

## COMPOSITION OF THE PANEL AND BIOGRAPHICAL INFORMATION

**CHAIR:****Kenneth G. Cassman**

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and Natural Resources  
Bureau of Rural Sciences  
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**RESOURCE PERSONS:**

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Senior Agricultural Research Officer  
TAC Secretariat  
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**CASSMAN, Kenneth (USA)**

Head of the Department of Agronomy and Horticulture, University of Nebraska.

**Expertise:** Agronomy, Plant physiology and Agroecology.

**Education:** Ph.D. in Agronomy and Soil Science from the University of Hawaii (1979).  
B.Sc. in Biology from the University of California, San Diego (1975).

**Experience:**

Since 1995: Research interests include soil fertility and plant nutrition, nutrient cycling and soil organic matter, root ecophysiology, and the sustainability of intensive cropping systems.

1991-1995: Head of the Agronomy, Plant Physiology, and Agroecology Division at the International Rice Research Institute.

1984-1990: Assistant and Associate Professor in the Department of Agronomy and Range Science at the University of California, Davis.

1982-84: Grain Legume Agronomist on the Egyptian Major Crop Improvement Project.

1980-82: Project Leader of the Jari Rice Project Research Group in Para, Brazil.

Other relevant experience:

- Fellow of the American Society of Agronomy, Crop Science Society of America, and the Soil Science Society of America; Board member of the Nebraska Crop Improvement Association; and Editorial Board of Field Crops Research and the Journal of Soil Science and Plant Nutrition (Japan).
- Chair of the Review of Agricultural Science Graduate Programmes at Wageningen Agricultural University, Netherlands (1998).
- Member of the 4th EPMR (1997) of CIMMYT.

**DINGKUHN, Michael (GERMANY)**

Senior Ecophysiologicalist and Teamleader, ECOTROP, Agronomy Programme, CIRAD-Amis.

**Expertise:** Natural Sciences, Biology, Morphology, Agronomy, Anatomy, Crop modelling, Crop and Rice breeding.

**Education:** Ph.D. in Natural Sciences, University of Hamburg (1985);  
M.Sc. in Biology, University of Hamburg (1982).

**Experience:**

Since 1998: Co-ordinating and conducting strategic research in support of CIRAD's agricultural research and developments projects in tropical countries.

1997: Program Leader, Rainfed Rice Program, WARDA (Ivory Coast). Duties similar to those cited under Program Leader, Continuum Program.

1994-96: Program Leader, Continuum Program, and Senior Scientist, WARDA (Ivory Coast). Led a multi-disciplinary team of 16 scientists, 12 thesis students and more than 100 permanent staff, initiating and leading strategic and applied research; act, as needed, as interim Director of Research and established a systems research facility and team, introducing systems research approaches to research projects, assisting in training.

1990-94: Senior Physiologist, WARDA, Sahel Program (Senegal). Characterized irrigated rice ecosystems in arid environments, set up a new research station, two experimental farms and a regional network for irrigated rice in the Sahel.

Collaborative Research Scientist, Agronomy Dept., IRRI.

1985-90: Established a team and facility for eco-physiological research for upland and lowland systems, developing a new plant type for higher yield potential under direct-seeded conditions, research on drought and N management; Instructor, Botanical M.S. Courses, University of Hamburg.

1984: Collaborative Research Fellow, Agronomy Dept., IRRI. Developing and testing methods to measure leaf and canopy gas exchange of rice in the field. Research on drought stress.

1983: Post-Masteral Fellow, Agronomy Dept., IRRI. Characterizing rice drought response mechanisms, with emphasis on biochemical parameters and gas exchange.

1980-82: Contractual participation in the research program "The Role of Phytohormones in Storage Processes" of the DFG (German Research Agency).

**GUTIERREZ, Andrew Paul (USA)**

Professor and Entomologist, Division of Ecosystem Science, University of California, Berkeley.

**Expertise:** Entomology, IPM-biological control, insect ecology, agroecosystems analysis, population ecology, plant-herbivore interactions, tritrophic modelling, agricultural economics, GIS.

**Education:** Postdoctoral studies, University of British Columbia, Canada (1970);  
Ph.D.(insect ecology/IPM/biological control), Univ. California, Berkeley (1968);  
M.S. (biological control/insect ecology), Univ. of California, Berkeley (1966);  
B.S. in Biology, Arizona State College (1962).

**Experience:**

Since 1972: Assistant Professor, Purdue University.

1968-70: Research Scientist, Commonwealth Scientific and Industrial Research Organization, Canberra, ACT, Australia.

*Other relevant professional experience:*

- Member, Executive Committee and Associate Director National IPM project (Huffaker Projects),
- Associate Director, National IPM Project (Adkisson Project) and leader of systems analysis,
- Leader IPM cotton project, California, Co-leader — IPM alfalfa project, California,
- *Founder* of the University of California State-wide IPM Project, Chairman of State-wide UC/IPM Technical Committee, Appointment FAO Panel of Experts in IPM, Rome, Italy, Chair, Africa-wide Committee on Biological Control,
- Founding member of the University of California Centre for Sustainable Development,
- Founding member of the University of California Centre for Biological Control.

He has carried out numerous consultancies, some examples of which are: FAO/Cotton in Nicaragua, California Wine Advisory Board, FAO/Brazilian Government - Biological Control of Cereal Aphids. Examples of some honours and awards which he has received are: Member Third USA/USSR Scientific Exchange, Yalta, USSR (1978), US Representative and Member, Pest Management Network, International Institute of Applied Systems Analysis, Vienna, Austria (1978 to 1986).



### HAMBLIN, Ann (Australia and UK)

Principal Scientist, Agriculture, Food and Social Sciences, Bureau of Rural Sciences, Canberra

**Expertise:** Soil science, Agronomy, Environmental management, Sustainable farming systems.

**Education:** PhD, Soil Science, University of Reading, England (1975);  
MA, University of Cambridge, England (1970);  
M.Ag.Sc, Soil Science, University of Reading, England (1966);  
B.A, Geography, University of Cambridge, England (1963).

#### **Experience:**

1998-2000: Director, Agricultural Production and Natural Resources, Bureau of Rural Sciences, Canberra.

1994-1998: Director, CRC for Soil and Land Management, Adelaide.

1989-1994: Principal Research Scientist: Head, Ecological Sustainable Development Section, Bureau of Resource Sciences, DPIE, Canberra.

1985-1989: Principal Research Scientist: CSIRO, Division of Plant Industry, Perth, W.A.

1981-1985: Research Scientist: Plant Research Division, Western Australian Dept. of Agriculture.

1976- 1981: Postdoctoral Research Fellow: Dept. of Soil Science & Plant Nutrition; Univ. of WA.

#### Other Activities:

- Member, Board of Trustees, International Fertilizer Development Centre (1994-2002);
- Member, Sustainable Agriculture Working Group, China Council for International Cooperation on Environment and Development (1997-2002);
- Director, Horticultural Research and Development Corporation, Australia (1997-2000);
- Lead Author, Land Resource Indicators, State of Environment Reporting, Environment Australia (1996-1998).

**SAVADOGO, Kimseyinga (Burkina Faso)**

Maître de Conférences Agrégé, University of Ouagadougou, Burkina Faso.

**Expertise:** Agricultural policy, Domestic and inter-regional agricultural products trade, Rural non-farm economy, Farming systems research, Consumer studies, Agricultural production, Structural adjustment policies, Environmental impacts of policies.

**Education:** **Ph.D.**, Dept of Agric. Econ., Purdue University, West Lafayette, Indiana, USA (1986) - Thesis: An analysis of the economic and Socio-demographic determinants of household food consumption in Ouagadougou, Burkina Faso; **M.S.**, Dept of Agric. Econ., Purdue University, West Lafayette, IN, USA (1982). Emphasis: Prod. Economics and Price Analysis.

**Research/teaching:**

Since 1995: Maître de Conférences Agrégé, University of Ouagadougou, Burkina Faso. Teaching undergraduate econometrics and graduate level micro-economics, agricultural economics and econometrics;

July 90-Oct. 95: Maître-Assistant, University of Ouagadougou. Teaching undergraduate econometrics and graduate level micro-economics and econometrics.

Jan.87-July 90: Assistant Professor, University of Ouagadougou. Teaching undergraduate level statistics and econometrics, graduate level econometrics, and some computer software.

**Administration:**

Oct. 91-Present: **Various positions: School of Economics, University of Ouagadougou.** *Dean* (Sept.97-present); *Vice-Dean for Academic Affairs* (Oct.94-Sept.97); *Vice-Dean for Research* (Oct.91-Oct.94). *Head of the Graduate Dept.* (May 88-Oct.90). **Centre d'Etudes, de Documentation, de Recherche économique et sociale, CEDRES:** *Acting Director* (Sept.97-Jan.99); *Deputy Director* (March 90-Oct.91).

**Other:**

Feb. 95-July 95: *Team leader* of a World Bank consultancy on poverty in Burkina.

April 93-Aug. 95: Collaborative research with the Department of Agricultural Economics, Michigan State University (East Lansing, Michigan) on agricultural productivity and supply response in Burkina.

**ZUCKERMAN, Paul Sebastian (UK)**

Investment Banker, Chairman, Zuckerman & Associates LLC.

**Expertise:** Finance, Agricultural Economics, Strategic Planning.

**Education:** Ph.D. in Agricultural Economics, Reading University (1974);  
Higher National Diploma in Agricultural Economics, Trinity College; Cambridge University (1968);  
B.A. & M.A. in Economics, Trinity College, Cambridge University (1967) .

**Experience:**

Since 1999: Investment Banking boutique.

1995-98: Founding Member of Management Committee and Managing Director in charge of Global Investment Banking, Caspian Securities Ltd. Responsible for managing and setting up the investment banking department world-wide for the first investment bank dedicated specifically for the emerging markets.

1992-95: Chairman, SG Warburg Latin America Ltd. Vice- Chairman, SG Warburg International, Executive Director, SG Warburg & Co. Ltd.

1981-95: Held various post with S.G. Warburg & Co. Ltd., London.

