

ORGANIZATION OF AFRICAN UNITY
SCIENTIFIC, TECHNICAL AND RESEARCH COMMISSION
(OAU/STRC)

SEMI-ARID FOOD GRAIN RESEARCH AND DEVELOPMENT
(SAFGRAD)

WEST AND CENTRAL AFRICA COWPEA NETWORK

"Réseau Niébé de l'Afrique Centrale et Occidentale"

(RENACO)

6333
REN



BUREAU DE COORDINATION
DE L'OAU/CSTR

Arrivée le, 22 JAN. 1992

Pour l'enregistrement

REPORT
OF THE NINTH MEETING
OF THE STEERING COMMITTEE

Edited by:

- Nyanguila Muleba
Coordinator, RENACO
IITA/SAFGRAD, Ouagadougou
Burkina Faso
- K.O. Marfo
Cowpea Breeder
Nyankpala Agricultural
Research Station
Tamale, Ghana
- O.O. Olufajo
Cowpea Agronomist
Ahmadu Bello University
IAR, Zaria, Nigeria

Bibliothèque UA/SAFGRAD
01 BP. 1783 Ouagadougou 01
Tél. 30 - 60 - 71 / 31 - 15 - 96
Burkina Faso

3487

NIAMEY - NIGER
13-14 MARCH, 1991



JULY, 1991



CONTENTS

I. INTRODUCTION.....	1
1. Objectives of the meeting.....	2
2. Attendance.....	2
3. Opening remark.....	3
4. Election of the Steering Committee Chairman and Rapporteurs.....	3
5. Agenda of the Meeting.....	3
 II. REPORT OF THE DELIBERATIONS.....	 5
1. GENERAL MATTERS.....	6
1) Adoption of the Proceedings of the 8th meeting of the Steering Committee.....	6
2) RENACO activities.....	6
2. REGIONAL TRIALS: 1991-91.....	12
1) Formulation of regional trials for 1991-92 crop season.....	12
2) Requests for regional trials.....	14
3. PLANS FOR VISITS TO NATIONAL RESEARCH PROGRAMS DURING THE 1991 CROPPING SEASON.....	17
4. FINANCIAL SUPPORT TO NATIONAL PROGRAMS.....	18
1) RENACO.....	18
2) Support by donors other than USAID.....	19
5. MISCELLANEOUS.....	20
1) SAFGRAD II: Proposal for extension.....	20
2) Joint maize-cowpea-sorghum seminar for research agronomists.....	20
3) Training courses in the use of computer.....	20
4) RENACO working groups.....	21
5) Proceedings of the 1991 joint maize-cowpea workshop.....	21
6) Proceedings of the 1989 training course for scientists from technology adapting centers....	21
7) Proceedings of the 1988 seminar for scientists from Lead Centers.....	21
 III. RECOMMENDATIONS AND ACKNOWLEDGEMENTS.....	 22
RECOMMENDATIONS.....	23
ACKNOWLEDGEMENTS.....	24

I.

INTRODUCTION

1. Objectives of the Meeting

The objectives of the meeting were to review the research findings and work plans of Lead and Associate Centres and to plan the activities of the network for the 1991 cropping season.

2. Attendance

Members of the Steering Committee

- Dr. O.O. Olufajo	(Chairman)	Nigeria
- Dr. C. Dabire		Burkina Faso
- Mr. F.L. Guilavogui	(New member)	Guinea Conakry
- Dr. N. Gumedzoe	(New member)	Togo
- Mr. H. Hamma	(French Rapporteur) New member	Niger
- Dr. K.O. Marfo	(English Rapporteur) New member	Ghana
- Dr. N. Muleba	Network Coordinator	

Observers:

- Dr. B.B. Singh	Cowpea Breeder, IITA-GLIP-Kano Nigeria representing the Director IITA-GLIP.
- Dr. S. Koala	Regional Coordinator, IDRC (Canada, Dakar, Senegal)

3. Opening Remark

The Network Coordinator, Dr. N. Muleba, introduced the newly-elected members of the Steering Committee and he congratulated them for having merited the confidence of the members of the cowpea network. He urged them to work hard and to be objective in their contributions in order to ensure the smooth running of the network. He also reminded them of the primary objective of the network, which is to strengthen the research capability of national cowpea programs of West and Central Africa in semi-arid zones.

