to more easily collaborate because they all use the same software and thus may all participate in the analytical process. Once the software decision is made both statistical and software training will be needed by researchers (Act. 19).

In addition to statistical analysis, other types of computer based tool can greatly increase the researchers capacity to analyze and more deeply comprehend research result. Therefore, other opportunities in computer software training for researchers and technicians will be programmed as these needs are identified. Present subjects include geographic information systems, graphics, and database management (Act. 20).

NATURAL RESOURCE MANAGEMENT PROGRAM 1995						
OBJECTIVE	OUTPUTS/ INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSONS RESPONSIBLE	TIMING	COMMENTS
Technology Valorization	Obj. 2 Ind. 1.a	1. Develop criteria and process for technology characterization/ validation	STTA	BAME		
		2. Extension Information Packaging				
		3. Research Grant technology development				
	Obj. 2 Ind. 1.a	4. Compile and synthesize research results for Compost and Agroforestry Technologies. Prepare for UNIVAL Valorization.	Training STTA	GRN-ZS Agroforestry		
		5. Animation Scientifique				
Natural Resource Management Research Planning	Obj. 3 Ind. 3.b	6. Training in Participatory Research Methods	SSTA Senegal Training	Cellule Reflex. Methods en Milieu Réel		
	Obj. 3 Ind. 3.b	7. Conference on participatory research methods.				
	Obj. 1 Ind. 2.a	8. Develop objective trees and logical frameworks for GRNSP Programmes	STTA	C&G		

NATURAL RESOURCE MANAGEMENT PROGRAM 1995						
OBJECTIVE	OUTPUTS/ INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSONS RESPONSIBLE	TIMING	COMMENTS
Natural Resource Management Research Planning (continued)	Obj. 1 Ind. 2.a	9. Plan 1996 Natural Resource Program Support \$1 Million		GRN-ZS, GRN-ZH Agrofor Kolda		
	Obj 1 Ind. 1	10. Improve integration of Agroforestry and GRNSP research planning	STTA	GRN-ZS Agroforestry		
	Obj. 3 Ind. 3	11. Improve On-farm trial design and analysis	STTA	GRN-ZS GRN-ZH		
		12. Site visits				
		13. Sabbatical Program				
Information Characterization and Management	Obj. 1 Ind. 1.a	14. Initiate GIS implementation plan	Training, Site Visit, Sabbaticals	GIS Comite	1995	
	Obj. 1 Ind. 1.a Ind. 4	15. Collect existing baseline natural resource and agro-ecological data	Local travel, Cent. Suivi Ecol.	GRN-ZH GRN- ZS		
	Obj. 1	16. Systems Modeling	TDY, Training			
General Program Support	Obj. 1 ind. 1	17. Cereals Methods and Planning	STTA	Cereals ZS		
	Obj. 1 Ind.1	18. Researcher and Collaborative Grant technical oversight and analysis.	NRP	Coord. de Sub		
	Obj. 4 Ind. 5	19. Statistical support	STTA	DRCSP		
		20. Computer Training				

4. OUTREACH

INTRODUCTION

Outreach activities are by definition most directly oriented towards Project Objective (3) and Project Outputs 3a and 3b. The aim of this facet of the project is to strengthen ISRA's links with its clients. Outreach activities consist of the following major tasks:

- a) developing a system of protocols and grants with NGO's, farmers organizations, and extension agencies, such that farmers participate in research needs assessment, research priority setting, execution and validation;
- b) organizing its outreach program;
- c) establishing adequate outreach procedures;
- d) establishing monitoring systems, and
- e) ensuring effective field testing and adoption of technologies.

The plan of activities for 1995 is based on knowledge gained, contacts established, and lessons learned during the first two years of the project. For the sake of economy, we will not recall here the details of accomplishments or problems encountered in 1993 and 1994. Instead, the reader is referred to the biannual reports of those years. In the present document, broad issues will be discussed as they refer to long term and short term objectives, and corresponding project tasks and activities.

During the first two years of the project, a system of protocols and grants with NGO's and farmer organizations was accomplished. Farmers have been approached through various NGO and OP representatives, through ISRA "Porte Ouverte" days, and through individual research projects; but an active, institutionalized participation has not yet been accomplished. In 1995 Outreach will participate with the Natural Resource Planning component in Participatory Research training in order to begin the institution wide acceptance and application of this procedure for all those researchers carrying out adaptive research. At the same time, collaborative research projects will continue to break ground in widening the network of farmers familiar with NRBAR and ISRA. Currently, there are eight collaborative research projects. Benchmark objectives A, C, and E refer to project activities that will be focused towards adjustments in the grants protocols that will enhance project implementation. In terms of lessons learned, we have understood that the Grants Management Committee must essentially be flexible and willing to make adjustments to protocols as we gain experience. In 1995, this will include a requirement in the protocols that grantee organizations be willing to apply the project log frame to monitoring plans, for better overall project management and on-going assessments.

The outreach program has initiated several activities which, in the long run, should lead to a variety of ISRA outreach procedures. UNIVAL will, in 1995, work with the Comité de Reflexion and designated staff in each ISRA research station to establish outreach procedures, such as regular farmer/researcher meetings, and the distribution of improved fiches techniques on a regular basis. Through the NRP's plans, researchers will receive MARP training. Audio-visual materials will be developed in 1995 which will become a regular part of ISRA outreach programming, and regular radio spots are planned. An additional procedure which will be begun is regular meetings with PNVA, and implementation of field visits with PNVA to assess the level of farmer familiarity with ISRA and NRM technologies recently developed. It is anticipated that UNIVAL will initiate a program to highlight various innovative farmers in radio and TV programming. We will also explore possibilities of setting up a mobile video viewing unit which will visit local markets. Possible tapes will include short stories on soil conservation methods, new seed varieties, and a new seeder developed at Bambey.

Monitoring systems, for the first time since project start-up, will be aligned with the project log frame among partners participating in the collaborative research program. This will be accomplished through collaborative grants grantee meetings which will allow partners to develop coinciding monitoring objectives and to integrate log frame and M & E indicators into their existing monitoring plans. Some coordination will also take place with DESFIL.

Field testing and adoption of technologies are processes which require close collaboration between Outreach and the Natural Resource Planner.

FOCUS

The focus in 1995 will be on implementation of strategies developed in 1994 and early 1995. It can be assumed that during the first quarter of 1995, planning will take place which will seek to align recommendations from the mid-term evaluation of ISRA, the UNIVAL national communications strategy, the results of the outreach seminars held by UNIVAL in October and November, 1994, and recommendations emanating from the Comité de Reflexion as well as NGO and OP partners. There is already significant convergence of opinion and direction among most of these elements, so that planning in early 1995 should be mostly fine-tuning. This exercise of fine-tuning should include the identification of bench-mark activities and monitoring indicators for both UNIVAL and the Outreach program as a whole, as well as assigning these activities a temporal context for the rest of the year. The Outreach Program will concentrate on delivery: delivery of messages and materials to farmers; striving to make the environment of ISRA regional stations and centers more permeable. In concert with the NRP program, UNIVAL, and the CNCR, Outreach will also work on improving the flow of communication from farmers to researchers. Keeping close watch on the research planning process, the Outreach program will work with the Research planner and his colleagues in increasing "ISRA readiness" to respond to farmers' willingness to participate in the research process as well as farmers' needs for the products that the research process can provide. The activities that are listed in the work plan chart which are linked to objective 3, such as the development of

three "valorization" packets, or the possible development of a film on fish scales for soil restoration, are examples of the focus on producing outputs which can directly enhance ISRA's outreach capabilities.

STRATEGY

The strategy for Outreach in 1995 rests on two axes: the continued support of UNIVAL and its programs with ISRA entities outside of as well as in Dakar; and continued work with the Comité de Reflexion in channeling information being gathered in the field from field visits, meetings with NGOs, talks with Senegalese farmers, and continued dialogue with such organizations as FONGS, CONGAD, and their umbrella organization, the CNCR. This strategy will be achieved both through the distribution of documents emanating from studies on relevant problems (communications, gender issues, literacy and non-literacy) and also through the verbal process of reporting on first-hand knowledge gained through the implementation of activities as described in the workplan chart. The use of logical frameworks by partner institutions and UNIVAL, for example, should enhance the flow of information and the level of comprehension of information by aiding in the development of common vocabulary and concepts among the various actors in the ISRA outreach environment. This activity should also promote joint planning, as well as more informed, efficient planning as more information sharing based on common assumptions takes place. Short term training of farmers, community leaders, and field agents should also contribute to the process. Finally, training and planning of outreach activities on the field level will be key in implementing the farmer to ISRA, ISRA to farmer information/product circuit.

RESEARCH VALORIZATION, TECHNOLOGY TRANSFER, AND KNOWLEDGE NETWORKS

We have, in the course of the last two years, identified several knowledge networks. D. Sarr, for example, has demonstrated that the USAID KAP study rightly argued (farmer-to farmer) that much information follows kinship networks. UNIVAL has recognized the importance of the CNCR as a regrouping of the major producers groups in the country's agricultural sector. Disciplinary groups at ISRA, and the many technicians and NGOs who work with the various groups are yet another network. To achieve technology transfer, these various networks require tools of communication and educational materials in order to enhance the flow of information. There is another ingredient which is far less tangible but which is of primary importance to this process of achieving "research valorization," and that is excitement, motivation, and the sense of being important participants at the forefront of positive change for the country of Senegal. This is the real challenge which the plan of 1995 is seeking to address: how to excite and motivate farmers and researchers about the tasks at hand? How to overcome cynicism and lethargy resulting from at least a decade of work on the research/farmer interface? Some technologies will be selected for diffusion not just for their superior efficiency, but also for their value as easily accessible, highly visible activities that give farmers the sense of beginning what they know is the long term task of successful natural resource

management in cereal production systems. This requires an examination of labor requirements, water management requirements, and "observability" of the various technologies that may be available. Given the constraints on staffing in the public and the private sectors, those activities that require the least instruction and follow-up by trained field agents may have the greatest potential for adoption. They may be the key in stimulating farmers to try more complicated activities that require higher levels of human and material investment. The use of fiches techniques, video films, local theater groups, radio and TV is being considered in this context: of exciting and motivating the public at large and farmers in particular about the significance of protecting and enhancing their inherited resources.

Tasks are summarised in the attached table.

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
A. Outreach works with GRNSP and (post)PNVA to valorise three recommended technologies to be publicized nationally	1.1, 3.2	OA and counterpart meet with relevant researchers to develop valorization plans, including refinements of technologies (niébe: melax and mouride; seeder: developed by Hyacinthe Mbengue; soil restoration: ie as promoted by Rodaie, Winrock and ARAF, valorisation implemented - activities identified (ie fiches techniques, cassettes, etc)	TA vehicle for departmental visits, NRBAR covers duplication and development costs	Outreach Advisor, Counterpart Wilson/Sarr	1st and 2nd quarters for one soil restoration book and audio cassette; 2nd quarter begin work on seeder	assessment of need and use on department level will inform form of support chosen - will include collab. with UNIVAL and NGOs - OPs
B. Monitor ongoing grants	3.4	1) review quarterly reports; conduct site visits; sponsor meetings of participants 2) log frame training and revision of indicators in grantee monitoring plans	TA vehicle, NRBAR fuel, portable computer, Kaolack or Dakar offices for meetings	Outreach Advisor; grants administrator, NRP, TA counterpart (part-time)	minimum 2 visits per year, 2nd and 4th quarters, plus meetings	locations of meetings may change; some may be regional; some financial follow-up only

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
C. generation of new collaborative grants projects	3.3	Presentations given by OA to various NGO's, OPs, etc. on NRBAR; documents on NRBAR distributed widely; field trips made to CER level to meet with local institution representatives; work with FONGS; CONGAD; CNCR	TA vehicle, NRBAR fuel, portable computer, CER representation, FONGS representation or other local federations	Outreach Advisor (full-time), TA counterpart, (part-time)	emphasis on late November/early December for program presentations	subject to revision with new information regarding NGO's and others operating in the field
D. Inventory of NGO's in project zone involved in NRM activities, assessment of activity relative to intervention quality and nature	3.1	final edit and preparation of report for distribution; use of report for communications/valorization strategies as well as data bank for ISRA	contract out final editing	Outreach Advisor, secondary TA Counterpart	2nd quarters	time slip possible depending on resources as described
E. public education/social marketing TDY to provide guidance on communications strategy	3.1, 1.1, 3.5	two visits to prepare 1995-97 plan, complete book on compost; two visits to assist in RTS projects and oversee strategy implementation	TDY budget line at least two persons trained for UNIVAL/ISRA regional outreach program	Outreach Advisor and counterpart, Dir. of UNIVAL	2nd, 3rd and 4th quarters	time slip depending on authorization of TDY requests