1981-91: Responsible for initiating and building Warburg's business in India, Latin America and Africa (e.g., Nigeria).

1974-80: Senior Agricultural Economist, World Bank, Washington D.C.

1970-72: Research Associate, IITA, Ibadan, Nigeria. Training Associate, Ford Foundation, Ibadan, Nigeria.

Other appointments:

- Director, Merrill Lynch European Equity Hedge Fund Ltd. (2000);
- Board Member, International Women's Health Coalition, New York (1999);
- Director, Dabur Oncology, Ltd. (1999);

- Deputy Chairman Garban Intercapital plc. (1998);
- Director, Vetiver Network, Washington D.C. (1996);
- Chairman, International Technology Development Group (1990-1995);
- Co-trustee of Amberstone Trust (1990-1995).

**TERMS OF REFERENCE  
FOR EXTERNAL PROGRAMME AND MANAGEMENT REVIEWS  
OF CGIAR CENTRES**

**BACKGROUND**

**Context**

The Consultative Group on International Agricultural Research (CGIAR) is an informal association of over 50 members that supports a network of 16 international research centres in agriculture, forestry and fisheries. The CGIAR aims, through its support to the Centres, to contribute to promoting sustainable agriculture for food security in developing countries. Because the Centres constitute the core of the CGIAR, the effectiveness of each Centre is crucial to the continued success of the CGIAR (as a System).

Each Centre is an autonomous institution operating within the mandate assigned to it by the CGIAR, and is governed by a legally constituted Board that has full fiduciary responsibility for managing the Centre. To ensure accountability in an essentially decentralized system, each Centre is expected to be responsive to the CGIAR, which provides financial support for its work.

The CGIAR has established a tradition of External Programme and Management Reviews (EPMRs) to provide a mechanism of transparency and accountability to the Members and other stakeholders of the CGIAR System. EPMRs are the joint responsibility of TAC and the CGIAR Secretariat, and are conducted for each Centre approximately every five years. As each Centre is autonomous, EPMRs provide a measure of central oversight and serve as an essential component of the CGIAR's accountability system.

**Integrated System of Reviews of Each Centre**

Besides the EPMRs, Centre Commissioned External Reviews (CCERs) are undertaken at each Centre. These CCERs are commissioned by the Centre Boards to periodically assess the quality and effectiveness of particular aspects of a Centre's work. The terms of reference (ToRs) for each CCER are determined by the Centre, based on broad principles endorsed by the CGIAR at ICW95 (ref. document entitled *Improving the Quality and Consistency of CGIAR's External Centre Reviews*, dated October 24, 1995).

EPMRs complement the CCERs by providing a CGIAR-commissioned and comprehensive external assessment of the Centre's program and management, especially its future directions and the quality and relevance of its research. The ToRs for the EPMRs (which update the "standard ToRs" endorsed by the CGIAR at MTM95) are provided below. Guidelines for undertaking the reviews are issued separately.

## TERMS OF REFERENCE

### Objectives and Scope

EPMRs seek to inform CGIAR members that their investment is sound, or recommend measures to make it so. Members of the CGIAR and other stakeholders can be informed whether the Centre is doing its work effectively and efficiently. EPMRs are both retrospective and prospective; and help ensure the Centres' excellence, relevance and continued viability, and the CGIAR System's coherence. Each review is expected to be strategic in orientation and as comprehensive as the situation warrants.

The broad objectives of EPMRs are to: a) provide CGIAR members with an independent and rigorous assessment of the institutional health and contribution of a Centre they are supporting; and b) to provide the Centre and its collaborators with assessment information that complements or validates their own evaluation efforts, including the CCERs.

The EPMR panel is specifically charged to assess the following:

- a) The Centre's mission, strategy and priorities in the context of the CGIAR's priorities and strategies;
- b) The quality and relevance of the science undertaken, including the effectiveness and potential impact of the Centre's completed and ongoing research;
- c) The effectiveness and efficiency of management, including the mechanisms and processes for ensuring quality; and
- d) The accomplishments and impact of the Centre's research and related activities.

The topics expected to be covered by the EPMRs are listed below.

### TOPICS TO BE COVERED

#### A. Mission, Strategy and Priorities

- The continuing appropriateness of the Centre's mission in light of important changes in the Centre and its external environment since the previous external review.
- The policies, strategies, and priorities of the Centre, their coherence with the CGIAR's goals (of poverty alleviation, natural resources management, and sustainable food security), and relevance to beneficiaries, especially rural women.
- The appropriateness of the roles of relevant partners in the formulation and implementation of the Centre's strategy and priorities, considering alternative sources of supply and the benefits of partnerships with others.

#### B. Quality and Relevance

- The quality and relevance of the science practised at the Centre.

- The effectiveness of the Centre's processes for planning, priority setting, quality management (e.g., CCERs, peer reviews and other quality and relevance assurance mechanisms), and impact assessment.

**C. Effectiveness and Efficiency of Management**

- The performance of the Centre's Board in governing the Centre, the effectiveness of leadership throughout the Centre, and the suitability of the organization's culture to its mission.
- The adequacy of the Centre's organizational structure and the mechanisms in place to manage, coordinate and ensure the excellence of the research programs and related activities.
- The adequacy of resources (financial, human, physical and information) available and the effectiveness and efficiency of their management.
- The effectiveness of the Centre's relationships with relevant research partners and other stakeholders of the CGIAR System.

**D. Accomplishments and Impact**

- Recent achievements of the Centre in research and other areas.
- The effectiveness of the Centre's programs in terms of their impact and contribution to the achievement of the mission and goals of the CGIAR.

## ITINERARY OF THE EPMR PANEL

The Panel Chair and a consultant on governance attended IITA's Board meetings held at Headquarters in Ibadan from 29 April to 4 May 2000.

The whole Panel visited IITA Headquarters from 15 to 24 January 2001 for the Initial Phase of the Review. During this time the Panel received briefings from IITA Management and senior staff related to the mission and strategy of the Centre, its organizational and operating structure, and the support services of the centre. From 16 to 19 January the Panel heard presentations from project scientists covering the scope and scale of the research being within each of the 14 projects. Follow-up discussions with individual and groups of scientists also occurred at that time.

On 20 January, the Panel split into two groups and visited other IITA research sites in WCA. One group (Team A) travelled to the IITA station in Benin and then on to Ghana; the other group (Team B) went to IITA's Kano research station in Northern Nigeria and to Nkolbisson research station in Yaoundé, Cameroon. From 17 to 19 April, enroute to Ibadan for the Main Phase of the review, several Panel members visited the IITA research station in Kampala.

The Panel reassembled at IITA HQ on 20 April for the Main Phase of the review. During that time the Panel had opportunity to interact with staff members in follow-up meetings to collect further information and seek clarification. Various chapters of the report were shared with the Management at final draft stage. On 7 May the report was presented to the Board and Senior Management and subsequently to the IITA staff.

### **Initial Phase Field Visit (20-25 January) by Team A (K.G. Cassman, A. Gutierrez, K. Savadogo and P. Zuckerman)**

Team A of the Panel traveled to Cotonou, Benin by car January 20 and met with NARS representatives at the INRAB Headquarters. They met jointly with the administrations of the Benin Scientific and Technological Research Center, Institute of Agricultural Research of Benin, Université Nationale du Bénin/School of Agronomy and Crop Protection. Panel members met with management and staff of IITA's PHMD at their HQ in Cotonou on January 21, toured the facilities, and were briefed on ongoing activities of research being conducted at the station. They then traveled to Accra, Ghana by car on January 22, and had meetings with the management of the Council for Scientific and Industrial Research (CSIR) Secretariat in Accra, The Kwame Nkrumah University of Science and Technology (KNUST), the Ministry of Forestry and Agriculture (MOFA). On January 25, one of the Panel Members visited the IITA SP-IPM experiments in Zaria, Northern Nigeria where he met with management of Ahamdu Bello University and IITA's management of the programme and farmers participating in SP-IPM Farmer Participatory Research (FPR).

### **Initial Phase Field Visit (20-25 January) by Team B (A. Hamblin, M. Dingkuhn, J. Noolan and T. Kelley)**

Panel members of Team B departed Ibadan by air on January 20 to visit IITA's Kano Research Station facilities where they met with staff and farmers involved in FPR. On January 21, the Panel held discussions with representatives of Kano State government, KNARDA, SG

Global 2000, NGOs and local farmers, and later visited FPR fields trials at the Hadejia Jamare, Jura field station. Members of the Panel departed on January 22 for Yaoundé, Cameroon where they visited the Nkolbisson Research Station to hear to presentations by RCMD staff. The following day, the panel visited 3 village experimental sites in the humid forest benchmark areas and later met with the administration of collaborating institutions, IRAD, ICRAF, CIFOR, and ICLARM.

**Pre-Main Phase Field Visit (17-19 April) by A. Hamblin, K. Savadogo, J. Noolan and T. Kelley**

Panel members visited the IITA research station in Kampala, Uganda on 17 April Meetings were held with regional network co-ordinators of INIBAP and PRAPACE and Executive Secretary of ASERECA. The following day IITA's ESARC scientists gave research briefings and later meetings were held with the Director General of the Ugandan National Agricultural Research Organization and the Chair of the Forum of Agricultural Research in Africa (FARA). On April 19, the Panel members visited the Namalonge Agricultural and Animal Research Institute and the Kawanda Agricultural Research Institute where meetings were held with the Directors and staff. Discussions were also held with CIAT's representative in Uganda. The Panel members departed that night to join the other Panel member at IITA HQ in Ibadan.

**Visit to Abuja (25 April) by K.G. Cassman, A. Hamblin, A. Gutierrez and K. Savadogo**

Panel members flew to Abuja to meet the Permanent Secretary of the Ministry of Agriculture and Natural Resources and fifteen senior directors of federal government offices, and subsequently met with the Special Advisor on Food Security to the President for discussions on host country relations and country priorities for agriculture.