4. Election of the Steering Committee Chairman and Rapporteurs

Dr. O.O. Olufajo was elected as the chairman of the Steering Committee while Dr. K.O. Marfo and Mr. H. Hassane were elected as English and French rapporteurs, respectively. The newly-elected chairman thanked members for the trust reposed in him and reminded them of the great task ahead of them, especially at this critical transitional period of the SAFGRAD Project.

5. Agenda of the Meeting

i) General matters

- Formal adoption of the proceedings of the 8th Meeting of the Steering Committee held at Cotonou, Benin, 5-9 November, 1990.

ii) RENACO activities

- Assessment of Lead and Associate Centers
- Assessment of technology adopting centers
- Assessment of the 1991-92 research work plans of Lead and Associate Centers as well as IITA-GLIP.

- Identification of technology of interest to cowpea production in the sub-region for inclusion in the 1991-92 regional trials.
- Identification of promising lines for inclusion in the observations nurseries.
- Visits to national programs during the 1991 cropping season.
- Financial support to national programs (Lead and Associate Centers and Technology Adapting Centers.)

iii) Miscellaneous

- SAFGRAD II: Proposal for extension.
- Joint Maize-Cowpea-Sorghum Seminar for research agronomists at IITA, Ibadan, Nigeria, 1 - 19 January, 1991.
- Training course in the use of computer.
- RENACO working groups for cowpea breeding, entomology, agronomy and pathology, including *Striga*.
- Proceedings of the 1989 Maize-Cowpea workshop.
- Proceedings of the 1989 training course of scientists from technology adapting centers.
- Proceedings of the 1988 Seminar for scientists from Lead Centers.

II

REPORT OF THE DELIBERATIONS

1. **GENERAL MATTERS**

- 1) Adoption of the Proceedings of the 8th Meeting of the Steering Committee held at Cotonou, Benin, November 5-9, 1990

The proceedings of the 8th Meeting of the Steering Committee were adopted as the true records of the deliberations of the meeting without any amendment.

2. **RENACO ACTIVITIES**

1) Advisory Panel's Report

In view of the fact that only one and a half days were allocated to Steering Committee meeting during the Niamey workshop, the Network Coordinator set up a seven member advisory panel to assist the Steering Committee in carrying out the following functions:

- i) summarise country reports from NARS and progress reports from IITA-GLIP.
- ii) assess the performance of Lead and Associate Centers as well as the level of improvement achieved by technology adapting centers.
- iii) identify promising technologies of interest to the network for inclusion in regional trials or observation nurseries.

The chairman of the Advisory Panel, Dr. A.B. Salifu briefed the Steering Committee on the membership of the Panel, its terms of reference and how it went about its assignment. He indicated that in order to discharge its responsibilities creditably, the Panel consulted the following documents:

1. Proceedings of the 1987 workshop, Ouagadougou, March 23-27.
2. Proceedings of the 1989 cowpea workshop: country reports.
3. Reports of the 2nd to 8th Meetings of the cowpea Steering Committee.
4. Report of Regional Trials, 1987-1989.
5. Report of Regional Trials, 1989-90.
6. SAFGRAD-II: Proposal for Extension
7. Country reports.

The Panel's report and decisions of the Steering Committee are summarized below:

i) Assessment of Lead Centers

a) **Burkina Faso**

The Panel observed that Burkina Faso had made admirable progress in the discharge of its network responsibilities in the areas of breeding for resistance to *Striga*, drought tolerance and resistance to insect pests. It however, recommended that Burkina Faso should pay closer attention to cowpea virology work.

The Steering Committee commended Burkina Faso for a job well done. It was decided that it should continue work in its assigned areas of responsibility to the network. However, the committee urged Burkina Faso to improve on reporting of its virology work.

b) **Cameroon**

Cameroon was assigned the responsibility for cowpea storage. The Panel noted that Cameroon had carried out good work in this area, using solar radiation, wood ash, and plant products. It had also made good progress in hermetic storage. However, the entomologist who did the above work left late in 1990 for a 3-year Ph.D study in USA. Since he has not been replaced, the Panel recommended that whilst Cameroon should be allowed to continue with as much

work as possible (with its staffing constraints), Ghana should assume responsibility for cowpea storage work in the Sudan savanna.