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
F. funding and production of two different outreach packages focused for farmers or NGOs	3.1, 1.1, 3.5	Packages to be developed in-house (ISRA) with outside help (contract) or through grant program; UNIVAL	local contract and/or grant process with input from ISRA/NRBAR staff and participating NGOs	OA & counterpart w/NRP, GRNSP, UNIVAL participating NGOs	3rd and 4th quarters 1995	may include new soil restoration techniques
G. gender assessment of agricultural systems in project zone to identify possible gender issues (TDY w/local contract support)	3.1, 3.2	collaboration with funded NGOs, review of data collection instruments; field observation of coll. research projects on line; baseline study for zone; three visits TDY	TDY and local contract budget line	Outreach Advisor and counterpart	2nd, 3rd and 4th quarters 1994	baseline study to be used for further analysis of project activities; consultant identified
H. assessment of possible marketability of ISRA services and products for future income generation	3.1, 3.2, 3.5	coordinate with SG at ISRA, fine-tune w/reference to Ernst & Young, World Bank assessments	TDY and local consultant budget lines	Outreach Advisor, counterpart with Financial Advisor	4th quarter 1995	close collaborative planning and implementn. examine existing sales; service and product contracts; make recomdatns

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
I. Coordination with Peace Corps NRM office for accessing national rural teachers network	1.1, 1.3; 3.2	rural teachers in NRM program use ISRA derived material to promote selected issues and to encourage farmer to research linkages/coord with PNVA	UNIVAL /2 people	OA and counterpart	4th quarter	devlpt and distribution of info packages on 1 tchnology and on ISRA services & products
J. farmers visit ISRA research stations on a bi-annual basis; an information day is arranged	1.1; 3.2	ISRA stations have Open Door days; also farmer seminars	project funds for training	Outreach Advisor and counterpart, NRP, UNIVAL support	depends on station timing; 3rd and 4th quarters	NGO/OP participation in seminars and Open Door days
K. set-up data bank on NGO's for ISRA researcher use	1.1; 3.1, 3.2	work with participating NGOs, possible DESFIL link, UNIVAL support and possible TDY or local contract support for data base design	project funds local contract with ISRA staff participation	Outreach Advisor and counterpart TDY/local consultant data base design	3rd quarter	possible collaboratn with Centre de Suivi Ecologique

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
L. meetings with UNIVAL: development and application of regional outreach strategy and national communications strategy	3.1, 3.2	UNIVAL works with OA, J. Simon and CNCR as well as refines clearance path for authorizations of activities goals and objectives	UNIVAL Director; Comité de Reflexion	Outreach Advisor and counterpart	on-going throughout year	some depends of financial management strategy of ISRA outreach
M. training needs assessment for ISRA Outreach Program	3.1, 3.2; 5.1, 5.2	identification of personnel with outreach responsibilities, training needs and resources identified	UNIVAL director; Comité de Reflexion	Outreach Advisor, counterpart, UNIVAL director	ongoing throughout year	managment decisions to be made
N. Information sheet on Collaborative Research program developed and circulating between NGOs, OPs, GRNSP group, NRBAR staff	3.2	UNIVAL develops newsletter format, assigns responsibility who works with Outreach; quarterly publication	two UNIVAL personnel, UNIVAL graphics equipment & paper (project purchase?); telephone	Outreach Advisor counterpart	4th quarter	timing depends on staff availability
N. assess feasibility of the creation of arrondissement level NRM committees working in concert with ISRA	1.1; 3.2	meetings on departmental level with FONGS and ISRA	training funds, local contracts, TA vehicle, GRNSP advisory support	Outreach Advisor, Counterpart possible precede by CER/PNVA, rural support assessment TDY	Planning at end of April, beginning of May; tournée in May	follow-up report for possible application in CBNRMS project

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
O. plans underway for active functioning of outreach/marketing role in UNIVAL	3.1, 3.2, 3.5; 5.2	personnel are assigned responsibilities for outreach, short-term training identified	NRBAR short-term training	Outreach Advisor, Counterpart	4th quarter	DG sign-off on new UNIVAL tasks and research station roles?
P. cost-benefit studies done (selected by ?) on ISRA marketing possibilities	3.5	Financial Advisor and Outreach Advisor work together on identifying and categorizing existing contracts; discuss with appropriate ISRA/NRBAR personnel the possibilities for new ones; possible TDY	NRBAR TDY funding, SG, DS Research Planner (COP)	Outreach Advisor, Financial Advisor, their counterparts	4th quarter	timing can be moved up depending on personnel work loads and financial management strategy
Q. site visits in Senegal and to other NRM projects with research and/or outreach to learn what may be applicable in Senegal	3.1, 1.1	NRP and counterpart, OA and counterpart visit sites where outreach and adaptive research activities are underway for possible ISRA applications and for planning of future trips for other staff (ie UNIVAL outreach person/s)	NRBAR site visit funding other USAID NRM project personnel, appropriate Ministerial or other official contacts, possible USAID Dakar assistance in plans	Natural Resource Planner (NRP) Outreach Advisor and/or Counterpart	planning in 2nd quarter; visit to Gambia and Guinea 3rd quarter	possible sites: Gambia, Niger, Guinea Burkina, Mali likely extension of activity to first quarter 1996

ISRA/NRBAR outreach wkplan.

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
R. Coordinating meetings with post-PNVA staff	1.1; 3.1-3.5	visit with directors of research & planning, vulgarisation, and formation in Dakar office, field visits ; assist in new program planning	PNVA staff, TA vehicle	Outreach Advisor, Counterpart	2nd and 3rd quarter	NRP may want to join in field visits
S. Work with short-term technical assistance in identifying and developing alternative contract prototypes for commercial partners of ISRA	3.5	Assess ISRA rules and Senegalese legal requirements for contracts with commercial entities; national and international	TDY funding, appropriate ISRA staff input	Outreach Advisor and counterpart, financial Advisor and counterpart	3rd or 4th quarter	see Financial Advisor plans
T. Assess state of current adoption of 2 or 3 NRM technologies to provide baseline	3	Study of project zone selected sites w/use of technologies ongoing; assess adoption	OA, homologue; local contract funds	OA, homologue, local expert	4th quarter	in consultation with NRP; composting likely choice
U. Visit regional centers and stations to assess outreach plans and roles	3	conduct analysis of progress towards an outreach role for ISRA centers and stations	possible TDY or local contract	OA, Homologue guidance; consultant to conduct study; Comité de Reflexion	4th quarter	in consultation Hannibal Muhtar study and Financial Management strategy and ANR/USAID

ISRA/NRBAR outreach wkplan.

NRBAR PROJECT: OUTREACH 1995						
TASK	OUTPUT INDICATOR	PROJECT ACTIVITIES	PROJECT RESOURCES	PERSON(S) RESPONSIBLE	TIMING	COMMENTS
V. Theatre group makes visits to villages to vulgarizé NRM themes	3	review submitted proposal and contract for services	possible local contract; Bambey region first as test	OA, homologue, UNIVAL, J. Simon report ref.	2nd or 3rd quarter	purpose is to invigorate the grassroots debate on profitability of NRM practices
W. Assist information flow from farmers to ISRA researchers	3	in addition to outreach activities already described, conduct MARP training for researchers and assist in application of method	Comité de Reflexion	Comité de Reflexion	2nd and 3rd quarters	see NRP Work Plan
X. Update computer capacity and audio visual capacity for UNIVAL	3,1.1,3.5	referring to guidance from J. Simon report, purchase new Apple equipment; video equipment	possible combination of funding from World Bank and NRBAR	OA, Homologue, Dir. of UNIVAL	3rd and 4th quarters	See Jamil Simon reports; request to emanate from UNIVAL
Y. Work on farmer/herder land use and social aspects of soil restoration	3	visit of Suchet Louis; meeting in Kolda with GRZ; meeting of S. Fall; special study commissioned	possible TDY or local contract; extension aspects reviewed	OA, homologue, possibly PAPEL	4th quarter	possible training visit to OSU and Tuskegee

5. FINANCIAL MANAGEMENT

Financial management activities will be particularly oriented to achieving Project Objective (4) and Project Output (2c). The aim of this facet of the project is to strengthen ISRA's financial management system by:

- (a) developing adequate financial sub-systems at ISRA,
- (b) increasing the effectiveness of the computerized accounting system,
- (c) strengthening the indirect cost accounting processes,
- (d) generating timely financial analyses in forms appropriate to decision-makers at all levels, and
- (e) developing a system for tracking all donor and Government of Senegal contributions.

The activities of the Financial Advisor complement the activities of Ernst & Young/Dakar (USAID Contract Number 685-0285-c-00-2299-00), including their Phase I analysis of the existing ISRA financial management system and recommendations for its improvement, and the implementation of the Phase II Action Plan for an improved financial management system. The Financial Advisor's activities reinforce ISRA management's capacity to coordinate, monitor, and evaluate the change process brought about by the Ernst & Young/Dakar program; and to assure the effective future operation of the reorganized financial management system. The Financial Advisor coordinates his activities with the donors in the development of the financial improvement plan.

APPROACH

It has become more and more clear that financial management is vital to National Institutes of Agricultural Research (INRA) like ISRA. These INRA's have not, historically, been profit making institutes; they have depended on external financing, usually the national government and international donors. Recent years have seen ever increasing demands placed on these financing sources, the same funds must finance a greater number of activities, and as a consequence the INRA's have faced difficulties to maintain the same level of funding let alone obtain any increases.

In this context, where donors are looking for reasons not to fund proposals, every positive action an INRA can take to strengthen its management becomes a quantifiably observable indicator to increase donor confidence and support the fund proposals. One of these positive actions available to the INRA's and to ISRA is to put in place an effective and viable financial management system. Actually, the donors and the national government regard good financial management in itself as proof that the total INRA management system is healthy and that research funds allocated have a good chance of being properly used.

The ISRA workshop which was organized to develop the Logical Framework (logframe) for the financial management system included participants from ISRA, USAID and the technical assistance teams. It provided an opportunity for the participants to exchange ideas and come to agreement on the direction in which ISRA should go. The workshop output, a draft logframe for ISRA's financial management function provides ISRA management with a holistic view of the financial management system - its mission, its hierarchical objectives and the verifiable indicators which permit an evaluation of progress. The logframe also provides a basis for completing this 1995 workplan for the financial management activities in the NRBAR project (identical to the ISRA workplan for 1995). The logframe and its indicators also provide a means to evaluate the proposals made for the reorganization and operation of the new financial management system now being installed.

The draft logframe was presented as part of a comprehensive strategic plan for the financial function to the Financial Management Commission of the ISRA Mid-term Review in January 1995. Following the mid-term review, the financial management team (Chief Accountant, his staff and the Financial Advisor) incorporated into the strategic plan and logframe the recommendations coming from the Financial Management Commission and developed the ISRA workplan for 1995. This final strategic plan for ISRA's financial management function, including the logframe and 1995 workplan, was then presented to the ISRA general management for approval.

STRATEGIC OBJECTIVES

The ISRA workshop which was organized to develop the Logical Framework (logframe) for the financial management system developed the strategic objectives. These objectives must be achieved if the financial management system is ever to meet its goal: to support the agricultural research activities by the implementation of a viable and appropriate financial management system.