## DOCUMENTS PROVIDED TO THE REVIEW PANEL

### A. Documents Provided by the TAC and CGIAR Secretariats

- Review Process in the CGIAR, 1988
- CGIAR Priorities and Strategies for Resource Allocation During 1998 – 2000
- Report of the Fourth External Programme and Management Review of the International Institute of Tropical Agriculture
- Report of the First External Programme and Management Review of the International Livestock Research Institute (one of the most recent EPMR reports)
- Documents regarding the most recent TAC strategic studies involving the Centre
  - (a) Priorities and Strategies for Soil and Water Aspects of Natural Resources Management Research in the CGIAR
  - (b) Review of Systemwide Programmes with an Ecoregional Approach
- The TAC Commentaries on IITA's 1998-2000, 1999-2001 and 2000-2002 MTPs
- Update on the Use of CCERs (Memo from TAC Chair)
- Guidelines and Terms of Reference for EPMRs
- Medium-Term Resource Allocation 1998-2000: Centre Proposals and TAC Recommendations
- Review Processes in the CGIAR System (TAC and CGIAR Secretariat document)
- Priorities and Strategies for Soil and Water Aspects of Natural Resources management Research in the CGIAR
- Harvest and Postharvest Problems in Agriculture, Forestry and Fisheries – the CGIAR Contribution to Research
- Relevant Extract from: Medium-Term Resource Allocation 1998-2000: Centre Proposals and TAC Recommendations
- Relevant Extracts from the CGIAR Research Agendas for the Years 1999, 2000 and 2001
- Roots and Tubers in the Global Food System: A Vision Statement to the Year 2000
- Most recent CGIAR Annual Report
- Most recent CGIAR Brochure and Directory
- Financial Requirements of the 2001 CGIAR Research Agenda (latest MTM 00 doc)
- Terms of Reference for External Programme and Management Reviews of CGIAR Centres
- Organization and Management of the CGIAR System: A Review, 1993. (S. Ozgediz, Public Administration and Development, Vol. 13, 217-231 (1993))
- CGIAR ICW 00 End of Meeting Report and MTM 00 Summary of Proceedings
- Evaluating Research Institutions: Lessons from the CGIAR. (S. Ozgediz, Knowledge, Technology, and Policy, Winter 1999, Vol. 11, No. 4, pp. 97-113)
- Reference Guides for CGIAR International Agricultural Research Centres and their Boards of Trustees, August 1997
- Most recent volume of the CGIAR Board of Trustees Directory (October 2000)
- CGIAR 1999 Financial Report (August 2000)
- Committees and Units of the CGIAR: Roles, Responsibilities, and Procedures
- Most recent CGIAR financial guidelines and manuals relating to: Financial Management (Financial Guidelines No. 1, December 1999); Accounting Policies and Reporting Practices Manual (Financial Guidelines. March 1999); Financial Guidelines – Audit Manual (Financial Guidelines No. 3, July 7, 1995)

### B. Standard Documents Provided by IITA at the Request of the TAC and CGIAR Secretariats

- Mandate and Mission Statement
- Corporate Annual Reports (1994-1999)

- PHMD Annual Reports (1995-1999)
- Project Annual Reports (1998 & 1999)
- IITA Strategic Plans ( 1989-2000, 2001-2010)
- Medium-Term Plans (1994-98, 1998-2000, 1999-2001, 2000-2002, 2001-2003)
- Annual Funding Requests
- Organization Chart
- Centre-Commissioned External Review Reports + Management Responses (6)
- 4<sup>th</sup> EPMR and Summary of Actions
- EPMR Project Data sheets (Old project portfolio)
- Project Summaries (Revised project portfolio)
- Staff inputs X projects (Revised project portfolio)
- Performance appraisal for Internationally Recruited Staff
- Staff List (1999)
- Board of Trustees (1999)
- List of staff Publications
- Board Minutes
- Personnel Policy Manuals (IRS and NRS)
- External Auditors Reports
- Internal Audit Reports
- IITA Impact Publications
- Project Monitoring Minutes
- EPHTA and SP-IPM
- Monitoring the IITA Research Agenda
- RPEC Minutes
- WPW for 2001 Programme

### C. Other Referenced Documents Seen by the Review Panel

#### CGIAR-TAC Documents

- Reducing Poverty through Cutting Edge Research: CGIAR First Review of Systemwide Programmes with an Ecoregional Focus. Oct. 1 1999.
- A Food Secure World for All: Toward a New Vision and Strategy for the CGIAR. April 26 2000.
- TAC-Commissioned External Review of Plant Breeding Methodologies in the CGIAR Centres: Sub panel report on IITA. 28 Feb-3 March 2000.
- Inter-Centre Working Group on Integrated Pest Management: Report of meeting 13-16 March 2000 held at IRRI, Los Banos, Philippines
- Roots and Tubers in the Global Food System: A Vision Statement to the Year 2000. CIP-CIAT-IFPRI-IITA report. Sept 2000.

#### Centre-Commissioned External Review Reports

- IITAs Programmes in Plant Health Management, 25 Nov. - 1 Dec. 1996.
- Savannah Cereal-Legumes Systems, 21 Sep. -1 Oct. 1997.
- Management, Administration and Operations. 26 Apr. - 6May 1998.
- Starchy Staples: Banana, Plantain, Cassava, and Yams Research at IITA. 21 Sep. - 2 Oct 1998. BOT-approved responses to the CCER, May 1999.
- IITA's Programmes in Resource and Crop Management. 26 Sep. 7 Oct. 1999. BOT-approved response, May 2000.
- Improving Postharvest Systems, 17 - 30 Nov. 1999.

## **D. IITA Documents Prepared in Response to Panel Chair's Request at the BoT Meeting**

### *Background information and impact assessment of IITA's programmes*

- **General Background paper on IITAs mandate area**
  - Socio-economic context of agricultural production
  - Agroecological zones and major cropping systems
  - Productivity trends and production shares of mandate crops by SSA region
  - Supply and demand projections of mandate crops
  - Land and labour productivity in sub-Sahara Africa: Addressing the roots of rural poverty
  - Trends in the quality of the resource base
  - New methods developed and utilized in biophysical, socio-economic, and on-farm research
  - Policy research at IITA
  - Agricultural intensification in Africa, with emphasis on West and Central Africa
- Review IITA Impact Assessments, 1995-2000
- Summary of impact from IITA research

### *Information about specific IITA research programmes*

- IITAs involvement in the systemwide programme on integrated pest management
- Experimental data on improvements in yield and yield stability across a time-series of maize, soybean, and yam varieties developed by IITA breeders
- Evaluation of hybrids and improved open-pollinated varieties with local varieties under stress
- Improvements in cassava yield and yield stability across a time-series of varieties developed by IITA breeders
- Yam improvement report for the EPMR
- Soybean improvement report for the EPMR

### *Information regarding IITAs linkages, collaborations, and grant-funded projects*

- Data and information about the strength of IITAs National Agricultural Research Institute partners.
- Significant collaboration with National Agricultural Research Institutions
- Grant-funded projects, 1995-2000
- Major collaborations with other CGIAR centres
- Status and future plans for involvement of IITA in Ecoregional Projects
- Major collaborations with advanced research institutions
- IITA-NGO partnerships in Sub-Saharan Africa
- IITA involvement in major networks

### *Complete list of publications, 1995-2000*

- Crop Improvement Division publications
- Resource and Crop Management Division publications
- Plant Health Management Division

### *Miscellaneous documents*

- IITA training activities and data, 1995-2000
- Performance appraisal guidelines and process for Internationally Recruited Staff.

## **E. Other Documents and References Consulted during the Review**

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**The following are further references to Chapter 3.4 (RCMD):**

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- IITA 1999. *Financing plan for the 2000 Research Agenda*.
- IITA 2001. *2002-2004 Medium term plan*. Draft version March 2001.

**The following are further references to Chapter 4**

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**ASSESSMENT OF IITA' S RESPONSE TO THE RECOMMENDATIONS OF THE  
1995 EXTERNAL PROGRAMME AND MANAGEMENT REVIEW (EPMR)**

The 1995 External Programme and Management Review (EPMR) of IITA made 35 recommendations. IITA's response to these recommendations has been taken into account in the appropriate sections of the Report. The December 2000 update provided by IITA and the Review Panel's assessment of the status of implementation of the recommendations is presented in this Annex.

### EPMR RECOMMENDATIONS

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
<p>1. That a rigorous review of all aspects of work on cowpea improvement at IITA be undertaken in 1998, with the participation of an external assessor(s), to determine whether the current lines of work will then have shown sufficient progress to justify their continuation.</p>	<p>There was a rigorous review of our work on cowpea improvement during a CCER from 21 September-1 October 1997. As far as plant protection research and implementation are concerned, the project on IPM legumes has since developed a dual approach by executing strategic research concerning biological control under core funding, while rigorously seeking special project funding for the implementation aspects. For these, a regional project (PEDUNE) was developed together with numerous West African (and one South African) countries. This project was first evaluated and funded by Switzerland and concentrated on farmers' participatory research in IPM, bringing together all known interventions. It has since moved into a second, enlarged, phase (PRONAF) including plant breeding/testing of varieties, evaluated again by all countries and funded by IFAD. The success of these implementation projects, which allow also testing of any new research result, particularly in biological control, has given new strength to cowpea research and is widely appreciated by our national collaborators, NGOs and farmers.</p>	<p>Unfortunately the 1997 CCER was not asked to address the 4<sup>th</sup> EPMR's recommendation. The 5<sup>th</sup> EPMR shares the overall positive assessment expressed in the CCER, but reiterates the 4<sup>th</sup> EPMR's concerns over the slim chance of finding strong host resistance to major insect pests because of insufficient genetic sources of resistance. There is still an urgent need for a quantitative impact assessment on the extent of adoption of cowpea into various farming systems and the formulation of a realistic strategy for the control of insect pests in cowpea.</p>
<p>2. That IITA increase its effort on producing improved soybean germplasm for the moist savannah and mid-altitude areas of sub-Saharan Africa, either by redeployment of existing resource or by seeking additional resource.</p>	<p>There has been no success in sourcing additional funds for increasing our efforts to produce improved soybean germplasm. However, we have been able to secure funding for several NARS to conduct soybean trials from OFDA/USAID and IFAD. Under our core activities so-called dual-purpose cowpea varieties have been developed for the maize/grain legume production systems in the moist savannah. These varieties combine excellent grain yield with high biomass production and high N fixation. New germplasm has also been identified for low P soils.</p>	<p>The issue has been addressed but not resolved because of lack of funds. The response of IITA refers to cowpea as a substitute rotation crop with maize in the moist savannah, but this is not acceptable because of the specific advantages of soybean (income for women, human nutrition).</p>