After critically reviewing the situation, the Steering Committee resolved that the Network Coordinator and Mrs. Dabire should visit Cameroon to assess their achievements and ascertain the present status of the project before a decision could be taken. The Network Coordinator and Mrs. Dabire were also requested to pay a visit to northern Ghana to inspect available facilities for storage work.

c) Ghana

Ghana was assigned the mandate for breeding for adaptation to the transitional and coastal savanna zones as well as cowpea storage entomology research in the same region. The Panel observed that Ghana had discharged its responsibilities creditably well and had the capacity to assume greater network responsibility. The Panel, therefore, recommended that Ghana should be given additional responsibility for breeding for drought tolerance, with special emphasis on heat tolerance, as well as storage entomological research in the Sudan savanna. The Panel, however, stressed the need for better coordination of the present cowpea teams in that country.

The Steering Committee decided that Ghana should continue with the responsibilities assigned to it in 1989, pending the outcome of the proposed visits of the Network Coordinator and Mrs. Dabire to Cameroon and Ghana.

d) Niger

The national cowpea program of Niger was assigned responsibility for breeding for *Striga* and drought resistance as well as agronomic work. The Panel observed that although Niger had a lot of potential, there had been little or no coordination of cowpea research in recent years, as evidenced by failure to submit reports. The Panel felt that Niger had not adequately fulfilled its

responsibility to the network. Thus, it recommended that Niger's responsibility to the network should be limited to *Striga* research only (i.e. breeding/selection for *Striga* resistance and pathological work on *Striga*) while Burkina Faso, Ghana and Nigeria should take care of its other network research responsibilities.

After a lengthy deliberation, the Steering Committee decided that Niger should continue with the responsibilities assigned to it in 1987, especially considering the progress of work seen on the field during the 1990 monitoring tour and the efforts being made by that country to ensure proper coordination of cowpea research. The Committee, however, observed that there were still some management problems which require urgent action. The Committee therefore, requested the Network Coordinator and the Chairman of the Steering Committee to visit the Director of Research and the National cowpea program of Niger to sort out the problems.

e) Nigeria

Nigeria was assigned lead center responsibilities in the areas of breeding, agronomy, entomology and pathology including *Striga*.

The Panel found Nigeria to have creditably discharged its responsibilities to the network. However, it noted that work in entomology was lagging behind other disciplines and that the breeder was not enterprising enough. The Panel suggested that Nigeria should assume additional responsibility for agronomic research in the Sahelian zone and for breeding for drought tolerance.

The Steering Committee decided that Nigeria should continue with the responsibilities assigned to it in 1987. The Committee, however, emphasized that it should strengthen its cowpea breeding program. To this end, it was agreed that Nigeria's cowpea breeder should pay a working visit (for at least one season) to IITA Kano sub-station or to the national cowpea program of Burkina Faso where the Network Coordinator is located.

f) Senegal

The Panel noted that Senegal was assigned more responsibilities than it could cope with. Moreover, Senegal was reluctant to accept genetic materials from other countries of the network. The Panel, therefore, recommended that Senegal's work load should be lessened so that it concentrates only on breeding for drought resistance.

The Panel's recommendation was accepted by the Steering Committee.

ii) Assessment of Associate Centers

Of the two Associate Centers, Benin and Mali, only Mali was assessed. The Panel was satisfied with the performance of Mali and it recommended that it be assigned responsibility for relevant aspects of cowpea research in the Sahelian zone, as an Associate Center.

iii) Research Work Plans for 1991

Work plans were submitted by Cameroon, Ghana, Nigeria and Mali.

a) Cameroon

The work plan submitted by Cameroon was not consistent with its mandate and therefore, it was not approved. They were requested to re-submit a new work plan which has been done.

b) Ghana

Ghana's work plan was found to be consistent with its present responsibility to the network and it was approved.

c) Nigeria

Nigeria's work plan was consistent with the responsibility to the network and it was approved. The only exception was the study on biology and bionomics of *Clavigralla* which was not approved because a lot of work had been done on this in the past.

d) Mali

Mali had proposed five trials out of which one was on bambaranut and therefore, of no interest to the network. It was recommended that the remaining four trials should actually be combined into one trial entitled, "Evaluating local cowpea lines/landraces for resistance to biotic (*Striga* and viruses) and abiotic (drought) stress and for their performance in mixed cropping".

iv) Comments on Technologies

The Advisory Panel felt that this should be done by the Steering Committee.

v) Other matters**a) Assessment of achievements of the Network**

The Advisory Panel suggested that instead of carrying out a survey, the coordinator should send questionnaire to RENACO member countries in order to reduce cost.

b) Technology Adapting NARS

The Panel recommended that assistance to technology adapting NARS, such as visits should be strengthened.