The specific objectives for the financial sub-system at ISRA are:

1. Coordinate the financial management activities. They are currently dispersed horizontally and vertically within the Institute (General Secretary, Chief Accountant, Internal Auditor, Management Controller, Research Management - programs, stations, projects).
2. Financial planning at the medium and long term range, identify needs and acquire financial resources. This would be a component part of the ISRA Strategic Plan and identify possible funding sources (internal and external, national and international). A fund-raising plan must be developed and proposals made.
3. Allocate credits to the priority projects and programs, and support services. There needs to be an effective budget process that is participatory and results oriented (multi-year budgets, costs of support services, variable costs per station, management responsibility, etc.). *Budgeting "is translating the operational plans into financial terms so that limited financial resources can be applied in the most efficient manner to carry out the activities described in that plan."* (Nickel 1989) The treatment of the general overhead from the stations and the costs of support services must receive particular attention.

4. **Assure a transparent and efficient use of the financial resources. The delegation of management authority should be done to support a rapid mobilization of funds at the level where the research activities take place.**
5. **Assure that financial information is recorded and conserved in accordance with existing regulations and management's internal controls. Adopt fund accounting practices.**
6. **Assure the data treatment and communication of financial information. One of the critical points here is the production of reports within the delays prescribed and in the expected formats.**
7. **Assure an appropriate level of control over operations and systems. Control is not an afterthought but must be designed into every step of the financial management process regardless of which service is responsible. A system of internal controls is necessary to protect and safeguard the assets of the Institute, and to verify that the procedures put in place are respected. Budget reports, including reports on encumbrances are indispensable tools.**

For each of these objectives the financial management team has selected a number of activities for their achievement. Verifiable indicators for these activities will permit the evaluation, over time, of the execution of the activities and the achievement of the objectives.

**PROGRAMME DE GESTION FINANCIERE ET COMPTABLE
PLAN DE TRAVAIL 1995**

BUT : Le but de la fonction financière est de supporter les activités de la recherche agricole par la mise en place d'une politique financière et d'un système de gestion financière adaptés.

INDICATEUR : Le système financier et comptable de l'ISRA est accepté par ses partenaires

RESULTAT No 1 : Les activités de gestion des ressources financières sont coordonnées

INDICATEUR/RESULTAT No 1 : La création de la Direction Financière et Comptable intégrant l'ensemble des activités de gestion financière et comptable (comptabilité générale, analytique, matière et budgétaire)

ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Centrer le Contrôle de gestion sur l'analyse des résultats financiers et budgétaires et la coordination de l'élaboration du budget pour le comité de budget	Rapport d'analyse des résultats financiers et budgétaires	CG	trimestrielle	
	Réunions du Comité de budget	CG, DS	à partir de mi-février	
	Note de service centrée le Contrôle de gestion sur l'analyse des résultats financiers et budgétaires et la coordination de l'élaboration du budget pour le comité de budget	DG	1er trimestre 1995	

RESULTAT No 1 : Les activités de gestion des ressources financières sont coordonnées		INDICATEUR/RESULTAT No 1 : La création de la Direction Financière et Comptable intégrant l'ensemble des activités de gestion financière et comptable (comptabilité générale, analytique, matière et budgétaire)		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
2. Réorganiser la fonction financière et comptable au niveau des centres et stations et assurer un responsable financier et comptable nommé par le Directeur Général sur proposition du responsable chargé des fonctions financières et comptables, qui soit rattaché directement aux directeurs des centres et stations	Identification des 11 responsables financiers pour tous les 11 centres et stations	DFC	1er trimestre 1995	
	Rédaction d'une note de service	DFC	1er trimestre 1995	
	Proposition d'un organigramme	DFC	1er trimestre 1995	
	Un responsable financier et comptable dans tous les 11 centres et stations (nommé par le Directeur Général sur proposition du responsable chargé des fonctions financières et comptables, qui soit rattaché directement aux directeurs des centres et stations) est nommé par note service	DG	1er semestre 1995	
3. Faire approuver les nominations des responsables de la Direction Générale chargés des fonctions financières et comptables, administration et technique, scientifique, contrôle de gestion et audit interne par le Conseil d'administration	Rédaction d'une note de service	DFC	1er trimestre 1995	

RESULTAT No 1 : Les activités de gestion des ressources financières sont coordonnées		INDICATEUR/RESULTAT No 1 : La création de la Direction Financière et Comptable intégrant l'ensemble des activités de gestion financière et comptable (comptabilité générale, analytique, matière et budgétaire)		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	Les nominations des responsables de la Direction Générale chargés des fonctions financières et comptables, administration et technique, scientifique, contrôle de gestion et audit interne sont approuvées par le Conseil d'administration	DG	1er semestre 1995	
4. Renforcer la supervision du Conseil d'administration sur les outils de contrôle	Présentation du plan d'action et des rapports de l'Auditeur interne	DG	1er semestre 1995	
	A chaque réunion le Conseil d'administration statue sur le plan d'action et les rapports du Auditeur interne	Conseil d'administration DG	1er semestre 1995	
5. Finaliser et mettre en oeuvre le stratégie pour la formation permanent des personnels administratifs, financiers et comptables, intégrant les besoins des centres et stations	Approbation du plan de création d'un programme de développement des ressources humaines au sein du personnel des services administratifs, financiers et comptables	DG	1er semestre 1995	
	Evaluation des besoins en ressources humaines et en formation à court et long terme	DAT/SARH	1er semestre 1995	
	Elaboration du plan et du budget de la formation 1995	DAT/SARH	1er semestre 1995	

RESULTAT No 1 : Les activités de gestion des ressources financières sont coordonnées		INDICATEUR/RESULTAT No 1 : La création de la Direction Financière et Comptable intégrant l'ensemble des activités de gestion financière et comptable (comptabilité générale, analytique, matière et budgétaire)		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	Démarrage de la formation du personnel	DAT/SARH	1er semestre 1995	
	Programme d'orientation pour les nouveaux employés	DAT/SARH	1er semestre 1995	
6. Actualiser, d'une manière participative, le processus d'information des acteurs, particulièrement sur les orientations et les options du système gestion financière	Le recensement de besoin est refait à tous les niveaux	EY	1er semestre 1995	
	Les résultats du recensement sont traités et restitués aux acteurs	EY, DFC	1er semestre 1995	
	Les propositions des révisions sont faites	EY, DFC	1er semestre 1995	
	Un processus d'auto-évaluation de l'adhésion des acteurs au système est inclus dans le manuel de procédures	EY, DFC	1er semestre 1995	
	Un point relatif à l'évaluation de l'adhésion des acteurs au système est inclus dans les TDR des revues et des audits interne et externe	DFC, AI	1er semestre 1995	
7. Elaborer les outils stratégiques (cadre logique, plan stratégique, plan d'action)	Le Comité de planification est créé	DFC	1er semestre 1995	
	Le Comité de planification statue sur l'avancement d'exécution du plan d'action	DFC	chaque trimestre	

RESULTAT No 1 : Les activités de gestion des ressources financières sont coordonnées		INDICATEUR/RESULTAT No 1 : La création de la Direction Financière et Comptable intégrant l'ensemble des activités de gestion financière et comptable (comptabilité générale, analytique, matière et budgétaire)		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	Le Comité de planification soumet les outils stratégiques à la Direction Générale	DFC	1er semestre 1995	
	Approbation du cadre logique, plan stratégique et plan d'action par la Direction Générale	DG	1er semestre 1995	

RESULTAT No 2 : La planification et la mobilisation à court, moyen et long terme des ressources financières sont réalisées		INDICATEUR/RESULTAT No 2 : Les outils stratégiques de planification et de mobilisation de financement sont conçus et adoptés		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Mettre en oeuvre le plan de financement à moyen terme	Un nouveau calendrier de planification et budgétisation est proposé	DFC, CG	1er trimestre 1995	
	La rencontre annuelle avec le Comité des bailleurs est tenue	DG, DFC	3eme trimestre 1995	

RESULTAT No 2 : La planification et la mobilisation à court, moyen et long terme des ressources financières sont réalisées		INDICATEUR/RESULTAT No 2 : Les outils stratégiques de planification et de mobilisation de financement sont conçus et adoptés		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
2. Mettre en oeuvre la plan de la stratégie de financement	Conception et mise à jour du fichier des conventions	DFC, EY	1er semestre 1995	
3. Renforcer la gestion de la mobilisation de fonds de souventions de l'Etat	Diagnostic de la situation de la souvention de l'Etat	DFC	1er semestre 1995	
	Une correspondance est adressée au Ministère de Tutelle pour demander qu'il y ait une adéquation entre le montant du budget de transfert et celui des salaires du personnel permanent et des charges de struture	DFC, DG		
	Une correspondance est adressée au Ministère de Tutelle pour demander que les tranches trimestrielles du budget de transfert soient mises à la disposition de l'ISRA	DFC, DG		
4. Negocier que les clients/baillleurs finance leur partie des frais indirects	Le SYSPA/400 est paramétré pour le déversement des coûts salariaux directs au niveau des actions et que les données mensuelles extra-comptables de la Direction Scientifique en ce qui concerne la répartition de temps du personnel scientifique par action soit fournies	UIG, EY, DS, SARH	1er semestre 1995	

RESULTAT No 2 : La planification et la mobilisation à court, moyen et long terme des ressources financières sont réalisées		INDICATEUR/RESULTAT No 2 : Les outils stratégiques de planification et de mobilisation de financement sont conçus et adoptés		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	La comptabilité analytique mis en place genere les coûts directs materiels et salariaux et les coûts indirects	UIG, EY	1er semestre 1995	
	Les conventions existantes ont été amendées et les nouvelles conventions ont été élaborées pour que les bailleurs supportent leurs pertes des frais généraux	DAT, DS, DG, EY	1er semestre 1995	
	Proposition pour fixer les taux des charges indirectes est fait	DFC, EY	1er semestre 1995	
5. Créer un fond de reserve d'investissement	Identification des investissements financés par l'Etat	DFC	1er semestre 1995	
	Identification des moyens de financement pour ce fonds	DFC	1er semestre 1995	

RESULTAT No 2 : La planification et la mobilisation à court, moyen et long terme des ressources financières sont réalisées		INDICATEUR/RESULTAT No 2 : Les outils stratégiques de planification et de mobilisation de financement sont conçus et adoptés		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
6. Créer un fond de roulement et l'alimenter par des contributions forfaitaires de 4 % des montants des couts directs et indirects des conventions	Etablissement du prix de revient des conventions de recherche	DFC	1er semestre 1995	
	Negociation avec des clients/bailleurs	DFC, DS, DG	1er semestre 1995	
7. Développer la generation des recettes propres	Isolation comptable des activités génératrice de revenus des autres activités de l'Institut	DFC, EY	1er semestre 1995	
	Determination de marge bénéficiaire	Cellule de production	1er semestre 1995	
	Etude du prix de revient de production	Cellule de production	1er semestre 1995	
8. Appurer les arriérés de l'ISRA	Determination des arriérés de l'ISRA	DFC	1er semestre 1995	
	Convention de dettes croisés avec l'Etat	DG	1er semestre 1995	
	Convention clients/bailleurs	DG	1er semestre 1995	
9. Mettre à jour les recommandations du Conseil interministeriel de 1993	Proposition pour la réactivation du Comité de suivi de recommandations	DFC	1er semestre 1995	
	Réactivation du Comité de suivi des recommandations	DG	1er semestre 1995	

RESULTAT No 3 : L'allocation des crédits aux budgets des projets, programmes et structures est fait		INDICATEUR/RESULTAT No 3 : Le budget annuel (consolidé, trésorerie, investissement) est approuvé par le Conseil d'administration et diffusé à temps		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Renforcer la processus de l'élaboration du budget, créer un outil de gestion	Le Comité de budget est crée et la gestion de son secretariat est assumé par le Contrôleur de gestion	DG	Mars 1995	
	Le canevas (procédures, coûts standards, coûts directs éligibles, taux des frais indirects, etc..) du budget est approuvé par la Direction et diffusé	CG, EY	2eme trimestre 1995	
	Proposition d'une Note de service repartissant les responsabilités en matière d'exécution du budget 1996 entre d'un part les structures de recherche et les structures d'appui et d'autre part entre la Direction Générale et les Centres est fait	CG, DS, EY	4eme trimestre 1995	
	Une Note de service repartissant les responsabilités en matière d'exécution du budget 1996 entre d'un part les structures de recherche et les structures d'appui et d'autre part entre la Direction Générale et les Centres est diffusée par la Direction	DG	4eme trimestre 1995	
	Un programme de communication et de sensibilisation pour l'exploitation du canevas et l'élaboration du budget 1996 est mis en place	CG, EY	2eme semestre 1995	