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
3. That IITA review the scale of its activity in cassava improvement in the Humid Forest Zone, particularly with respect to Central Africa and formulate a proposal to enhance the uptake of its technology by the national programmes for cassava improvement in this region.	During 1999, IITA initiated a centralized and farmer-participatory breeding programme in the humid forest bench mark area in Cameroon to provide germplasm that will feed into other national programmes in Central Africa. Though the region continues to be highly unstable, work and collaboration in research and implementation of cassava plant protection has continued through an FAO mission in Congo – Brazzaville and through continued, and recently renewed collaboration with colleagues of D.R. Congo. This collaboration concerns ACMV (and possibly the Ugandan variant of this virus disease), the newly troublesome cassava root scale, and continued releases and monitoring of <i>Typhlodromalus aripo</i> , the highly efficient predator that has been released against CGM. Meanwhile, more systematic and long-term work on these three main problems, which will benefit the whole region, is being conducted in the forest benchmark area in Cameroon.	The scale of breeding activities has not been reviewed. Breeding has been strengthened at the Cameroon benchmark area using farmer-participatory approaches. Enhanced dissemination of improved varieties in Central Africa has not been possible due to political instability, but a new project for the Democratic Republic of Congo will address this. Issue largely resolved.
4. That IITA maintain its work on yam improvement at the current level while seeking every opportunity to devolve more of the applied work progressively to the NARS, possibly by subcontracting.	NARS in six countries have become more active in conducting applied research on yam as a result of close interaction with the IITA yam project and funding from GTZ, OFDA/USAID and IFAD.	Adequately addressed
5. That IITA, in its continuing reorganization of the Maize Improvement Programme, seek ways of devolving more of its work on genetic improvement of maize to NARS in the region.	Through WECAMAN, NARS have developed sites to screen breeding materials for nitrogen use efficiency, drought and <i>Striga hermonthica</i> . This development has enhanced the capacity of NARS for increased germplasm screening and exchange. With continued external support this could reduce the need for IITA to screen for these constraints.	The establishment of the WECAMAN network has helped devolving much of the germplasm evaluation work to NARS, and breeding for acid soils has been devolved to IRAD (Cameroon). Further devolution to other NARS and for other breeding objectives appears possible and needs to be studied. Issue partly resolved.
6. That IITA secure the continuity of staffing of the Biosystematic Unit by maintaining its core funding.	The action recommended has not been implemented through core funding But, the biosystematics unit (part of the project 'Biological control and functional biodiversity') enjoys relatively stable funding as a special project, from Austria. The museum and its activities have been vastly expanded and linked up with international co-operation in biosystematics (BioNET), by taking a leading role in West Africa.	Funding for the biosystematics staff continued from non-core special funds from the Austrian Government, but funding is now uncertain. All other aspects of the recommendation have been implemented.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
7. That appropriate measures be taken to ensure that the data on characterisation of the pest and patho-agroecosystems are kept in a form that is readily accessible to future generations of scientists.	Databases have been and are being compiled covering the cassava surveys and results of ESCaPP, PEDUNE, LUBILOSA, and other projects. In addition, the museum keeps an updated database on all insects and pathogens that have been identified from the region and retains voucher specimens. Numerous fundamental ecological studies on the pests and pathogens have been published in peer-reviewed journals and the curator of the museum, in international collaboration, is preparing keys and faunal lists which are to be published.	Procedures and programmes are in place to centrally archive and retrieve the geo-referenced data for analysis as suggested by the EPMR.
8. That IITA increase its strength in phytopathology at Ibadan.	Despite the renewed recommendations for new pathologist positions by the CCERs, this recommendation, sadly enough, has not been implemented due to lack of financial resources. We have since employed a visiting scientist on a semi-permanent basis to run the Germplasm Health Unit.	The numbers of samples processed would indicate that they have good capacity, but it is unknown whether further increases in staffing will occur.
9. That IITA emphasize the establishment of strategic institutional research alliances (such as consortia) to address adequately the complexity of sustainable resource management research.	This recommendation has been wholeheartedly adopted in all IITA divisions and has allowed the expression of complimentary strengths from a broad range of institutions. Key examples include the alliances with CAMBIA for biotechnology research in CID and PHMD. Specifically in west and central Africa the EPHTA umbrella framework enables a wide range of effective IARC/NARS/ partnership consortia to be active. Other examples are the strong breeding and IPM networks active in SSA such as SARRNET, EARRNET, PEDUNE etc. Prime examples in RCMD would include the Balanced Nutrient Management Systems (BNMS) Consortium activities (University of Leuven, Ahmadu Bello University, INRAB (Benin), SG 2000 and IITA), the Characterization of African Ecosystems (CERA) Consortium linking IITA with Yale University and the ASB African dimension. More broadly based efforts include efforts to link organizations within the west and central African region to their regional or global counterparts through agencies such as CROPNET and the CIEPCA alliance on cover crop research and extension.	Adequately addressed

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
<p>10. That the Resource and Crop Management Division core efforts be concentrated on the comprehensive attention to one benchmark area each for the Moist Savannah and Humid Forest Programmes.</p>	<p>RCMD has responded fully to the spirit of this recommendation if not to its letter. The recent CCER of Projects 1, 2 and 10 (old numbering system) reinforced the stricture that RCMD should not expend core resources in the mid-altitude ecozone and this has been adhered to. Yet, under the EPHTA ecoregional programme it was found desirable to include two rather than one benchmark site in the moist savannah ecozone to cover the range of contrasting systems in this ecology. Hence work has been concentrated in the Northern Guinea Savannah benchmark area in Kaduna/Kano and in the Degraded Savannah benchmark area in Benin. Work in the humid forest ecozone remains concentrated in the forest margins benchmark area in the Cameroon. "Watching briefs" only have been retained over the degraded forest, forest pockets and southern Guinea savannah benchmark areas in S.E. Nigeria, Ghana and Ivory Coast respectively as resources were not available under EPHTA or other projects to develop these benchmark areas. One favourable dimension of this concentration of efforts in these three restricted benchmark areas has been a much greater enhancement of inter-divisional collaboration. The existence now of large databases of biological, physical and socio-economic information which characterize the variability in these areas is now recognized by all IITA staff as being powerful agencies in improving the efficiency of research targeting and dissemination of research results. This growing synergy derived from now working shoulder to shoulder should be maintained as it acts as a powerful tool in the generation of further special project funding as problems can truly be addressed at a systems level.</p>	<p>The issue of benchmark areas has not been resolved. The 5<sup>th</sup> EPMR has the same concerns as the 4<sup>th</sup> EPMR on too great an expenditure of resources on benchmark areas, but appreciates the quandary that IITA has as a result of the expansion of planned benchmark areas (from two to six) in the EPHTA ecoregional programme. The 5<sup>th</sup> EPMR sees a distinction between the utility of benchmark areas as the focus of collaborative work among stakeholders, and its limitations as a methodological approach in systems analysis.</p>

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
<p>11. That the Resource and Crop Management Division apply rigorous priority setting to its research portfolio in order to concentrate efforts on research areas of highest possible impact.</p>	<p>This recommendation cannot but be accepted as prioritization for impact remains a serious on-going process annually in RCMD. The Division has attempted to redress its efforts somewhat from a strict process orientation to one which encompasses a broader range of the research and development continuum. Our project outputs are now specifically geared towards achieving visible and measurable impact in the medium term and the appointment of a core Impact Generation Specialist, a core GIS specialist (for scaling-out and scaling-up) and a special project NGO Liaison Scientist demonstrates our commitment to the principal of achieving and monitoring impact (a key feature of Project 14). Nevertheless, key constraints to system productivity and profitability remain ---- inadequate soil fertility, chronic weed infestation, insufficient investment in pre and post-harvest machinery and other inputs, and a generally hostile infrastructure and policy environment. Divisional efforts will continue to be aimed at these difficult but not intransigent real-life targets.</p>	<p>IITA's response to this recommendation inferred that quantitative assessment was too complex to undertake. Increases in post harvest technology, market research, and socio-economic surveys in the RCMD portfolio has not been balanced by reducing the input into traditional research areas, such as agronomic field trials and soil fertility research. A broader range of issues is now being covered than five years ago. A formal transparent priority setting mechanism is still needed that clearly demonstrates the relative benefit of research into benchmark site and domain characterization, participatory research in cropping systems and product development, policy-related studies in collaboration with national government agencies and direct development projects to implement research products across large constituencies.</p>
<p>12. That the Resource and Crop Management Division put greater emphasis on on-farm research in its programme.</p>	<p>This recommendation has been fully accepted and now close to 90% of RCMD's research efforts are based on-farm. This is in accordance with a) the research benchmark area approach and the identification of key villages incorporating desired environmental and social diversity as target research locations; and with b) recent scientific method changes in working with farmers and other NARS partners (particularly NGOs) in an effective participatory mode. Work remaining on station which must not be compromised include key long-term trials studying nutrient turnover and the sustainability of cropping systems. Such trials are becoming a very scarce but necessary resource in West and Central Africa if issues such as carbon sequestration and global warming are to be addressed.</p>	<p>Adequately addressed</p>