2. REGIONAL TRIALS - 1991-92

1) Formulation of Regional Trials for 1991-92 Crop Season

Four regional trials and one breeding nursery were proposed based on the progress reports received from the Lead Centers and IITA-GLIP. The trials and cultivars included as well as the origin of the cultivars are presented below:

i) Regional trial for adaptation to transition zones

	<u>Cultivar</u>	<u>Origin</u>
1	CR-06-07	Ghana
2	IT86D-544	IITA-GLIP, Ibadan
3	IT86D-641	- do -
4	IT81D-1137	- do -
5	IT86D-444	- do -
6	IT85D-3577	- do -
7	IT86D-888	- do -
8	IT82E-16	- do -
9	IT82E-18	
10	IT83S-818	- do -
11	IT82E-32	- do -
12	Local check	- - -

ii) Regional trial for adaptation to Sahelian and Sudanian zones

	<u>Cultivar</u>	<u>Origin</u>
1	KVx 396-4-5-2D	Burkina Faso
2	KVx 164-41-64	- do -
3	KVx 402-5-2	- do -
4	KVx 402-19-5	- do -
5	KVx 397-6-6	- do -
6	IAR7S180-4-5-1	IAR Nigeria
7	ITN89E-4	IITA-GLIP-Niger
8	ITN89E-3	- do -
9	KC 85-7	INRAN, Niger
10	KB 85-18	- do -
11	TVx 3236	IITA-GLIP, Ibadan
12	Local check	- - -

iii) Regional trial for adaptation to northern Guinea savanna

	<u>Cultivar</u>	<u>Origin</u>
1	KVx 305-2-118-23-2	Burkina Faso
2	KVx 305-118-31	- do -
3	KVx 402-5-2	- do -
4	KVx 402-19-1	- do -
5	KVx 402-19-5	- do -
6	IAR7 S180-4-5-2	IAR-Nigeria
7	IAR7 S180-4-5-1	IAR-Nigeria
8	CR-06-07	Ghana
9	KVx 398-7-1	Burkina Faso
10	KN-1 (Vita 7)	IITA-GLIP, Ibadan
11	TVx 3236	IITA-GLIP, Ibadan
12	Local check	- - -

iv) Regional trial for Striga resistance

	<u>Cultivar</u>	<u>Origin</u>
1	KVx 164-65-5	Burkina Faso
2	KVx 291-47-222	- do -
3	KVx 397-6-6	- do -
4	KVx 402-5-2	- do -
5	KVx 402-19-1	- do -
6	KVx 402-19-2	- do -
7	KVx 305-118-31	- do -
8	IT81D-994	IITA-GLIP, Ibadan
9	TN5-78	INRAN-Niger
10	IT82D-849	IITA-GLIP
11	B 301	Botswana
12	IT82E-32	IITA, GLIP

v) Observation nursery

	<u>Cultivar</u>	<u>Origin</u>
1	KVx 164-41-64	Burkina Faso
2	KVx 291-47-222	- do -
3	KVx 295-2-124-99	- do -
4	KVx 402-5-2	- do -
5	KVx 295-2-124-51	- do -
6	KVx 305-118-31	- do -
7	IT86D-719	GLIP, IITA, Ibadan
8	IT86D-879-1	- do -
9	IT87D-697-2	- do -
10	IT86D-715	- do -
11	IT87D-885	- do -
12	IT89KD-374	IITA-GLIP-Kano, Nigeria
13	IT89KD-245	- do -
14	Local check	- - -

2) Requests for Regional Trials

After presentation to national programs, regional trials were requested as follows:

i) Adaptation to transition zones:

<u>Country</u>	<u>No. of sets</u>
Central African Republic	1
Cote d'Ivoire	1
Ghana	1
Guinea Bissau	2
Guinea Conakry	2
Mauritanie	1
Sierra Leone	3
Togo (South)	1
TOTAL	12

ii) Adaptation to Sahelian and Sudanian Zones

<u>Country</u>	<u>No. of sets</u>
Benin	3
Burkina Faso	2
Cameroon	2
Mali	2
Mauritania	1
Niger	1
Nigeria	1
Tchad	3
TOTAL	15

iii) Adaptation to northern Guinea savanna

<u>Country</u>	<u>No. of sets</u>
Burkina Faso	2
Cameroon	2
Central African Republic	2
Cote d'Ivoire	1
Gambia	2
Ghana	1
Guinea Bissau	2
Guinea Conakry	1
Mali	1
Nigeria	1
Togo (north)	1
Togo (south)	1
TOTAL	17

iv) Striga resistance

<u>Country</u>	<u>No. of sets</u>
Benin	3
Burkina Faso	2
Cameroon	2
Ghana	1
Mali	2
Niger	3
Nigeria	3
Tchad	1
Togo (north)	1
Togo (south)	1
TOTAL	20

v) Observation Nursery

<u>Country</u>	<u>No. of sets</u>
Burkina Faso	1
Cape Verde	2
Ghana	1
Guinea Bissau	1
Guinea Conakry	1
Mali	2
Mauritania	1
Niger	2
Nigeria	2
Sénégal	3
Tchad	3
<hr/>	
TOTAL	19
Grand Total	<u>83</u>

3. PLANS FOR VISITS TO NATIONAL RESEARCH PROGRAMS DURING THE 1991 CROPPING SEASON

The Committee agreed that the underlisted countries should be visited as part of the activities to strengthen national cowpea research capabilities.

<u>Country</u>	<u>Personnel or S.C. members to make the visit:</u>
1. Cameroon	(Network Coordinator & Mrs. Dabire)
2. Benin	(Network Coordinator with <i>Striga</i> Specialist, Prof. A.M. Emechebe).
3. Ghana	(Network Coordinator & Mrs. Dabire to Northern Ghana).
4. Guinea Bissau	(Network Coordinator).
5. Guinea Connakry	(Network Coordinator).
6. Mali	(Network Coordinator, Multiple visits).
7. Niger	(Network Coordinator, Chairman, SC).
8. Mauritania	(Mr. G.A. Amankwa).
9. Tchad	(Mr. G.A. Amankwa).

4. FINANCIAL SUPPORT TO NATIONAL PROGRAMS

1) RENACO

It was agreed that the level of financial support to national programs in 1991 should be the same as that of 1990. However, Senegal would receive 2,000 instead of 3,000 US dollars in view of the reduction in its research responsibilities to the network. Furthermore, Burkina Faso would receive no financial support from RENACO because that country's cowpea program has been benefiting financial assistance from IDRC (Canada) since November, 1990. However, a bulk sum of 8,000 US dollars would be made available to Burkina Faso for multiplication of seed for 1991-1992 regional trials.

The financial assistance to individual countries are, therefore, as follows:

a) **Lead Centers**

Amount (US \$)

- Burkina Faso	-
- Cameroon	2,000.00
- Ghana	2,000.00
- Niger	2,000.00
- Nigeria	4,000.00
- Senegal	2,000.00

b) **Associate Centers**

- Benin	1,000.00
- Mali	2,000.00

c) **Technology Adapting Centers**

- Each Technology Adapting Center will receive \$580.00.

2) Support by donors other than USAID

The International Development Research Center (IDRC) of Canada has been financing cowpea research activities of Burkina Faso since November, 1990 while their support to Mali ended in November, 1990.

Dr. S. Koala, IDRC's regional representative based in Dakar attended the 9th Meeting of the RENACO Steering Committee and he informed the Committee that IDRC is willing to support cowpea research in some West African countries, namely Benin, Burkina Faso, Mali and Niger, either through bilateral agreement or the Cowpea Network or both. He expressed the hope that the Committee would consider how best IDRC could be of help to national cowpea programs.

5. MISCELLANEOUS

1) SAFGRAD II: Proposal for Extension

This document had been revised along the guidelines suggested by the Steering Committee at its November, 1990 meeting. Information had been provided on measurable impact of the network such as, number of trials despatched since 1987, number of feedback received, and cultivars that have been released or about to be released by member countries. Other items included were list of participants in monitoring tours, group training courses, seminars and workshops.