RESULTAT No 3 : L'allocation des crédits aux budgets des projets, programmes et structures est fait		INDICATEUR/RESULTAT No 3 : Le budget annuel (consolidé, trésorerie, investissement) est approuvé par le Conseil d'administration et diffusé à temps		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	Un diagramme décrivant la structure d'approbation des dépenses et des responsabilités budgétaires est approuvé par la Direction et diffusé	CG, EY	4eme trimestre 1995	
	Le budget annuel est 1996 présenté par fonds, par programme et par responsable budgétaire et diffusé	UIG, EY	4eme trimestre 1995	
	Le budget annuel 1996 est approuvé par le Conseil d'administration	DG	4eme trimestre 1995	

RESULTAT No 4 : L'utilisation transparente et efficace des ressources financières est assuré		INDICATEUR/RESULTAT No 4 : Les besoins des Centres et stations en liquidité sont satisfaits en temps voulu		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Mettre en place un système d'approvisionnement performant et transparent	Mis à jour du manuel de procédures	DAT, EY	1er semestre 1995	
	Une programme de renforcement de l'approvisionnement est approuvé	DAT, NRBAR, DG	2eme semestre 1995	
	Rapports d'activités de dernier douze mois	DAT	trimestrielle	

RESULTAT No 4 : L'utilisation transparente et efficace des ressources financières est assuré		INDICATEUR/RESULTAT No 4 : Les besoins des Centres et stations en liquidité sont satisfaits en temps voulu		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
2. Mettre en place un système adapté de gestion des contrats	Mis à jour du manuel de procédures	DAT, EY	1er semestre 1995	
	Rapports d'activités de dernier douze mois	DAT	trimestrielle	
3. Mettre en place un système adapté de gestion de la facturation et des paiements de sous-contractants	Mis à jour du manuel de procédures	DAT, DFC, EY	1er semestre 1995	
	Rapports d'activités de dernier douze mois	DAT, DFC	trimestrielle	
4. Mettre en place un système adapté du suivi des engagements au budget	Les dépenses qui ne sont pas budgétisées ne peuvent pas être engagé			
5. Mettre en place une programme d'information sur les procédures	Recyclage périodique	DAT, DFC, DS	annuel	

RESULTAT No 5 : L'enregistrement et de la conservation des Informations financières est assuré		INDICATEUR/RESULTAT No 5 : Une comptabilité par fonds spécifiant la provenances et l'utilisation des fonds est mise en place		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Equiper les Centres avec un outil informatique de gestion	Identification des équipements et progiciels	EY	1er semestre 1995	
	Formation des agents	EY, UIG	1er semestre 1995	

RESULTAT No 5 : L'enregistrement et de la conservation des informations financières est assuré		INDICATEUR/RESULTAT No 5 : Une comptabilité par fonds spécifiant la provenances et l'utilisaton des fonds est mise en place		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
2. Faire une auto-evaluation des pratiques comptable conformément aux regles généralement reconnu sur le plan national et international	Identification des instituts de recherche où les pratiques comptable conformément aux regles généralement reconnu sur le plan national et international sont reconnues	DFC	1er semestre 1995	
	Les visites aux instituts de la recherche pour étudier leurs pratique comptable	DFC	1er semestre 1995	
	Introduction de la théorie et des pratiques d'une comptabilité par fonds spécifiant la provenances et l'utilisaton des fonds	DFC	1er semestre 1995	
	Développement d'un outil d'auto-évaluation	DFC	1er semestre 1995	
	Abonnements aux revues specialisées	DFC	1er semestre 1995	
3. Intégrer le système de la suivi des engagements au budget avec le systeme de l'enregistrement de la comptabilité générale	Les rapports des deux systèmes peut être présenté ensemble	UIG, EY	1er semestre 1995	
	Les saisies et conservation d'information des deux systèmes sont séparées	UIG, EY	1er semestre 1995	
4. Assurer la pérennité de l'équipement informatique de gestion financière et renforcer l'UIG	L'élaboration d'un plan de réorganisation pour l'UIG, qui renforce la capacité de former les utilisateurs, développer les applications et exploiter les équipements	Consultant	2eme semestre 1995	

RESULTAT No 5 : L'enregistrement et de la conservation des informations financières est assuré		INDICATEUR/RESULTAT No 5 : Une comptabilité par fonds spécifiant la provenances et l'utilisaiton des fonds est mise en place		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
	La révision du Plan Informatique de la gestion financière	Consultant	2eme semestre 1995	
	L'établissement d'un outil d'évaluation du système par les services utilisateurs	Consultant	2eme semestre 1995	
	Le système d'inventaire et d'entretien des équipements centralisés et décentralisés	Consultant	2eme semestre 1995	
	Le système de securité des machines et des donnés	UIG, EY	1er semestre 1995	
5. Intégrer la gestion des conventions au système COBYS	La confection des mémoires se base sur les données du système COBYS	UIG, EY	1er semestre 1995	
	La processus des recouvrements sont contrôlé par le plan comptable	DFC, UIG, EY	1er semestre 1995	
	Les états financiers des conventions (rubrique bailleurs) sont produit par COBYS	DFC, UIG, EY	1er semestre 1995	
	Le suivi en devises des financements extérieurs et des engagements des dépenses au niveau local des conventlons (rubrique bailleurs) est produit par COBYS	DFC, UIG, EY	1er semestre 1995	

RESULTAT No 6 : Le traitement et la communication des informations financières sont assurés		INDICATEUR/RESULTAT No 6 : Les rapports répondant aux besoins des partenaires sont émis		
ACTIVITES	INDICATEUR/ ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Produire des rapports sur le prix de revient des actions de recherche	Rapports produits	BAME	annuel	
2. Produire des tableaux de bord	Des ratios financiers de recherche agricole ont été présentés	DFC	1er semestre 1995	
	Analyse des besoin d'information des utilisateurs des tableaux	DFC	1er semestre 1995	
	Paramétrage des tableaux	UIG, EY	1er semestre 1995	
3. Produire les états financiers	Etats financiers par fonds	UIG, EY	trimestrielle	
	Etats financiers par conventions	UIG, EY	trimestrielle	
	Etats financiers par programmes	UIG, EY	trimestrielle	
	Etats financiers par centres	UIG, EY	trimestrielle	
	Etats financiers consolidé	UIG, EY	annuel	

RESULTAT No 7 : Un contrôle adapté des opérations et des systèmes est assuré		INDICATEUR/RESULTAT No 7 : Comptes audités sans réserve		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
1. Plannifier et exécuter une programme de vérification externe	Conclure un contrat avec un cabinet d'audit pour les trois prochaines années	DAT, AI	2eme semestre 1995	
	Un rapport annuel de l'Auditeur Externe est fait et soumis à la Direction Générale et au Conseil d'Administration	DG, AI	annuel	
2. Plannifier et exécuter une programme de vérification interne	Un rapport annuel de l'Auditeur Interne est fait et soumis à la Direction Générale et au Conseil d'Administration	AI	1er semestre 1995	
	Un plan de travail de l'Auditeur Interne est fait et soumis à la Direction Générale et au Conseil d'Administration	AI	1er semestre 1995	
	Une programme de formation pour l'Auditeur Interne est approuvé	AI, NRBAR, DG	1er semestre 1995	
3. Faire, par les Consultants, un revue des recommandations de la Commission Gestion Financière et Comptable de la revue à mi- parcours du PRA II	Développement des TDRs	DFC, AI	2eme trimestre 1995	

RESULTAT No 7 : Un contrôle adapté des opérations et des systèmes est assuré		INDICATEUR/RESULTAT No 7 : Comptes audités sans réserve		
ACTIVITES	INDICATEUR/ACTIVITES	PERSONNEL RESPONSABLE	CALENDRIER	COMMENTAIRES
4. Mettre en place un système de vérification du système de gestion financière des sous-contractants	Révisions des systèmes des sous-contractants	DFC, AI, EY	2ème semestre 1995	

6. PROJECT SUPPORT ACTIVITIES

The activities indicated under Sections 2 to 5 will be supported by management, administration, and monitoring and evaluation activities, as well as by the provision of financial services. Leadership and overall project support will be provided by the Project Director, the Project Deputy Director, and the Grants Administrator, as part of their ISRA duties. In addition, CID NRBAR staff will participate in project support activities, with effort being concentrated at the Chief-of-Party and Project Administrator levels.

Although the CID COP retains full responsibility for day-to-day project implementation of the USAID/CID contract, the CID NRBAR Coordinator is responsible for recruiting and nominating technical assistance, the purchase and shipment of project commodities from outside of Senegal, and all services for participant trainees in the U.S. In addition, the CID NRBAR Coordinator will occasionally provide administrative and management services, as necessary, and is due to make at least one visit to Senegal during 1995: to assist with completing the life-of-project workplan and budget, and to evaluate project procedures.

The NRBAR Project Director, assisted by the Project Deputy Director and the CID COP, in cooperation with other ISRA/NRBAR team members, will:

- (a) plan and participate in regular meetings with project collaborators, and compile project reports (see attached list),
- (b) participate in 4 ISRA/USAID inspection visits to project sites, during January, April, September and December,
- (c) administer offices and facilities, and supervise and recruit technical assistance and local staff, including the management (drafting SOW, logistics, recruitment, reporting, etc.) of up to 30 TDYs during 1995,
- (d) review results of, and make recommendations from, the 1992-93 technology inventory study and the Ernst and Young financial management study which have been locally commissioned by USAID,
- (e) participate in 2 Project Implementation Reviews commissioned by USAID, in May and October,
- (f) participate (planning, implementation, review) in the 1995 audit of CFA expenditures, proposed for October,
- (g) establish, manage, effect payments on, and control, NRBAR local currency accounts,
- (h) assess progress against project performance indicators identified in the NRBAR monitoring and evaluation plan, with TDY assistance (refer Section 2),

- (i)** continue to collect and analyse baseline data, and write a baseline data report,
- (j)** arrange the Annual Joint Review (USAID/ISRA/CID staff), proposed for October,
- (k)** schedule and manage (develop a revised training plan, identify/place trainees and monitor progress) all in-country aspects of NRBAR training, and collaborate with the CID NRBAR Coordinator for all foreign training matters,
- (l)** assist the Outreach Advisor in developing a system for, help manage, and implement the collaborative research grants program,
- (m)** maintain the NRBAR inventory system, and
- (n)** maintain development activities such as housing and office improvements, and familiarisation with ISRA and USAID procedures.

The activities of the Project Administrator will focus on logistical and administrative support, with a minor element of technical support, as follows:

- (o)** administer the housing and local facility needs of the technical assistants,
- (p)** undertake procurement and management of local project materials, including administration of vehicles,
- (q)** provide personnel services for CID NRBAR staff, and office staff supervision,
- (r)** provide translation services for minor documents,
- (s)** provide all necessary clerical and secretarial services,
- (t)** provide accounting and financial management services for local currency transactions, and
- (u)** assist NRBAR staff in undertaking administrative exercises related to their technical tasks.