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
13. That IITA conclude an agreement with CIMMYT to ensure that the collection and conservation of African maize germplasm is undertaken.	CIMMYT and IITA concluded an agreement on this issue. We approached CIRAD (in the framework of CORAF) to do a joint exploration and also requested support (with CIMMYT) from SGRP. Both of these requests were not approved. No additional African maize germplasm has been collected.	No longer an issue
14. That IITA strengthen the capacity and increase the authority of the Seed Health Unit in matters relating to the movement of germplasm by the Centre.	This unit, with the new name Germplasm Health Unit, has been consolidated and is now staffed by a visiting scientist, reporting to the director of PHMD. She had formerly been employed by the Nigerian Quarantine Services at Moor Plantation and brings correspondingly good contacts with the local authorities and the Inter-African Phytosanitary Council (IAPSC) to her new job. She is assisted by a committee consisting of the virologist, the other pathologist, the breeders (who are the main clients of this unit), the gene bank scientist and a weed scientist. Passage of all in-coming and out-going material through the Germplasm Health Unit is now mandatory, thus assuring the health of all material being imported and exported from IITA as well as the good reputation of the Institute.	Adequately addressed
15. That IITA review its policies and strategies relating to networks to ensure that these are adequately integrated with, and receive support from, the Centre's research and training programmes.	In our original reply it was noted that in all networks there are effective linkages with core research and training programmes, through frequent liaison, technical backstopping, information flow, regular attendance at steering committee meetings and field visits. Since the last EPMR, IITA's research agenda is implemented through a set of projects and the networks have become part of the project activities, ensuring full integration between them and the centre's research and training programmes.	Given the importance of 'networks' it would not have been out of order to have commissioned a CCER. Nevertheless this seems to be no longer a substantive issue.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
<p>16. That the International Co-operation Division undertake a review of its priorities, strategies and activities, in order to respond effectively to the emerging opportunities for increased partnership with NARS and other collaborators.</p>	<p>The IITA Board of Trustees in its meeting of 2-7 May 1998 discussed extensively the opportunities to strengthen the co-operation with NARS and related matters. It considered that with the adoption in recent years of a project structure of the implementation of the research agenda special efforts were needed to assure that all projects were actively involved in matters related to strengthening of NARS.</p> <p>Analyzing the situation further it was concluded that this could not be done under the current structure. It was clear from the discussions at various levels that there was potential for confusion between the research projects and the International Co-operation Division which also had responsibilities for strengthening NARS, but which had more of a co-ordinating and administrative rather than a research function. It was also clear from Board members representing the region that the interaction at the research project level was highly valued. As a result it was subsequently concluded that it would be best to dissolve ICD and to make the relevant research projects directly responsible for the regional projects related to them. Other arrangements would have to be made to cover administrative matters related to these projects, to maintain optimum liaison with NARS, and to assure effective implementation of ongoing activities in Information and training.</p> <p>The following arrangements are proposed.</p> <ol style="list-style-type: none"> <li>1. Establishment of a position of NARS Liaison Officer</li> </ol> <p>The NARS Liaison Officer would be responsible for the effective interaction with NARS, Regional Research Organizations and other partners in sub-Saharan Africa. Many of these contacts with partners are now evolving within the framework of the Ecoregional Programme for the Humid and sub-Humid Tropics of sub-Saharan Africa (EPHTA), it is therefore proposed to link this position with the EPHTA Co-ordinating Office.</p> <ol style="list-style-type: none"> <li>2. Establishment of a Project Officer <ol style="list-style-type: none"> <li>a. Responsibility for Project Databases</li> <li>b. Project Formulation and Implementation</li> <li>c. Project reporting</li> </ol> </li> <li>3. Establishment of a position of Information/Training Officer</li> </ol>	<p>The 5<sup>th</sup> EPMR believes that the role and importance of the international co-operation needs to be strengthened and the organizational changes since the 4<sup>th</sup> EPMR have been counter productive.</p>

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
17. That IITA Board develops and implements a more systematic and structured process for evaluating the Director General's performance and use the results for making future BoT decisions on Director General contract terms and conditions.	The Board of Trustees has developed a set of criteria against which to evaluate the Director General's performance in a structured and systematic manner.	Not adequately addressed. More formally documented procedures, practice and outcomes need to be put into place.
18. That the Programme Committee utilize more proactive and participatory methods in determining research strategies and review policies, including those for internally managed external reviews, to enable the BoT to provide effective oversight of the scope and quality of the research programmes of IITA.	The Programme Committee has developed criteria for the preparation and execution of the centre-commissioned external reviews. The Programme Committee reviews the terms of reference and always nominates one of its members as a resource person in the review as well as an observer for the BOT. Implementation of the recommendations of the CCERs are systematically monitored and reviewed by the Programme Committee which subsequently reports on progress made to the Board.	Not adequately addressed. With only one meeting a year the Programme Committee cannot exercise sufficient intellectual leadership. In addition it does not adequately visit stations to assess developments. The CCERs are often presented by the Division Director who can influence the tone of the presentation.
19. That the Terms of Reference of the Audit Committee (AC) include oversight responsibility for management systems, personnel policies and administrative procedures. The AC should also provide guidance for undertaking internally managed external reviews in these areas as appropriate.	This recommendation has been partially implemented. The Board has decided that the oversight responsibility for management systems, personnel policies and administrative procedures is the responsibility of the Executive Committee but it will seek advice of the Audit Committee as appropriate.	Not adequately addressed. The ToR for the Audit Committee should be expanded to include operations review as is done at a number of other CGIAR Centres. Just as the Programme oversees CCERs in Programme areas so should the Audit and Operations Review Committee oversee the management, personnel and administrative side. The Executive Committee has too many other items on its plate.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
20. That the Director General re-examine with the IITA Board, the appointment of a Deputy Director General (Research) to ensure that top research leadership can be provided in a continuous and sustained manner without distorting relationships in management structure.	A DDG has been appointed and constitutes together with the DG the Office of Director General and the research leadership is carried out jointly by the DG and the DDG. When the DDG was recruited it was decided by the Research Programme Committee of the Institute that the DG should continue to chair this committee. However, it should be stressed that day-to-day research management activities are carried out by the DDG.	The issue remains and is dealt with in the Panel's report.
21. That the head of international cooperation should continue to be appointed at the Deputy Director General level and have additional responsibilities including information services.	As noted under recommendation 16, the International Cooperation Division has been dissolved and information services are reporting directly to the Office of the Director General.	The 5 <sup>th</sup> EPMR recommends the position be upgraded, but not to DDG level.
22. That IITA develop an integrated project-based planning, resource allocation and implementation system in the next few years and pilot test it in selected areas before extending its coverage to the entire research programme and to research-related activities.	This recommendation has been fully implemented.	The 5 <sup>th</sup> EPMR has reservations on the effectiveness of the role of projects. In addition the draft MTP 2002-2004 implies that AEZ coordination will have a measure of line responsibility, thus complicating decision making and accountability questions.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
23. That IITA further develop its priority-setting methodology and processes for routine screening of new projects, including <i>ex-ante</i> impact assessment, irrespective of their funding source. It should also ensure compatibility with the formal strategic planning process of IITA.	IITA has looked at various options for effective priority setting. It has concluded that it should draw upon the exercises carried out by the regional agricultural research organizations in sub-Saharan Africa. These priorities are assessed against the overall responsibilities of the CGIAR and the Institute. Each ongoing project of IITA is systematically reviewed once every 18 months by the Research Program and Executive Committee (RPEC) of the Institute and necessary changes in the project plans and activities are subsequently made. Guidelines have been adopted for the development of new project proposals and this includes review and approval by RPEC.	This remains a major issue and is dealt with at length in the current report.
24. That IITA establish a formal and transparent system for ensuring that NARS are routinely consulted in planning the Centre's annual research programme and research-related activities.	IITA through its various channels, such as networks, direct researcher to researcher contacts, workshops and recent work in the benchmark areas consults and collaborates closely with the widest range of partners and uses the feedback to adjust its programme and research related activities. For ESARC an annual planning meeting is held with NARS representatives of the region. Such a meeting would be difficult to hold in West and Central Africa (WCA), because of the wide range of crops to be covered. IITA has concluded a MoU with CORAF outlines the procedures for the development and implementation of regional projects in WCA.	It is not clear the extent to which NARS actively participate in the annual planning meetings at Ibadan, but the Centre has consulted extensively with NAROs and subregional organizations in developing IITA's draft Strategic Plan.
25. That IITA take steps to improve the uniformity, transparency and due process of the current Performance Evaluation System.	In addition to the response provided to the fourth EPMR, management has organized training courses on performance evaluation. This included both locally recruited management staff and internationally-recruited staff. Annual performance evaluations are systematically carried out. For the IRS project coordinators are now involved in the appraisal of the scientists.	Not adequately addressed. For IRS, lack of clarity about what "counts" at the Centre, and about the rationale underlying salary increases. For NRS there are issues about position classification in research vs. administration.
26. That the IITA rescind the "11 year rule", limiting the tenure of scientists at IITA, and delete it from the personnel policies applicable to internationally recruited staff.	This recommendation has been implemented	Adequately addressed.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
27. That the Personnel Policies and Procedures Manual for Internationally Recruited Staff include the Institute's Salary Structure for all classes of internationally recruited posts including the pay ranges, incremental steps and criteria for the placement of staff at each level.	Classes of international staff are clearly defined in IITA's personnel policy manual and the relevant salary ranges are annually reviewed by the Executive Committee of the Board. The Institute continues to believe that it is not appropriate to publish the salary ranges in the Personnel Policy Manual. Incremental steps continue to be determined on the basis of performance	The Institute's salary structure for all classes of IRS indicating the pay ranges, incremental steps and criteria for the placement of staff at each level are neither transparent nor included in the Personnel Manual.
28. That IITA prepare comprehensive and updated Personnel Policy and Procedures Manuals for nationally recruited staff at all field stations.	This recommendation has been implemented.	Adequately addressed.
29. That IITA appoint a professionally qualified, internationally- recruited specialist in human resource management as Head of Human Resources, reporting to the Deputy Director General (Management).	Originally IITA noted that it was not convinced that the concerns addressed by the Panel would best be addressed through the appointment of a Head of Human Resources. However, it has kept the situation under regular review and a Human Resources Manager for internationally recruited staff has now been appointed. The position of Personnel Manager for nationally recruited staff has also been maintained. Both these positions report to the Director of Corporate Services.	Not adequately addressed. The Institute still has not consolidated all human resource functions (both IRS and NRS) into a single human resources unit as recommended in the 4 <sup>th</sup> EPMR.
30. That IITA develop an integrated programme/project planning, budgeting and financial reporting system to support the transition to project-based research management.	This recommendation has been implemented.	See response to recommendation no. 22.
31. That a Publications Policy for IITA be established, and that an Advisory Committee monitor its implementation.	A publications review policy has now been established. As noted in recommendation 21, Information Services now reports to the Office of the Director General and the Research Programme and Executive Committee regularly monitor the activities.	Adequately addressed. There is a Committee that monitors the process for refereed articles.