2) Joint Maize-Cowpea-Sorghum Seminar for Research Agronomists

Dr. O.O. Olufajo gave a report on the Joint Maize-Cowpea-Sorghum seminar for research Agronomists held at IITA, Ibadan, Nigeria between 7th and 19th January, 1991. He indicated that the main objectives of the seminar were to identify appropriate technologies that would meet peasant farmers' needs and requirements; and to highlight the major constraints to agricultural production, in the sub-region with a view to identifying areas that require research emphasis. There were twenty participants from twelve out of the seventeen member countries of RENACO. At the end of the seminar six recommendations were drawn up from issues that arose from presentations and discussions.

3) Training Course in the Use of Computer

The Network Coordinator reported that contacts had been made with ICRISAT, Niamey and GLIP-IITA Ibadan for the organization of the training course in the use of computer. The budget estimate for the course at ICRISAT, Niamey had been prepared while that of IITA, Ibadan was being worked out. A letter had been sent to the Director of GLIP-IITA requesting him to commit funds for the training course as promised at Cotonou, Benin. His response was awaited.

4) RENACO working groups

The Network Coordinator reported that, cowpea scientists attending the workshop were to meet in working groups to choose a group speaker and make propositions of areas that need more research attention. The groups were cowpea breeding, entomology, pathology and agronomy. No formal report had been received by the Network Coordinator as at the time of the meeting.

5) Proceedings of the 1991 joint maize-cowpea-sorghum workshop

The proceedings were published and distributed during the 1991 Niamey joint maize-cowpea-sorghum workshop.

6) Proceedings of the 1989 training course for scientists from Technology Adapting Centers:

The proceedings were still in the publication process at IITA, Ibadan, Nigeria at the time of the workshop.

7) Proceedings of the 1988 Seminar for scientists from Lead Centers:

The proceedings were still in the publication process at Ahmadu Bello University, Zaria, Nigeria at the time of the workshop.

III

RECOMMENDATIONS AND ACKNOWLEDGEMENTS

RECOMMENDATIONS

The cowpea research Network Steering Committee would like to make the following recommendations:

- 1) Judging from the number and quality of scientific papers presented at the workshop and the great interaction between networks, it is recommended that the biennial inter-workshop should be encouraged.
- 2) The Committee noted with satisfaction the research output on cowpea by the various national programs as evidenced by the presentation at this workshop. It is recommended that SAFGRAD should continue to support and encourage national programs through networking.
- 3) The Committee considers the formation of working groups as a step in the right direction. It is recommended that necessary support should be provided to the groups in order to facilitate the provision of solutions to common problems of cowpea production in the sub-region.
- 4) Considering the devastating effects of parasitic flowering plants on cowpea in the subregion, the Committee recommends that research should be intensified on *Striga* and *Alectra*.
- 5) The Committee noted the strong need for higher degree and In-service training. It recommends therefore, that higher degree training should be included in the next phase of SAFGRAD.
- 6) In view of the fact that cowpea is a very important crop in the Sahelian zone, the Committee wishes to re-emphasize the need for IITA to continue its research activities on cowpea in this zone in collaboration with ICRISAT through the Sadore station.
- 7) The Committee expressed its satisfaction with the efforts and diligence with which the Network Coordinator is handling the affairs of the Network.

ACKNOWLEDGEMENTS

Members of the SAFGRAD Cowpea Network Steering Committee wish to express their sincere gratitude to:

- SAFGRAD Coordination Office, for logistic support.
- Members of the Advisory Panel for the able assistance rendered in assessing the research activities and work plans of Lead and Associate Centers.
- USAID, for financial support and keen interest in the Network.
- IITA, for its commitment to the network and provision of technical backstopping to national programs.
- The Network Coordinator, Dr. N. Muleba for handling the affairs of the network with diligence.
- The Government and people of Niger for their hospitality.

AFRICAN UNION UNION AFRICAINE

African Union Common Repository

<http://archives.au.int>

Department of Rural Economy and Agriculture (DREA)

African Union Specialized Technical Office on Research and Development

1991-07

RENACO, REPORT OF THE NINTH MEETING OF THE STEERING COMMITTEE

MULEBA, Nyanguila

AU-SAFGRAD

<https://archives.au.int/handle/123456789/9131>

Downloaded from African Union Common Repository