The activities of the CID NRBAR Coordinator, the CID Deputy Director responsible for NRBAR, and other U.S. based project support staff will focus on management, administrative and logistical support, mostly undertaken in the U.S. as a result of requests from the field, as follows:

- (y)** recruitment: preliminary searches for, and formal recruitment of, TDYs
- (z)** logistics: (1) purchase and shipping of project commodities, (2) international travel arrangements, (3) preparation and submission to ISRA/USAID of an annual inventory, and (4) preparation of visas and medical clearances, as necessary,

(aa) procedures manual: Dr. Kearns will assist with preparation of a Second Edition of the NRBAR Procedures Manual, following the writing of the life-of-project workplan in the Fourth Quarter,

(ab) technical backstopping: (1) technical information requested by ISRA/NRBAR will be obtained and sent to Senegal,

(ac) networking: (1) contact will be maintained with all project collaborators through distribution of biannual reports, annual workplans, monthly updates and by letter, telephone and personal meetings, and (2) when travelling between the U.S. and the project, staff will be encouraged to make brief working visits to collaborating institutions to promote their involvement,

(ad) visits to Senegal: the CID NRBAR Coordinator (or alternate member of the CID management staff) will visit Senegal (1) in the First Quarter (primarily to participate in the final stages of the NRBAR Mid-Term Evaluation), and (2) in the Fourth Quarter (primarily to finalise the life-of-project workplan),

(ae) contracting: (1) manage subcontracts with Howard University, Tennessee State University and Oregon State University, (2) process subcontracts developed under the Collaborative Research Grants, and (3) compile and submit to the USAID Contracting Officer the necessary financial and management reports,

(af) participant training: (1) placement and administration of long-term trainees outside of Senegal, (2) placement and administration of short-term trainees outside of Senegal, and (3) NRBAR Biannual Reports and workplans, and ISRA newsletters, will be distributed to participant trainees, to keep them informed of ISRA and NRBAR developments, and

(ag) communication: constant communication will be maintained with the ISRA/NRBAR office, in order to expedite the above tasks.

The above activities will be supported by the following participation in an estimated 150 meetings and the writing of more than 113 reports:

MEETINGS

Apart from the continuing informal technical and administrative meetings between project collaborators, a number of formal project meetings will be held during the year, as follows:

WEEKLY

A weekly coordinating meeting will be held between the CID COP and the USAID Project Officer.

MONTHLY

Coordination meetings will be held between the ISRA Scientific Director, the USAID Project Officer and the CID COP, with a frequency of at least once per month. As the need arises, coordination meetings will also be held with other ISRA, CID and USAID personnel. A meeting of all the CID contracted staff will be held with a frequency of at least once per month; on average, two meetings per month are anticipated.

QUARTERLY

ISRA/NRBAR Team Coordination Meetings, including all TAs and counterparts, will be held at least four times, including a meeting in the First Quarter to assist with 1994 Workplan Development. All TAs and appropriate USAID personnel will meet when necessary to discuss project progress.

U.S. MANAGEMENT TEAM MEETING

The annual management team meeting of the U.S. collaborators with the CID COP is scheduled for 6 and 7 July at Oregon State University. Representatives of ISRA and USAID will be invited to participate in this year's meeting which will ensure that the recommendations of the NRBAR Mid-Term Evaluation are implemented.

PROJECT IMPLEMENTATION REVIEW (PIR) MEETINGS AT USAID

Present papers and participate in the two PIRs proposed for 1995, in May and October, involving all contracted personnel.

USAID PROJECT COMMITTEE MEETINGS

Present papers and participate in at least one USAID Project Committee meeting per Quarter, including the review of the First Draft Workplan in the First Quarter.

ANNUAL JOINT REVIEW

This is proposed for October, based at Bambej.

AUDIT MEETINGS

Participate in meetings which plan for, provide information for, and review recommendations of, a possible audit planned for October.

TDY MEETINGS

For each TDY, participate in initial planning meetings and in a final presentation meeting with ISRA/USAID.

REPORTS

Although not a contractual obligation, all reports relating directly to work with ISRA will be written in French, and will be tailored to the specific reporting requirements and scheduling of ISRA. Reports proposed for 1995 are described below:

MONTHLY REPORTS

Although on-site monthly reports are not a contracted requirement, it is proposed that Monthly NRBAR Reports be compiled in order to provide timely monitoring information to the ISRA/CID team, USAID and other project participants. Each CID Technical

Assistant is responsible for writing a single page report in French and English, at the end of each month, briefly listing activities, achievements, difficulties, proposed programme for the immediate future, and other appropriate information. The NRBAR Deputy Director and the CID Chief of Party are then responsible for collecting this information, adding a summary/cover page, and sending the report to the ISRA Director General with copies to principal counterparts, Technical Assistants, to the NRBAR Project Officer (Mawa Diop) at USAID, and to the CID NRBAR Coordinator at Oregon State University, as soon as possible during the month following.

The Project Administrator will compile a monthly financial report of FCFA expenses as soon as possible during the month following; this will be sent directly to OSU by courier, for incorporation into the CID Monthly Financial Report for the project. The CID Monthly Financial Report will be sent directly to USAID/Washington by the CID financial office, and the CID COP will send a copy at the same time to the USAID/Senegal NRBAR Project Officer.

MONTHLY COORDINATION REPORTS

The CID COP will compile a report of the proceedings of each formal coordinating meeting.

QUARTERLY REPORTS

In view of the recent changes in USAID's reporting requirements for their projects, the CID COP will compile a Quarterly Report for each Quarter of the Calendar Year, beginning with First Quarter of 1995.

USAID ADMINISTRATIVE DOCUMENTATION

Draft and submit the necessary project documents to USAID for project implementation actions, including PIO/Ps.

TRIP REPORTS

When TAs travel overnight on project business, they will write a short trip report.

PROCEDURES MANUAL

A Second Edition of the NRBAR manual of procedures will be developed by the SG in the Fourth Quarter, with the assistance of other ISRA staff, the Project Administrator and a short-term consultant, Dr. Jean Kearns.

BIANNUAL REPORTS

The Fourth Biannual Report, for the January 1994 - December 1994 period, will be completed during the first Quarter, and the Fifth Biannual Report, for the period January - July 1995, will be completed during the Third Quarter.

PERIODIC PROGRESS REPORTS FOR SPECIFIC EVENTS AND SUBJECTS

These will be written from time to time: FOR EXAMPLE, following each TDY and major in-country or foreign training event.

REPORTS OF INSPECTION VISITS AND ANNUAL JOINT REVIEW

One report for each of the ISRA/USAID inspection visits, will be written. In addition, a report of the Annual Joint Review will be written.

PROJECT IMPLEMENTATION REVIEW (PIR) REPORTS

Papers will be developed for each of the 2 PIRs.

INVENTORY AND PROCUREMENT REPORTS

These inventories and status assessments of project commodities will be updated every six months, following the production of the Biannual Reports. The Annual Report of Government Property in Contractor's Custody will be prepared in mid-year. The Commodity Procurement Plan for the life of the project, including the purchase of project vehicles, will be prepared in the First Quarter.

TRAINING REPORTS

Detailed progress of participants in short and long term training will be summarised in an Annual Training report.

WORKPLANS AND BUDGETS

The 1995 workplan will be drafted during the First Quarter, and the 1996 workplan will be completed before the end of December. Subsequent amendments to the workplan will be made from time to time, if necessary. The life-of-project workplan will be completed in October, following adequate review by ISRA, USAID and all collaborators at a NRBAR Planning Workshop.

TRAINING PLANS

The NRBAR long-term training plan, covering the life of the project, will be revised in March/April. A complete project training plan will be developed as part of the life-of-project workplan. All training plans will include both domestic and foreign training proposals.

At least 70% of the effort of the COP/RP and 90% of the effort of the Project Administrator will be spent on project support activities, as detailed above. The equivalent levels of effort in the area of project support for the Outreach Advisor, Natural Resources Planner and the Financial Advisor are expected to be 20%. Some of the specific support activities proposed for each technical assistant have been described in earlier, programmatic, sections of this workplan.

TABLE 1. SUMMARY AND ANTICIPATED TIMING OF 1995 WORKPLAN ACTIVITIES FOR PROJECT SUPPORT.

Activité	Jan.	Fév.	Mars	Avri	Mai	Juin	Jull	Aout	Sept	Oct.	Nov.	Déc
(a) meetings/reports: workplans biannual reports	[REDACTED] 1995 [REDACTED] 1996 MID-TERM [REDACTED] REVIEW/EVAL/TDY TRAIN. [REDACTED] PLAN U.S. MAN [REDACTED] MEET. CID TDY [REDACTED] JOINT REVIEW (J) [REDACTED] [REDACTED] [REDACTED]											
(b) ISRA/USAID inspection visits	[REDACTED]											
(d) technology/financial study review	continuous _____											
(e)ll (e) proj. impl. reviews	[REDACTED]											
(f),(g) local currency acc./audit	continuous _____ TDY _____ [REDACTED] AUDIT _____											
(h),(i) monitor/eval., impact indic.	continuous _____ TDY [REDACTED]											
(k) training	continuous — M.S.SELECTED _____ IN TRAINING _____											
(l) collaborative research grants	continuous											
(m) inventory system	continuous											
(n) start-up activities	continuous _____											
(c),(o)-(t) administration/financial serv.	continuous _____											
(u) (refer Sections 2,3,4,5)	continuous _____											

7. PROJECT RESOURCE COMPONENTS

In order to achieve project objectives through the above programs, the project has been invested with seven types of resources. The relationship between use of these resources and potential project impact will be summarised in the NRBAR Quarterly Report for the Second Quarter; the list of grants titles, including those anticipated to begin in 1995, is presented on pages 74a and b. Programs for the use of each type of resource are summarised below:

I. RESEARCH PROGRAM SUPPORT

Ia. COLLABORATIVE RESEARCH GRANTS PROGRAM

Purpose: To increase the number of trials and quality of farmer participation in the design of ISRA conducted on-farm trials and evaluation of natural resources based agricultural technologies.

Target

Participants: Farmer's Organizations, NGO's, Village Groups, Input Suppliers, Universities, Public and private Extension Organizations, PVO's.

Protocols: (or collaborative research agreements) will identify: the research problem, proposed response, length of time, resources contributed by both parties, multi-year budget, obligations and responsibilities, roles in selection of farmers, research interventions, implementation, monitoring, data collection/analysis, training of staff.

Funding: For gasoline, per diem, supplies, computer time, hiring up to two research assistants. Commodity support in certain cases.

Length of Grant: Maximum of 3 years.

Mode: Funds disbursed against deliverables.

Budget: Not to exceed \$75,000 per grant during initial 2 year period. After experience is gained up to \$300,000 per grant or more is available if agency has extensive experience and matching funds.

Total Program Funding: \$1,612,500

Source of Funds: USAID funds administered by CID/OSU on behalf of ISRA

Reviewers: Research review committee chaired by ISRA and including representation of extension and development agencies, NGO's and other actors in NRM farm-centered activities, university and technical assistance team.

Review Procedures: Research review committee meets at least four times per year to review proposals and plan a program, to review implementation, and for monitoring and evaluation purposes.

ISRA Staff: ISRA has nominated Pape Nd. Sall as Research Grants Coordinator.

Number of Grants: (indicative)	Years 1-2	2 - 3 grants/year
	Years 3-6	5 grants/year
	Years 1-6	5 major grants/year (max. \$300,000)

Timetable: Announced each November.
Six weeks allowed for organizations to prepare proposals for first Quarterly submission.
Submission before end of January for first Quarter.
Review committee selects applicants by end of February (no later than thirty days after closing date) for first Quarter.

Proposals: Should identify the problem, describe the relationship to Natural Resources Management and detail required research work requested from ISRA, location of work to be conducted, expected results, costs and matching funds. Proposals should be addressed to the ISRA Scientific Director or to the ISRA Grants Coordinator, using the protocols already developed by the committee at its November 1994 meeting.

1995 TIMETABLE:

FEBRUARY 24: Last date for submission of 1995 grants proposals to the committee.

MARCH: Review committee meets to select grantees.

MAY: Workshop for grantees

JUNE: Implementation of research program begins, disbursement procedures in place.

AUG/SEPT: Review committee makes site visits and initial written evaluation of the program.

NOVEMBER: Review committee meets to review program and to announce 1996 program.

DECEMBER: Final 1995 reports due from existing Grantees.

It is anticipated that approximately 5 new Collaborative Research Grants will be awarded in 1995, in addition to the continued funding of the existing 8 Grants.

Ib. GRANTS TO ISRA RESEARCHERS

The purpose of the grants to ISRA researchers program is to provide research support to: (1) researchers who are already engaged in natural resources based research, but needing assistance beyond that already available in ISRA's program, (2) conduct site visits for researchers interested in natural resources technologies outside of Senegal, and (3) researchers interested in a sabbatical to develop collaborative research activities with researchers or organisations outside of Senegal.