1995 EPMR Recommendations	IITA's December 2000 Progress Report	2001 EPMR Panel's Comments
32. That a comprehensive review of Information Services be conducted as soon as possible.	With the various changes in the International Cooperation Division and the change in the reporting responsibilities of Information Services this recommendation has not been implemented. However, a detailed review of the library was carried out.	Not adequately addressed. A review of the library was done, but most of the recommendations were not implemented
33. That IITA maintain an effective capacity in social science research and recruit to fill the positions approved in the Medium-Term Plan as soon as possible.	Action has been taken which more than fulfils this recommendation and this group now represents one of the central foundations of IITA research (largely reporting under Project 14). Current staff include two agricultural economists, two food policy economists (one a CIRAD associated posting), an IPM economist (special project funding), a yam systems economist (special project funding), a rural sociologist, an impact generation specialist and a GIS specialist. This is a very large increase in staff complement compared with the previous EPMR period.	Still a major issue and one the Panel has focused on in this report.
34. That IITA decide on the appropriate approach to impact assessment and identify specific areas/topics on which work should initially be concentrated.	This recommendation has been implemented. An impact generation and assessment specialist has been hired to coordinate these activities). A series of impact assessments have been reported in a new IMPACT publication series. Greater emphasis is placed on efforts designed to consider ex-ante impact in line with Recommendation 11. This becomes a key issue in whether or not special project funding applications have a strong likelihood of success.	This recommendation has not, or only very incompletely, been implemented. There is still no systematic research on ex-post or ex-ante adoption of new technologies, and on-farm performance measurements for adopted technologies remain limited to specific research sites although the Centre has hired an 'impact assessor'. This position focuses on the process of adoption rather than documenting impact.
35. That IITA appoint a short-term consultant for gender issues on a periodic basis to help sensitize/train/advise IITA research scientists in gender-related methodologies in order that gender concern is institutionalized.	In its various research activities IITA pays specific attention to gender needs and this has been further strengthened by our increased social science capacity and our work in the benchmark areas under the ecoregional programmes. For on campus issues, it was decided that it was not a problem among scientists here and what we need is more sensitization on how to work with scientists of diverse cultures and local staff who have diverse cultural backgrounds as well. IITA has taken advantage of the advice and information provided by the Systemwide Gender and Diversity Programme and it has gained additional experience through workshops organized by the Organizational Change Programme.	Adequately addressed. In its research, the Centre does incorporate attention to the role of women in agriculture.

## CHANGES IN PROJECT NAMES AND NUMBERS - 2001 ONWARDS

Old Project No. and Title in 2000	New Project No. and Title (from 2001 onward)
Project 1 - short fallow stabilisation	Incorporated into new Project 11 and 12
Project 2 - Agroecosystem development strategies	New Projects number 14
Project 3. Biological control and diversity	New Project 7 Biological control and functional biodiversity
Project 4. Integrated management of legume pests and diseases	New Project 8 Integrated management of legume pests
Project 5. Integrated management of maize pests and diseases	New Project 9. Integrated management of maize pests
Project 6 Integrated management of cassava pests and diseases	New Project 10 Integrated management of cassava pests
Project 7. Improving plantain and banana-based systems	New Project 2 Improving plantain and banana based systems
Project 8 Integrated control of <i>Striga</i> and other parasitical plants- gone (included in new Project 4)	New incorporated into new Project 3 (improving cowpea-cereal systems in the dry savannas)
Project 9. Improving postharvest systems	Spread across new Projects 2,3,4,5,6,8,9,11,12,13,14
Project 10. Farming systems diversification	New incorporated into new Projects 11, 12 and 13
Project 11. Cowpea-cereals systems improvement for the dry savannas	New Project 3 Improving cowpea-cereal systems in the dry savannas
Project 12. Improvement of maize-grain legume systems in the moist savanna of West and Central Africa	New Project 4. Improving maize-grain legume systems in West and Central Africa
Project 13. . Improvement of yam-based systems	New Project 5. Improving yam-based systems
Project Cassava productivity in lowland and mid-altitude agroecologies of sub-Saharan Africa	New Project 6 Improving cassava based systems
Project 15 Molecular and cellular biotechnology for crop improvement	New incorporated into Projects 3,4,5,6,8,9,10?
Project 16 Improving the dissemination of IITA's research results	New incorporated into each project
Project 17 Conservation and genetic enhancement of plant biodiversity	New Project 1 Conservation and use of plant biodiversity
Project 18 Ecoregional program for the humid and subhumid tropics of sub-Saharan Africa	New Project 16 Ecoregional program for the humid and subhumid tropics of sub-Saharan Africa
Project 19 Systemwide program for integrated pest management	New Project 15 Systemwide program for integrated pest management
	New Project 12: Improvement of high-intensity food and forage crop systems
	New Project 13: Building livelihood assets through multi-product perennial cropping (MPPC) systems targeted to degraded/deforested lands
	New Project 14 Impact, policy and systems analysis

All old projects, except for old Project 17 (dissemination of results), that have been discontinued in their current form were in RCMD, as are the new projects. Evidence of continuing significant change in this division's objectives.

## ANNEX VII

## MAJOR COLLABORATIONS WITH OTHER CGIAR CENTRES

Institution	City/ Country	Collaborator	IITA Scientist	Topic	Source of Funds	Expected Outcome
CIAT	Colombia	A. Braun L. Smith	(S. Yaninek)	Foreign exploration for phytoseiid predators	IFAD, UNDP	Exploration for phytoseiid predators for the biological control of cassava green mite in Africa
CIAT	Colombia	P. Anderson	J. Legg	Coordination of whitefly project	DANIDA	
CIAT	Colombia	M. Fregene J. Thome	M. Gedil A. Dixon	DNA markers for ACMD resistance	Rockefeller Foundation	DNA markers for ACMD resistance
CIAT	Colombia	H. Ceballos	A. Dixon J. Whyte M. Bokanga	Cassava germplasm enhancement production and post harvest technologies	IITA, CIAT and IFAD	Improved cassava varieties and market for cassava in Africa
Many	i) Indonesia ii) Kenya	Various	S. Weise, J. Gockowski, C. Nolte, S. Hauser	Alternatives to Slash and Burn Programme	GEF, DANIDA, EC	Phase II – Key land use systems identified and evaluated using environmental, agronomic sustainability, economic and social indicators. (complete, report available) Phase III – Productivity, resilience and stability of mosaics of land use systems in the forest margins evaluated and the capacity of households, local communities and other stakeholders developed to assess, monitor and implement a range of adaptive management strategies for dealing with environmental, social and economic change. (initiated in January 2000)
CIMMYT	Mexico	D. Bergvinson	W.G. Meikle	varietal resistance to stored product insects	Core CIMMYT	Identification of agronomically acceptable resistant varieties for West Africa.
CIMMYT	Kenya	A.O. Diallo	B. Badu-Apraku S.O. Ajala, A. Menkir, J.G. Kling	Maize Striga Project	USAID, UNDP, IFAD, JIDA	i) Development of maize varieties with increased tolerance to drought, low soil nitrogen and Striga and with resistance to stemborer as well as complementary crop management practices for stress conditions.  ii) Capacity to develop stress tolerant maize varieties enhanced in the participating African NARS.  iii) Stress tolerant maize varieties and complementary crop management practices released/being released in collaborating NARS.

Institution	City/ Country	Collaborator	IITA Scientist	Topic	Source of Funds	Expected Outcome
CIMMYT	Zimbabwe	K.V. Pixley M. Banzinger	A. Menkir	Maize germplasm with resistance to highland leaf blight rust and drought	IITA	Resistant materials developed.
CIMMYT	Mexico and Kenya	D. Hoisington D. Grimanelli F. Kanampiu	J. Kling	Mapping genes for Striga resistance in maize	Rockefeller Foundation	Molecular markers for Striga resistance
CIP	Kenya	P. Ewell	J. Teri	Sweet Potato/SARRNET	USAID	Improved root crop production and utilization in SADC region
ICIPE	Nairobi, Kenya	J. Ssenyonga	C. Gold	Economic assessment of IPM	RF	Farmer appropriate control strategies
i) ICRAF ii) IPGRI	i) Kenya ii) Italy	Various	S. Weise, J. Gockowski, S. Hauser	Sustainable Tree Crops Programme	USAID and Private Sector (Chocolate Manufacturers)	To enhance public and private partnerships in order to provide farmers with the technology, organizational framework, services, skills and policy environment required to maintain over the long term increased productivity of high quality tree crop products, make their product competitive in international markets, derive economic benefit from the opportunity of liberalized markets, build growth-oriented farmer businesses that create wealth for their communities, and sustainably use their natural resource base and conserve their biodiversity while increasing productivity.
ICRISAT	Nigeria	S.G. Gupta	B.B. Singh	Farmers participatory evaluation of improved crop-livestock systems in the dry savannas	Systemwide Livestock Project	Holistic farming system ensuring high sustained crop and livestock.
ILRI	Nigeria	S. Tarawali	B.B. Singh	Farmers participatory evaluation of improved crop-livestock systems in the dry savannas	Systemwide Livestock Project	Holistic farming system ensuring high sustained crop and livestock.
ILRI and LPG members from eight other CGIAR centres (IFPRI, CIMMYT,	Kenya	J. Smith	R.J. Carsky, H. Grimme, V.M. Manyong, D. Keatinge, S.A. Tarawali	Participation in Livestock Programme Group (LPG = "steering committee") for the Systemwide Livestock Programme, coordinated by ILRI (1998 – on going)	Systemwide Livestock Project	Development of operating procedures for SLP and its management Assessment of project proposals and funding approval. Development and implementation of major workshop on crop residues (Crop residues in sustainable mixed crop/livestock farming systems, held in India, April, 1996