A research grants committee composed of ISRA administrators, ISRA researchers, the CID Research Planner and the CID Natural Resources Planner will oversee the administration of the program. The committee will develop subject matter criteria to further define the scope and reporting procedures of the program, develop and disseminate application procedures for ISRA researchers to follow, develop selection criteria to evaluate and approve proposals, and follow-up funded activities to ensure both research progress and communication of results.

There are three types of Grants to ISRA Researchers: Grants for research in Senegal, Site studies and Sabbaticals. Protocols for the Grants for research in Senegal program have already been developed; during 1995, additional transfers of funds into this category will be made from elsewhere in the CID contract budget, in order to facilitate continued funding of this program in the absence of USIAD direct funding (which are not yet forthcoming due to delays in ISRA's financial certification). During 1995, the research grants committee will also establish the protocols for the implementation of the site visit and sabbatical programs.

Each type of grant is discussed in detail in the remaining paragraphs of this Section.

Ib.1 GRANTS FOR RESEARCH IN SENEGAL

Purpose:	To provide supplementary funding to maximize the impact of the work already being conducted by ISRA scientists.
Target Participants:	ISRA researchers already involved in Natural Resources based research.
Protocols:	Will identify: the research problem proposed, response, length of time, resources required, multi-year budget, obligations and responsibilities, research interventions, implementation, monitoring, data collection/analysis.
Funding:	To hire additional short-term technical staff, cover operating costs, obtain additional commodities.

- Length of Grants:** Maximum of 3 years
- Mode:** Funds disbursed against deliverables.
- Budget:** Maximum of \$10,000 per year for each project.
- Total Program Funding:** \$225,500, initially, and a further \$450,000 after ISRA's financial certification or after additional transfer of funds within the CID budget.
- Source of Funds:** USAID funds administered by CID/OSU on behalf of ISRA (initial \$225,500 and any additional transfers, only).
- Reviewers:** Research review committee with ISRA
- Number of Grants:** 25, with a maximum of 8 in 1995.
- Timetable:** Announced each November.
Six weeks allowed for organizations to prepare proposals for first Quarterly submission.
Submission before end of first Quarter.
Review committee selects applicants by end of first Quarter (no later than thirty days after closing date).
- Proposals:** Should identify the problem, describe the relationship to Natural Resources Management and detail required research work requested from ISRA, location of work to be conducted, expected results, costs and matching funds. Proposals should be addressed to the ISRA Scientific Director or to the ISRA Grants Coordinator, using the protocols already developed by the committee at its November 1994 meeting.

1995 TIMETABLE:

- FEBRUARY 24:** Last date for submission of 1995 grants proposals to the committee.
- MARCH:** Review committee meets to select grantees.
- MAY:** Workshop for grantees
- JUNE:** Implementation of research program begins, disbursement procedures in place.
- AUG/SEPT:** Review committee makes site visits and initial written evaluation of the program.

NOVEMBER: Review committee meets to review program and to announce 1996 program.

DECEMBER: Final 1995 reports due from existing Grantees.

It is anticipated that up to 8 new Grants for Research in Senegal will be awarded in 1995, in addition to the continued funding of the existing 6 Grants.

Ib.2 SITE STUDIES

Purpose: To expose ISRA scientists to Natural Resources approaches and interventions being tried elsewhere in the Sahel, Africa and Asia.

Target Participants: ISRA researchers.

Protocols: Will be developed after the Second Quarter committee meeting.

Funding: To identify technical problems, travel to selected locations, to spend up to 4 weeks studying the problems, approaches and impacts of research at those locations.

Length: Up to 4 weeks.

Mode: To be decided after committee meeting.

Budget: \$10,000 per grant.

Total Program Funding: \$101,250, with an additional \$45,000 being available directly from USAID following ISRA's financial certification.

Source of Funds: USAID funds administered by CID/OSU on behalf of ISRA

Reviewers: ISRA Committee

Review Procedures: ISRA Committee

ISRA Staff: Not yet designated.

Number of Grants: approximately 3 grants per year.

Timetable: Program announced in May, successful proposals to be funded from June.

Proposals: Should identify the problem, describe the relationship to Natural Resources Management, location, expected results, and costs. Proposals should be addressed to the ISRA Scientific Director.

Location: Neighboring Sahelian countries, and other countries in Africa and Asia.

Host Institutions: To be proposed by applicant.

Ib.3 SABBATICALS

Purpose: To enable ISRA scientists to participate in research at a different research institution and to analyze and synthesize the NRM information developed in ISRA.

Target Participants: ISRA scientists who have participated in natural resources-based agricultural research as principal researchers for at least three years and have sufficient longitudinal data for synthesis and analysis.

Protocols: To be developed by the committee after the Second Quarter meeting.

Funding: To cover the costs of per diem, lodging and expenses of sabbatic leave. This does include payment for salary.

Length: 3 - 4 months.

Mode: To be developed by the committee.

Budget: To be developed by the committee.

Total Program Funding: \$53,500, initially, with a further \$320,000 provided by USAID following ISRA's financial certification.

Source of Funds: USAID funds administered by CID/OSU on behalf of ISRA (initial \$53,500, only)

Reviewers: ISRA Committee

Review Procedures: ISRA Committee

ISRA Staff: Not yet appointed.

Number of Grants: 1-2 grants per year during 1995, 1996 and 1997.

- Timetable:** To be developed by the committee.
- Proposals:** Should identify the problem, describe the relationship to Natural Resources Management, location to be conducted, expected results, costs and any matching funds, and an invitation from the host institution. Proposals should be addressed to the ISRA Scientific Director.
- Location:** United States, Morocco, Cameroon, Nigeria, India or other countries. IARC's (IITA, ICRISAT, ICRAF, WARDA, ILCA), and branches of IARCs.
- Host Institutions:** To provide host collaborator, office space, secretarial help.

II. SUPPORT FOR ISRA'S NATURAL RESOURCES PROGRAM

These funds are expected to be released directly to ISRA by USAID in 1996 following ISRA's financial certification, which is due to take place by 30 June, 1996. The process of certification has just begun, in conjunction with the Ernst and Young work with ISRA on financial management. An assessment of direct/indirect research costs and the preparation of a natural resources plan for ISRA are also needed prior to release of funds; an assessment of direct/indirect research costs will be made following the (1995) implementation of the first year of the integrated financial management system, and of the first year of the ISRA-wide INFORM research management data system; the natural resources plan has been completed. Protocols for the implementation of this program will be developed in 1996. For the 1994 and 1995 seasons, in view of the need to increase the level of natural resources management research activities as soon as possible, a method of temporarily increasing the level of funds in the Grants for Research in Senegal category has been implemented; a further augmentation of these funds will be undertaken in 1995, in order to ensure complete funding of the 1995 grants and funding for the 1996 grants.

Funds will be used primarily by the following research groups:

GESTION DES RESSOURCES NATURELLES ET SYSTEMES DE PRODUCTION EN ZONE SECHE (DRCSP),

GESTION DES RESSOURCES NATURELLES ET SYSTEMES DE PRODUCTION EN ZONE HUMIDE (DRCSP), and

AGROFORESTERIE (DRPF and DRSPA).

In the case of agroforestry, funding has been designated to experiments to be implemented anywhere in Senegal; however, in the case of DRCSP, experimental work will be funded only if it is primarily located within the "project area". The project area is taken to include primarily the regions of Fatick, Kaolack, Thiès, Diourbel, Tambacounda, Kolda and Ziguinchor.

III. LINKAGES TO INTERNATIONAL RESEARCH INSTITUTIONS

These funds are expected to be released directly to ISRA by USAID in 1996 following ISRA's financial certification, which is due to take place by 30 June, 1996. The process of certification has just begun, in conjunction with the Ernst and Young work with ISRA on financial management. ISRA will draft proposals for appropriate visits and for developing institutional linkage structures during 1996. Protocols will be developed for this program in 1996.

Proposals and protocols for appropriate visits and for developing institutional linkage structures will be developed with the assistance of a TDY (see Section 2 (f):(1)).

Purpose:	To fund the cost of organizing and participating in seminars, conferences, workshops, and exchange visits between ISRA staff and staff of regional and international research organizations, and in particular cases to finance operating costs of joint research.
Target Participants:	ISRA scientific staff who are involved with natural resources based research.
Objectives:	To enable ISRA to: <ol style="list-style-type: none">1. Take advantage of research conducted elsewhere which has direct relevance to Senegal2. Increase the cost effectiveness and comparative advantage of ISRA's research.3. Establish long-term linkages with IARC's which facilitate peer international exchange.
Protocols:	To be developed in 1996.
Funding:	To be developed in 1996.
Length:	To be developed in 1996.
Mode:	Matching funds encouraged to promote joint activities.
Budget:	To be developed in 1996.
Total Program Funding:	\$500,000
Source of Funds:	USAID funds administered by ISRA, following ISRA's financial certification.
Reviewers:	ISRA Committee

Review Procedures:ISRA Committee

ISRA Staff: To be proposed.

Number of Grants: To be developed in 1996.

Timetable: To be developed in 1996.

Proposals: Proposals should be addressed to the ISRA Scientific Director.

Location: According to proposals submitted.

Host

Institutions: To be proposed by applicants.

IV. PERSONNEL

All long-term ISRA, USAID and CID personnel have been recruited and assigned.

An indicative list of proposed short-term consultants for 1994, presented in Annex 1, has been taken from the programs described in Sections 2-6 of this workplan. It is anticipated that a total of up to 30 consultants will be utilised during the year; many inputs indicated here will not be implemented, while additional proposals will be included during the year, as necessary.

V. TRAINING

Applications for training will be made to the Project Director, through the Deputy Director, and the ISRA Réunions de Coordination will provide valuable supporting advice to the Project management in making funding decisions.

A revised NRBAR Long-Term Training Plan, covering the life of the project, will be developed during the Second Quarter. Long-term training activities in 1995 will be dominated by the selection, processing and commencement-of-study of the remaining six NRBAR M.S. participant trainees, and by the initial of field research activities in Senegal of those who are already in NRBAR M.S. and Ph.D. Degree training in the U.S.

Long-term BS training for women activities in 1995 will continue for those ten ISRA-sponsored women who have already commenced their studies at ENSA and IST.

Short-term training activities, proposed in earlier sections of this report, will be undertaken on a case-by-case basis, with the approval of the Project Director. An indicative list of short-term training events being considered for 1995 is presented in Annex 2. The NRBAR life-of-project Training Plan, due in October, will contain a listing of proposed short-term training events for the life of the project, based on the ISRA Strategic Plan.

VI. ISRA DIRECT SUPPORT

It is anticipated that ISRA will continue to provide the necessary physical support, and the necessary staff time and resources, to successfully implement the project.

VII. USAID DIRECT SUPPORT

It is anticipated that USAID will continue to provide the necessary funding and support, for ISRA to successfully implement the project.

ISRA/NRBARSUBVENTIONS A LA RECHERCHE COLLABORATIVE

CODE	TITRE ET SITES DU PROJET	CHERCHEUR PRINCIPAL ET PARTENAIRE
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1993

S01	Valorisation des Ressources Naturelles. Thiès - Diourbel - Fatick.	Madiagne DIAGNE RODALE /Thiès.
S02	Amélioration de la fertilité des sols. Thiès - Kaolack - Diourbel - Fatick - Tambacounda.	Aminata BADIANE WINROCK /Dakar.
S03	Valorisation des Technologies Agroforestières Mises au Point par la Recherche et Transfert en Milieu Réel. Fatick.	Maleini DIATTA OÛDIL /DRCSP/Dakar.

1994

S04	Amélioration et diversification des productions agricoles en milieu réel par le biais de l'agroforesterie. Kaolack.	Babou NDOUR WINROCK /Dakar.
S05	Amélioration de la productivité Céréalière par la protection des cultures dans les cuvettes du Lac de Guiers. St Louis.	Abdourahm. TAMBA SAHEL 3000 /Dakar.
S06	Etude de l'influence des brise-vent sur la productivité agricole céréalière dans la vallée du Fleuve Sénégal. Podor.	Abdourahm. TAMBA G.P. KIRAYE /Podor.
S07	Projet de Recherche Collaborative en Agroforesterie. Kaolack.	Babou NDOUR AFRICARE /Kaolack.
S08	Collaboration ISRA/ARAF : Pour une meilleure Valorisation et Gestion des Ressources Naturelles. Gossas.	Désiré Y SARR ARAF /Gossas.

1995

S09	Méthode d'évaluation d'une stratégie d'aménagement de terroir appliquée à deux villages du Sine Saloum. Nioro - Kafrine.	Modou SENE CARITAS /Kaolack.
S10	Mise au point d'itinéraires techniques pour l'intensification de la riziculture dans les vallées aménagées par le GADEC dans le Sénégal Oriental et la Haute Casamance. Tamba - Kolda - Kaolack.	Mour GUEYE GADEC /Tambacounda.
S11	Gestion Intégrée des Ressources Naturelles par des groupements féminins dans le Département de Bambey. Bambey.	Aminata BADIANE FJBS /Bambey.
S12	Valorisation des résidus de transformation du poisson fumé pour la fertilisation des terres. Thiès - Fatick - Diourbel.	Mamadou NDIAYE AHDIS /Bambey.
S13	Amélioration de la fertilité des sols de Ndof. Fatick.	Manievel SENE RODALE /Thiès.
S14	Amélioration de la fertilité des sols et gestion des adventices par la production de céréales de plateau (maïs et mil). Sédhiou.	Souleymane DIALLO OCRV /Sédhiou.
S15	Diversification des cultures. Kaolack.	Famara MASSALY CARITAS /Kaolack.

CODE	TITRE ET SITES DU PROJET	CHERCHEUR PRINCIPAL
1993		
R01	Etude sur l'utilisation agricole des écailles de poisson fumé comme amendement organique des sols du Sénégal. Mbour- Fatick.	Mamadou NDIAYE DRCSP/Bambey.
R02	Etude de l'impact de la recherche: le cas des Unités Expérimentales de Thyse-Kaymor-Sonkorong et Koumbidia. Kaolack.	Désiré Y SARR DRCSP/Kaolack.
R03	Influence des itinéraires techniques sur la conservation de sols de plateau au milieu paysan (Basse Casamance). Ziguinchor.	Mankeur FALL DRCSP/Djibélor.
R04	Valorisation du potentiel pastoral pour le développement de systèmes céréaliers performants et viables en zone sub-humide du Sénégal: la Haute Casamance. Kolda - Vélingara.	Nouhine DIEYE DRSPA/Kolda.
1994		
R05	Effets des techniques culturales sur la variabilité des rendements du sorgho pluvial et sur son effet allélopathique. Kaolack - Diourbel.	Manievel SENE DRCSP/Bambey.
R06	Amélioration des pâturages naturels des zones d'élevage du Sénégal par utilisation de phosphates naturels. Kolda - Louga.	Amadou T DIOP DRSPA/Dahra.
1995		
R07	Valorisation du Potentiel des légumineuses fourragères en vue de l'amélioration des productions céréalieres et animales en zone subhumide. Kolda	Ambroise DIATTA DRSPA/Kolda
R08	Influence de quelques espèces ligneuses sur le redressement du statut organique et de la fertilité de vieux champs sur sol ferrallitique (rouge) en Casamance. Ziguinchor - Bignona.	Soulèye BADIANE DRPF/Djibélor
R09	Evaluation socio-économique des étables fumières dans la région de Kolda. Kolda et Tamba.	Abdoulaye FALL DRCSI/BAME/St L.
R10	Effet d'une stabulation améliorée des bovins sur leurs performances pondérales et sur la gestion de la fertilité des sols dans le centre du Bassin Arachidier. Fatick.	Fatimata DIA DRCSP/DRSPA/KI
R11	Etude de l'efficacité du neem dans la protection et la conservation des sols contre l'infestation des nématodes phytoparasites, ravageurs des cultures maraichères. Dakar - Mbour.	Emile V. COLY DRCSI/Dakar.
R12	Inventaire des Technologies basées sur la Gestion des Ressources Naturelles et utilisées dans la production Agricole en Basse Casamance. Ziguinchor - Bignona - Oussouye.	Mabèye SYLLA DRCSP/Djibélor.
R13	Identification de technologies de la culture de mil/niébé en zone humide. Tamba - Kaolack.	Mbaye NDIAYE DRCSP/Bambey.
R14	Etude de l'influence de la matière organique sur la croissance des arbres et le rendement des cultures dans le centre du Bassin Arachidier (Bambey). Bambey.	Ibrahima DIAITÉ DRPF/Kaolack.
R15	Etude comparée de l'adoption des technologies de gestion des sols dans les rizières de mangroves de Casamance et les périmètres irrigués de la Vallée de l'Anambé. BAME/DRCSI. Ziguinchor - Vélingara.	Ibrahima DIA DRCSI/BAME/St L.

685-0285

NRBAR PROJECT SCHEDULE - 1995 (January draft)

NRBAR 95/2A

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		1995											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RESOURCE COMPONENTS:													
Collaborative Research Grants Program		---			8 grants	---		13 grants	-----				
Grants for Research in Senegal		---			6 grants	---		14 grants	-----				
Site studies													
Sabbaticals													
Support for ISRA's Natural Resources Program *		---zero---											
Research linkages: international		---zero---											
Short Term Training Assistance													
Ph.D. Participant Trainees in U.S. on study													
M.S. Participant Trainees													
Short-term training\conferences outside Senegal		--4 on study -----											
Short-term training in Senegal		---approx. 15 -----											
Training for Women, BS Program Participants		---approx. 20 -----											
		----- 10 in training -----											
PROGRAMS:													
Research Planning Program		--see section 2 of the 1995 workplan											
Natural Resources Program		--see section 3 of the 1995 workplan											
Outreach Program		--see section 4 of the 1995 workplan											
Financial Management Program		--see section 5 of the 1995 workplan											
SUPPORT:													
Quarterly Reports													
Quarterly inspection visits/reports ISRA/CID/USAID													
Annual Joint Review													
Mid-Term Evaluation ISRA/USAID/World Bank													
COP/USAID meetings (weekly)													
Monthly coordination meetings ISRA/CID/USAID													
ISRA/Ernst & Young/USAID Meetings													
Biannual NRBAR Report													
Workplans													
NRBAR Audit													

* Subject to ISRA's Financial Certification

8. FINANCIAL STATUS

A: CID CONTRACT

The financial status of the project is summarised in the attached Expenditure Report (Tables 8.1, and 8.3, and Figure 8.1). Project expenditures to 31 December, 1994, of \$3,639,929, as measured by the CID Monthly Financial Reports, are equivalent to 23% of the \$15,672,714 contract budget, are at approximately the expected level for this stage of the project. Actual expenditures to 31 December, 1994, are estimated to have totalled \$4,076,429.

Estimated expenditures on the CID contract for the calendar year 1995 (\$3,767,000) and for the USAID financial year (OCT95-SEP96: \$4,438,000) are presented below in Table 8.2. These estimates are based on the original CID contract budget, the projected NRBAR program for 1995 and 1996 as described in workplans, and on the January 1994 devaluation of the CFA.

Estimated expenditures for the calendar year 1995 are summarised for each resource component in Table 8.3.

A detailed review of project expenditures is planned for June, and a revised life-of-project budget will be developed during the July to October period.

TABLE 8.1 NRBAR CUMULATIVE EXPENDITURE REPORT, 31DEC94,
IN THOUSANDS OF U.S.\$

CATEGORY	BUDGET AMOUNT*	CUMULATIVE EXPENSES	BALANCE UNEXPENDED	PERCENT UNEXPENDED
SALARIES	1,666	514	1,152	69%
FRINGE BENF.	416	112	303	73%
ALLOWANCES	909	382	527	58%
TRAVEL, ETC	1,545	180	1,365	88%
COMMODITIES	267	112	155	58%
SUBCONTRACT	4,254	836	3,418	80%
OTHER DIRECT	544	264	280	51%
RES. GRANTS	300	33	267	89%
TRAINING	3,083	403	2,679	87%
INDIRECT COST	2,689	803	1,886	70%
TOTAL	15,673	3,640	12,033	77%

*not including the amount budgeted for July 1997 to July 1998, in case the option period is exercised.

TABLE 8.2 NRBAR FINANCIAL ESTIMATES FOR 1995/96

TABLE A: 1995 CALENDAR YEAR

CATEGORY	ESTIMATED EXPENDITURES, BY QUARTER, IN '000 U.S.\$				
	1995				TOTAL 1995
	JAN-MAR	APR-JUN	JUL-SEP	OCT-DEC	
SALARIES	99	91	93	91	374
FRINGE BENF.	19	20	20	20	79
ALLOWANCES	43	51	51	51	196
TRAVEL, ETC	75	59	74	51	259
COMMODITIES	2	2	134	2	140
SUBCONTRACTS	167	174	272	272	885
OTHER DIRECT	23	24	24	24	95
RES. GRANTS	23	23	42	42	130
TRAINING	297	228	258	268	1051
INDIRECT COST	125	118	172	143	558
TOTAL	873	780	1140	947	3767

TABLE B: USAID FISCAL YEAR 1995/96

CATEGORY	ESTIMATED EXPENDITURES, BY QUARTER, IN '000 U.S.\$				
	1995	1996			TOTAL
	OCT-DEC	JAN-MAR	APR-JUN	JUL-SEP	OCT95/SEP96
SALARIES	91	105	96	98	390
FRINGE BENF.	20	20	20	20	80
ALLOWANCES	51	51	51	51	204
TRAVEL, ETC	51	75	59	74	259
COMMODITIES	2	2	2	2	8
SUBCONTRACTS	272	272	272	289	1 105
OTHER DIRECT	24	24	24	24	96
RES. GRANTS	42	42	42	62	188
TRAINING	268	493	378	428	1 567
INDIRECT COST	143	125	118	172	558
TOTAL	947	1 209	1 062	1 220	4 438

TABLE 8.2C PROJECTED EXPENDITURES ON THE CID CONTRACT FOR 1995, BY RESOURCE COMPONENT, IN '000 U.S.\$

	BUDGET 1992-97	1992-94 EXPENSES	1995 EST. EXPENSES	AVAIL. 1996-97
I. RESEARCH PROGRAM SUPPORT				
Ia. Collaborative				
Research Grants (CID)	1 612	210	275	1 127
Ib.1 Grants for Research in Senegal (CID)				
Ib.2 Site Studies (CID)	225	86	124	15
Ib.3 Sabbaticals (CID)	101	0	30	71
	53	0	50	3
IV. PERSONNEL				
IVa. Long-term TA	3 193	1 464	710	1 019
IVb. Short-term TA	1 810	375	450	985
V. TRAINING				
Va. Long-term	1 575	270	435	870
Vb. Short-term, foreign	700	160	300	240
Vc. Short-term, Senegal	193	74	80	39
Vd. Long-term, B.S.	410	140	60	210
(CID SUPPORT: NRBAR office, commodities, indirect costs)	5 801	1 299	1 253	3 249
TOTAL	15 673	4 078	3 767	7 828

B: ISRA CONTRIBUTION (RESOURCE COMPONENT VI.)

This is expected to be equivalent to \$500,000 during 1995, including the salaries of ISRA/NRBAR staff, office space and supplies, and equipment.

C: OTHER USAID FUNDING (RESOURCE COMPONENTS II., III., AND VII., AND PARTS OF I.)