Institution	City/ Country	Collaborator	IITA Scientist	Topic	Source of Funds	Expected Outcome
CIP, CIAT, ICARDA, ICRAF, ICRISAT, IRRI)						
ILRI, ICRISAT, IFDC, CORD University of Durham, UK	Various	Various	S.A. Tarawali, B.B. Singh, S. Nokoe, V.M. Manyong, B. Asafo -Adjei, N. de Haan	Improving crop-livestock systems in the dry savannas (1998-on going)	Systemwide Livestock Project	Workshop on crop-livestock systems in the dry savannas of West and Central Africa, November 1998. Development and implementation of a multi-institute, multi-disciplinary approach to holistic on-farm evaluation of crop and livestock technologies using a “best bet” approach
ILRI	Kenya	J. Hansen	S.A. Tarawali	Research on herbaceous legumes (1996-1999)	IITA and ILRI	Multiplication, maintenance and dissemination of herbaceous legume germplasm. Identification of herbaceous legumes for crop-livestock systems. Institutionalization of joint IITA -ILRI position
ILRI	Kenya	J. Smith	V.M. Manyong, R.J. Carsky, G. Tian, D. Chikoye, S.A. Tarawali	Research on crop-livestock systems (1994-2000)	EPHTA, ILRI and IITA	Evaluation of crop-livestock systems and development of conceptual frameworks. Evaluation of the reciprocal benefits in crop-livestock systems
ILRI and University of Hohenheim	Kenya ii) Germany	Various	S.A. Tarawali, N. de Haan, V.M. Manyong, N. Sanginga, J. Wendt	Strategies for promoting farmer utilization of herbaceous legumes (1999- 2002)	BMZ/GTZ, IITA, ILRI	Identification of recommendation domains for herbaceous legumes, based on assessment of biophysical and socioeconomic constraints and opportunities in the NGS and DS benchmark areas

- NB. 1) Scientists from CIFOR, ICRAF, ICRISAT, ILRI, IPGRI, WARDA are currently hosted at IITA stations.
- 2) Meeting scheduled for September 2000 to identify areas for stronger programmatic cooperation in West and Central Africa (IITA/ICRISAT/ILRI and WARDA).

## ANNEX VIII

## IITA BOARD COMPOSITION (1996-2001)

Name	Nationality	Specialization	Gender	Nominated By	96	97	98	99	00	01	Positions Held
Lukas Brader	Netherlands	Entomology	M	Ex-Officio	X	X	X	X	X	X	M-EC, M-PC
Pierre Dubreuil	France	Agronomy/Hydrology	M	CGIAR	X	X					C-BOT, C-EC
John Stewart	Canada	Soil Science	M	Board	X	X					C-PC, M-EC
Marc Van Montagu	Belgium	Biochemistry	M	Board	X	X					M-PC, C-NC
Mary Okelo	Kenya	Management/Banking	F	Board	X	X	X				C-AC, M-EC
Joseph Mukiibi	Uganda	Plant Pathology	M	Board	X	X	X				VC-BOT, M-EC, M-PC, M -NC
Wally Omole	Nigeria	Animal Nutrition	M	Member co	X						M-PC
Constance McCorkle	USA	Anthropology	F	CGIAR	X	X	X	X			M-PC, M-AC
Adamu Aliyu	Nigeria	Veterinary Science	M	Member Co	X	X	X				M-PC
Michel Sedogo	Burkina Faso	Soil Science	M	Board	X	X	X	X	X		VC-BOT, M-EC, M-PC
Hoffmann, Volker	Germany	Sociology	M	Board	X	X	X	X	X		C-NM, M-PC
Kyoko Saio <sup>1</sup>	Japan	Food Nutrition	F	Board	X	X	X	X	X	X	M-PC
Anastasios Leventis <sup>2</sup>	UK	Business	M	Board	X	X	X	X	X	X	C-AC, M-EC
Martin Clucas <sup>3</sup>	UK	Business	M	Board	X	X	X				
Enrico Porceddu	Italy	Genetics	M	Board	X	X	X	X	X	X	C-BOT, C-EC, M -PC
Jorgen Jakobsen	Denmark	Plant Pathology	M	CGIAR	X	X	X	X	X	X	C-PC, M-PC, M-AC, M -EC
Limamoulaye Cisse	Senegal	Soil Science	M	Board		X	X	X	X	X	M-PC
Eric Tollens	Belgium	Agricultural Economics	M	Board		X	X	X	X	X	M-PC, M-NC
Joy Kwesiga	Uganda	Women in Development	F	Board			X	X	X	X	M-PC, M-AC
Geoffrey Mrema	Tanzania	Agric. Engineering	M	CGIAR			X	X	X	X	M-PC, M-AC
Suri Sehgal <sup>4</sup>	USA	Biotechnology	M	Board			X	X	X	X	M-PC, M-AC
Abdoulaye Babale	Cameroon	Political Science	M	Board				X	X	X	M-PC
Umaru Alkaleri <sup>5</sup>	Nigeria	Library Science	M	Member Co				X	X		M-EC
Julius Okojie <sup>6</sup>	Nigeria	Forestry	M	Member Co				X	X		M-PC

<sup>1</sup> Term ends May 2001<sup>2</sup> Term ends May 2001<sup>3</sup> Deceased 1998<sup>4</sup> Resigned May 2000<sup>5</sup> Retired January 2001<sup>6</sup> Retired May 2000

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Name	Nationality	Specialization	Gender	Nominated By	96	97	98	99	00	01	Positions Held
Assetou Kanouté	Mali	Biology	F	Board				X	X	X	M-PC
Michael Collinson	UK	Agricultural Economics	M	Board					X	X	M-PC
Mortimer Neufville	USA	Animal Science, Biochemistry	M	Board					X	X	M-PC
Erastus Gyang	Nigeria	Unknown	M	Member Co						X	M-PC
Gry Synnevag	Norway	Breeder/Geneticist	F	Board						X	M-PC
Hans von Lengerke	Germany	Agrometeorologist	M	Board						X	M-PC
Masa Iwanaga <sup>7</sup>	Japan	Biotechnology	M	Board						X	M-PC
Guda Abdulaahi	Nigeria	Unknown		Member Co						X	M-EC
B.D. Usman	Nigeria	Unknown	M	Member Co						X	M-PC

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<sup>7</sup> Term begins May 2001