Direct funding by USAID of ISRA programs is not anticipated during 1995, as ISRA's financial certification is not expected to be completed until the end of the year. A major expense during 1995 for USAID direct funding will be costs of the Ernst and Young work. Budgeted amounts for components I, II, and III are as follows:

TABLE 8.2C PROJECTED EXPENDITURES ON DIRECT FUNDING OF ISRA PROGRAMS BY USAID FOR 1995, BY RESOURCE COMPONENT, IN '000 U.S.\$

	BUDGET 1992-97	1992-94 EXPENSES	1995 EST. EXPENSES	AVAIL. 1996-97
Ib.1 Grants for Research in Senegal (USAID)				
Ib.2 Site Stud. (USAID)	450	0	0	450
Ib.3 Sabbaticals (USAID)	45	0	0	45
	320	0	0	320
II. SUPPORT FOR ISRA'S NATURAL RESOURCES PROG.				
	1 000	0	0	1 000
III. LINKAGE PROGRAMS				
	500	0	0	500

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TABLE 6.3
CID CONTRACT - CUMULATIVE NRBAR EXPENDITURES

filename CIDPREX5.WQ1

Month ending quarter/year	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95
CID Annual Budget Figures from contract (1)				3410158								
Estimated Expenditures from Annual Workplans Budgeted from 1994 Workplan and Estimated (2)						2965000		6972839		5070080		10562846
CID Vouchers for end of quarters		47770	131805	971242	1049268	1484193	2695080	3443080	4197080	5070080	5850080	6990080
Estimate of Actual Expenditures (3)	10000	300000	700000	1100000	1600000	2152080	2554435	2929807	3300513	3839929	4076429	

Month ending quarter/year	9/95	12/95	3/96	6/96	9/96	12/96	3/97	6/97	9/97	12/97	3/98	6/98
CID Annual Budget Figures from contract (1)				13498116								
Estimated Expenditures from Annual Workplans Budgeted from 1994 Workplan and Estimated (2)	7937080	8837080	9737080	10637080	11537080	12437080	13337080	14237080	15137080	16037080	16937080	17842619
CID Vouchers for end of quarters												
Estimate of Actual Expenditures (3)												

SPREADSHEET NOTES

(1) Original Contract budget, plus 55,000 added by Contract Modification #2 for computer purchase

(2) Estimated from 1994 workplan through 3rd quarter 1995, then estimated at 900,000 per quarter

(3) Estimate of Actual Expenditures = CID Quarterly Financial Report + estimated % for costs not yet processed
9/92 to 8/93 based on historical costs

12/93 estimated at 45% of CID December 93 Quarterly Financial Report

3/94 onwards, estimated at 50% of expenditures for current quarter, from annual workplan

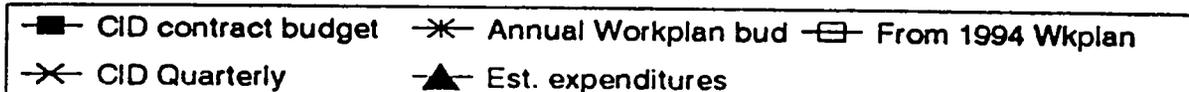
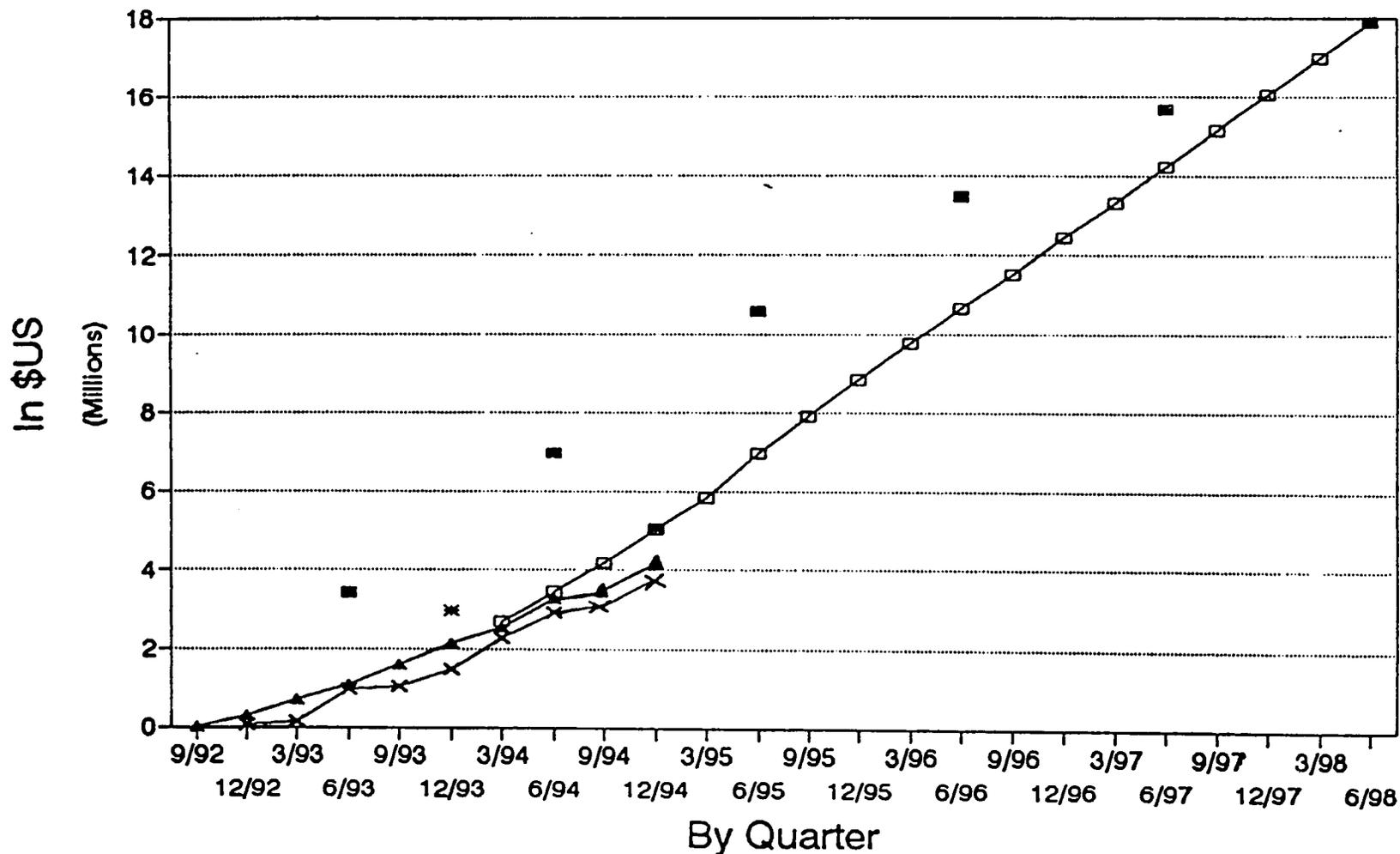
3/94	272000
6/94	374000

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Figure 8.1 NRBAR PROJECT
 CUMULATIVE EXPENDITURES - see Table 8.3

NRBAR 95/ZA

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**ANNEX 1:
INDICATIVE LIST OF SHORT-TERM CONSULTANTS, 1995**

This list is indicative of the range of short-term consultants being considered for 1995, in order to support project activities. It is anticipated that approximately 30 consultants will be utilised during the year; many consultancies indicated here will not be implemented, while additional proposals will be included during the year, as necessary.

TOPIC	PERIOD	PERSONNEL/NOTES	REFERENCE PAGES
monitoring/eval.	JAN	M/E specialist	16
institutional reorganiz.	JAN	financial spec.	16
research station manag.	JAN	research station spec.	16
strategic planning proc.	FEB	senior research planner	16
mid-term review	FEB	CID Manager	64
gender issues	APR	gender specialist	33
SWOT analysis	APR	institutional analyst	16
strategic priorities	MAY	priorities spec.	16
grants management	MAY	grants administrator	60
research station manag.	MAY	research station spec.	16
strategic plan draft.	MAY	planner	16
research impact	MAY	impact specialist	15
managem. inform. syst. INFORM3 review	MAY	INFORM specialist	16
participatory research approaches	MAY	research partic. spec.	26
methodology for on-farm trials	JUNE	on-farm research spec.	26

outreach	JUNE	communications spec.	32
NGO information	JUNE	NGO/education spec.	35
NRM research support	JUNE	senior soils spec.	26
monitoring/eval.	JUNE	M/E specialist	16
cereals breeding support	JUNE	senior cereals breeder	26
gender issues	JUL	gender specialist	33
research impact	JUL	impact specialist	16
NRM research support	JUL	GRN planner	26
program priorities	JUL	program planner	16
procurement system	AUG	procurement specialist	16
outreach	AUG	communications spec.	32
admin. training needs assessment	AUG	training spec.	40
research station manag.	AUG	research station spec.	16
research impact	AUG	impact specialist	16
MIS/accounts interface	AUG	MIS/accounts spec.	40
economics methodology BAME unit plan	SEP	senior social scientist	17
personnel eval. syst.	SEP	personnel specialist	16
evaluation of E&Y Phase II work	SEP	EDP manag. spec., finan. manag. spec.	58
program priorities	SEP	program planner	16
technology validation	SEP	senior scientist	25
assessment of accounts training-new system	SEP	training spec.	40
research finance	SEP	financial specialist	40
program priorities	SEP	research scientist	16

program priorities	OCT	research scientist	16
ISRA/partenaire contracting	OCT	contracts spec.	33
gender issues	OCT	gender specialist	33
communications	OCT	communications spec.	17
personnel syst. eval.	OCT	human resources spec.	16
team building/logframe	OCT	teams specialist	40
managem. inform. syst. INFORM4 documentation	OCT	INFORM specialist	16
annual joint review	OCT	senior CID manager	64
research impact	OCT	impact specialist	16
MIS/accounts interface	NOV	MIS/accounts spec.	40
research station manag.	NOV	research station spec.	16
social marketing	NOV	marketing spec.	32
training development	NOV	training spec.	40
procedures manual project manag/audit	NOV	Dr. Kearns, CID	60
marketability of ISRA services	DEC	marketing/dissemination spec.	33, 36, 40
systems modelling	DEC	modeller	26
NGO databank	DEC	NGO specialist	34
internat. networks	DEC	senior agric. scientist	17
social soil restoration	DEC	GRN social scientist	38

**ANNEX 2:
INDICATIVE LIST OF SHORT-TERM TRAINING EVENTS**

This list is indicative of the range of short-term training events being considered for 1995, in order to support project activities. It is anticipated that approximately 35 events will be implemented during the year; many proposals indicated here will not be implemented, while additional proposals will be included during the year, as necessary. In addition to these proposals, it is anticipated that 10 foreign training events will be undertaken by ISRA/NRBAR staff, such as visits to conferences to present papers relevant to the objectives of the project, short-courses in critical technical areas, and training in support functions such as financial and computer management.

TOPIC	LOCATION/PERIOD	PERSONNEL/NOTES	REFERENCE PAGES
research station finance	SEN/JAN	ISRA/USAID/E&Y	16
research management	U.S./APR	research directors	17
strategic planning	SEN/APR	4 workshops, national/regional	16
strategic research priorities	SEN/MAY	senior research/extension staff	16
participative research	SEN/MAY	researchers	25
literature reviews	SEN/MAY	researchers	25
extension committees	SEN/MAY	OP, PNVA, ISRA personnel	36
systems modelling	FOR/MAY	researchers	26
institutional communic.	US/JUN	UNIVAL	36
on-farm research	SEN/JUN	researchers	26
INFORM uses	FOR/JUN	senior research managers	16
logframes and M/E	SEN/JUN	researchers	16,25
research station management	SEN/JUN	senior administrators	16
impact studies	U.S./JUL	2 impact agro-economists	16
program priorities	SEN/JUL	regional workshops	16

GIS	SEN/JUL	researchers	23
monitoring/eval.	FOR/AUG	M/E program officers	16
economics methodology	FOR/AUG	2 agro-economists	17
research station management	U.S./AUG	senior administrators	16
audit	FOR/AUG	auditors	40
accounts information	U.S./AUG	financial staff	40
validation	SEN/AUG	researchers	25
financial admin.	FOR/AUG	financial administrators	40
administration manag.	U.S./AUG	senior manager	17
research station management	FOR./SEP	senior administrators	16
accounts information	SEN/SEP	financial staff	40
research open day	SEN/SEP	researchers/part./farmers	17
research open day	SEN/OCT	researchers/part./farmers	17
NRBAR annual joint rev.	SEN/OCT	NRBAR personnel	60
NRM strategy	SEN/OCT	researchers/managers	26
budget management	FOR/OCT	budget officers	40
farmer info. exchange	SEN/OCT	farmers, researchers	34
economics programs	SEN/OCT	social scientists	17
INFORM training	SEN/OCT	INFORM managers	16
communications strat.	SEN/NOV	communications spec.	17,32
team building	SEN/DEC	senior staff	40
international linkages	SEN/DEC	senior researchers	17
personnel evaluation	SEN/DEC	personnel managers	16