## IITA, 1996-2001 AT A GLANCE\*\*

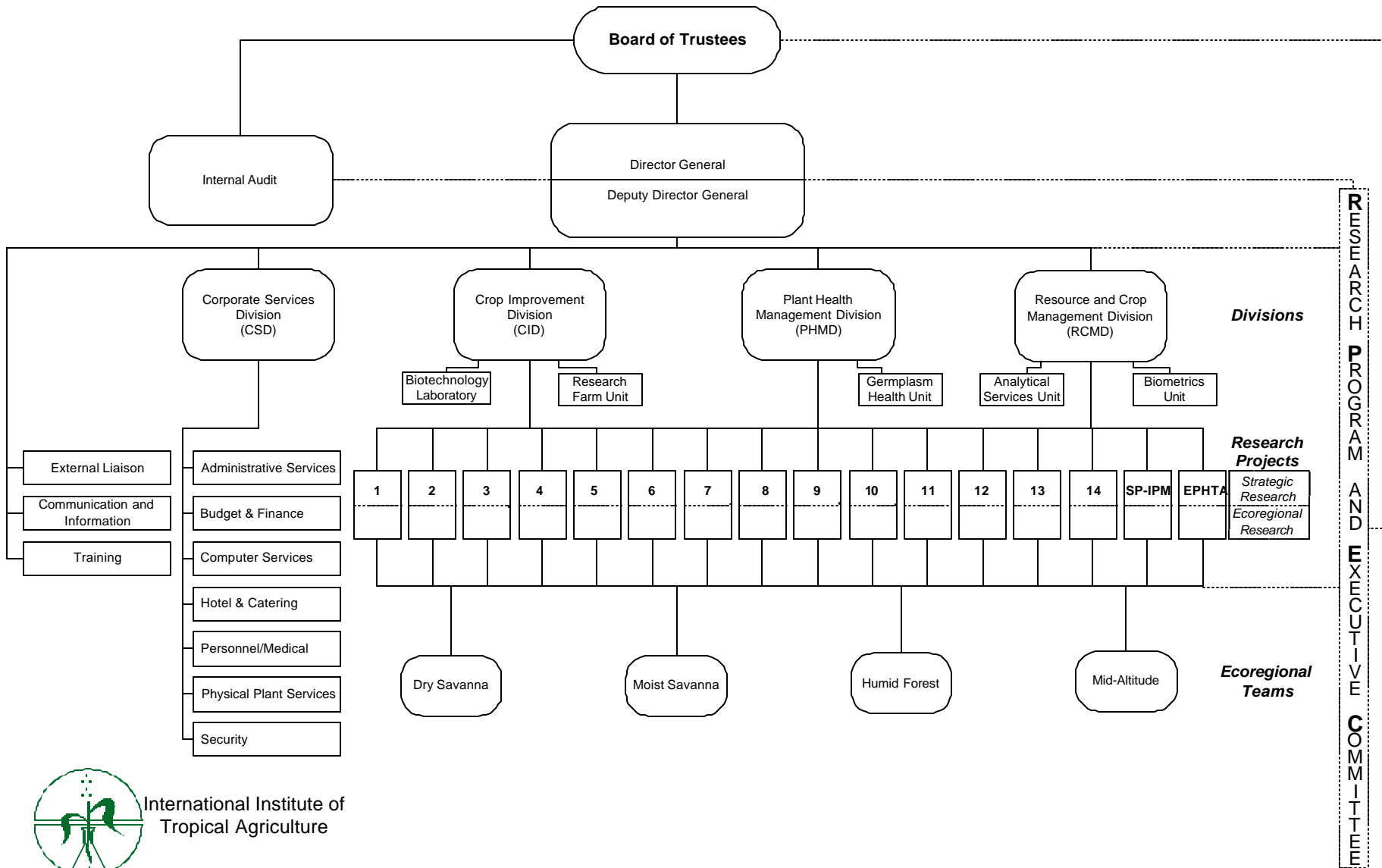
	<u>Actual</u>					<u>Estimated</u>
	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
<b>A. STAFF COMPOSITION (Positions)</b>						
Internationally -Recruited Staff (IRS)	103	86	78	79	81	81
Post Doctoral, Associates, Visiting	11	24	22	25	25	25
Nationally -Recruited or Support Staff (NRS)	<u>1,638</u>	<u>1,378</u>	<u>1,250</u>	<u>1,005</u>	<u>995</u>	<u>950</u>
	1,752	1,488	1,350	1,109	1,101	1,056
<i>Memo: of which Outreach included in A above</i>						
Internationally -Recruited Staff (IRS)	41	32	30	31	35	35
Post Doctoral, Associates, Visiting	8	12	14	14	12	12
Nationally -Recruited or Support Staff (NRS)	397	274	248	200	200	200
<b>B. FINANCIAL INFORMATION (In US\$'000)</b>						
<b>Total Grants</b>	<b>31,180</b>	<b>29,170</b>	<b>29,221</b>	<b>30,791</b>	<b>28,962</b>	<b>32,852</b>
<i>Unrestricted Core</i>	<i>12,886</i>	<i>14,245</i>	<i>13,745</i>	<i>14,208</i>	<i>13,931</i>	<i>13,722</i>
<i>Restricted Core</i>	<i>9,492</i>	<i>10,798</i>	<i>15,400</i>	<i>16,534</i>	<i>15,031</i>	<i>19,130</i>
<i>Complementary</i>	<i>8,802</i>	<i>4,127</i>	<i>76</i>	<i>49</i>	<i>-</i>	<i>-</i>
<b>Investment Income</b>	1,004	1,474	819	368	904	900
<b>Total Expenses</b>	<b>33,953</b>	<b>31,620</b>	<b>29,364</b>	<b>31,350</b>	<b>29,695</b>	<b>35,480</b>
<i>Research, Conferences &amp; Information Services</i>	<i>25,517</i>	<i>24,693</i>	<i>24,159</i>	<i>24,032</i>	<i>23,491</i>	<i>28,704</i>
<i>General Administration &amp; Operations</i>	<i>6,006</i>	<i>4,506</i>	<i>*3,304</i>	<i>5,427</i>	<i>5,423</i>	<i>5,876</i>
<i>Depreciation</i>	<i>3,714</i>	<i>3,424</i>	<i>3,188</i>	<i>3,049</i>	<i>2,418</i>	<i>2,500</i>
<i>Indirect Cost Recovery</i>	<i>(1,284)</i>	<i>(1,003)</i>	<i>(1,287)</i>	<i>(1,158)</i>	<i>(0)</i>	<i>1,600</i>
Surplus (Deficit)	<b>(1,769)</b>	<b>(976)</b>	676	<b>(191)</b>	171	122
<i>Outstanding Operating Commitments</i>	<i>1,127</i>	<i>985</i>	<i>806</i>	<i>691</i>	<i>676 ?</i>	<i>?</i>
<b>Funds Balances (Net Assets)</b>	<b>40,723</b>	<b>41,026</b>	<b>41,885</b>	<b>41,748</b>	<b>19,243</b>	<b>?</b>
<i>Capital Invested in Fixed Assets</i>	<i>31,563</i>	<i>32,747</i>	<i>31,338</i>	<i>30,574</i>	<i>7,146</i>	<i>?</i>
<i>Operating Funds</i>	<i>5,438</i>	<i>5,521</i>	<i>6,197</i>	<i>6,006</i>	<i>6,177</i>	<i>6,299</i>
<i>Capital Funds</i>	<i>3,722</i>	<i>2,758</i>	<i>4,350</i>	<i>5,168</i>	<i>5,920</i>	<i>6,518</i>
Current Assets	25,891	26,166	26,151	26,223	25,334	25,117
Current Liabilities	16,731	17,887	15,604	15,049	13,237	12,300
<i>Working Capital</i>	<i>9,160</i>	<i>8,279</i>	<i>10,547</i>	<i>11,174</i>	<i>12,097</i>	<i>12,817</i>
<i>Capital Expenditures</i>	<i>2,914</i>	<i>3,596</i>	<i>1,975</i>	<i>2,317</i>	<i>1,801</i>	<i>?</i>
<i>Depreciation Charge</i>	<i>3,714</i>	<i>3,424</i>	<i>3,188</i>	<i>3,049</i>	<i>2,418</i>	<i>2,500</i>
<i>Outstanding Capital Commitments</i>	<i>2,276</i>	<i>1,002</i>	<i>582</i>	<i>910</i>	<i>?</i>	<i>?</i>
<b>C. FINANCIAL INDICATORS</b>						
<i>Current Ratios (Times)</i>	<i>1.55</i>	<i>1.46</i>	<i>1.68</i>	<i>1.74</i>	<i>1.91</i>	<i>2.04</i>
<i>Operating Funds (Days)</i>	<i>58</i>	<i>64</i>	<i>77</i>	<i>70</i>	<i>76</i>	<i>65</i>
<i>Working Capital Days</i>	<i>98</i>	<i>96</i>	<i>131</i>	<i>130</i>	<i>149</i>	<i>132</i>

Figures in italics indicate noted, or portions of other amounts presented in the Financials

Figures related to effective funds and working capital are shown as estimates only for discussion

\*Accrual of \$0.985 million was reversed (in 1998) in compliance with IAS 37

\*\*Data supplied by IITA





## GLOSSARY OF ACRONYMS

ACMV	African Cassava Mosaic Virus
AD	Audit Committee
ADB	African Development Bank
ADPs	Agricultural Development Projects
AEZ	Agroecological Zone
AFLP	Amplified Fragment Length Polymorphism
AGRIS	International Information System for the Agricultural Sciences
ARI	Advanced Research Institute
ARIPO	African Regional Industrial Property Organization
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASB	Alternatives to Slash and Burn
BA	Benchmark Area
BL	Biotechnology Laboratories
BNF	Biological Nitrogen Fixation
BNMS	Balance Nutrient Management Systems
BoT	Board of Trustees
BRU	Biotechnology Research Unit
BSV	Banana Streak badna Virus
CAMBIA	Centre for Agricultural Molecular Biology
CBD	Convention on Biological Diversity
CERAAS	Centre d'études régional pour l'amélioration de l'adaptation à la sécheresse, Sénégal
CGIAR	Consultative Group for International Agricultural Research
CGU	Crop Genetic Unit
CIEPCA	Centre d'information et d'échanges sur les plantes de couverture en Afrique (IITA, Benin)
CIFOR	Centre for International Forestry Research
CIRAD	Centre de Coopération internationale en recherche agronomique pour le développement
CIP	Centro Internacional de la Papa
CORAF	Conference of African Agricultural Research Managers
CRC	Catholic Resources Centre
CSIRO	Council for Scientific and Industrial Research
DANIDA	Danish International Development Assistance
DDS	Diocesan Development Services
DFID	Department for International Development
EARRNET	Eastern African Roots Crops Research Network
ESA	Eastern and Southern Africa
EU	European Union
ESCAPP	Ecologically Sustainable Cassava & Plant Protection
FIS	Financial Information System

FPR	Farmer Participatory Research
FLORES	Forest Land-Oriented Resource Envisioning System
GAA	Germplasm Acquisition Agreement
GIS	Geographic Information System
GMO	Genetically Manipulated Organism
GPA	Geo-spatial analysis
GPH unit	Germplasm Health Unit
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IAPSC	Inter- African Phyto-sanitary Council
IBCD	International Biopesticide Consortium
ICD	International Co-operation Division
ICIPE	International Centre for Insect Physiology & Ecology
ICIS	International Crop Information System
ICLARM	International Centre for Living Aquatic Resources Management
ICRAF	International Centre for Research in Agr oforestry
ICW	International Centres Week
IFDC	International Fertilizer Development Corporation
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
INIBAP	International Network for the Improvement of Banana & Plantain
INRAB	Institut National de Recherche agricole de Benin
IPM	Integrated Pest Management
IPR	Intellectual Property Rights
IRAD	Institut de Recherche Agricole pour le Developpement
ISNAR	International Service for National Research Agriculture
KNARDA	Kano State Agricultural & Rural Development Authority
KNUST	Kwame Nkrumah - University of Science and Technology
MAS	Marker Assisted Selection
MIS	Management Information System
MOFA	Ministry of Forestry and Agriculture
MOUs	Memorandum of Understanding
MPPC	Multi- Product Perennial Cropping
MTA	Material Transfer Agreement
MTM	Mid-term Meeting
MTP	Medium-term Plan
NARES	National Agricultural Research & Extension System
NGS	Northern Guinea Savannah
NRI	Natural Resources Institute
NSS	National Seed Service
OFDA	Office of US Foreign Disaster Assistance
PPM	Parasitic Plant Management
PASCON	Pan-African Striga Control Network
PRONAF	Programa nacional de Fortalecimento da Agricultura Familiar
PCR	Polymerase Chain Reaction
RCM	Resource & Crop Management
RENACO	West & Central Africa Cowpea Network

RRS	Regional Recruited Staff
SAA	Sawakawa Africa Association
SAARNET	Southern African Roots Crops Research Network
SAFGRAD	Semi-Arid Food Grains Research & Development
SDI	Spatial Development Initiatives (in Southern Africa)
SGRP	Systemwide Genetic Resources Programme
SINGER	Systemwide Information Network for Genetic Resources
SPALNA	Soil & Plant Analytical Laboratory Network of Africa
SP-IPM	Systemwide Programme on Integrated Pest Management
SSR	Simple Sequence Repeat
TRIPS	Trade Related Intellectual Property Regimes
UNB	Université Nationale du Bénin
WAFRINET	West African Network
WARDA	West Africa Rice Development Association
WECARD	Western & Central African Council for Research & Development