# Organization of African Unity Organisation de l'Unité Africaine

O A U / S T R C - SECRETARIAT P.M.B. 2359 LAGOS, NIGERIA.



CSTR/OUA - SECRETARIAT P. M. B. 2359 LAGOS, NIGERIA.

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SEMI-ARID FOOD GRAIN RESEARCH AND DEVELOPMENT (SAFGRAD)

OAU/STRC JOINT PROJECT Nº 31

SECOND OAU/STRC WORKSHOP ON MAIZE AND COWPEAS

12 - 15 FEBRUARY 1980

OUAGADOUGOU, UPPER VOLTA

REPORT AND RECOMMENDATIONS

Bibliothèque UA/SAFGRAD 01 BP. 1783 Ouagadougou 01 Tél. 30 - 60 - 71/31 - 15 - 98 Burkina Faso Nº 0 0 9 6 3

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#### AGENDA

Ist Day, February 12, 198	<u>30</u>
7.30	Registration
	Inauguration
10.00	Opening ceremony by His Excellency the Minister of Rural Development
	Address of the Executive Secretary of OAU/STRC read by Mr Akadiri-Soumaila, International Coordinator, OAU/STRC
	· ·
SESSION I	Chairman: Mr. Akadiri-Soumaila, International Coordinator OAU/STRC
,	Rapporteur: Dr Akposoe
9.00 - 9.30	Overview of SAFGRAD Maize and Cowpea Program - Dr. Asnani
9.30 - 10.10	Coffee
10.10 - 11.10	Soil and soil management in Semi-Arid Regions of Africa - Dr. Nicou
11.10 = 11;45	IITA core Maize Program - Dr. Efron
11.45 - 12.00	ACPO's role in SAFGRAD Upper Volta experience - Mr; Korteweg
12.00 - 12.15	Discussion
12.15 - 15.00	Lunch Break.

SESSION II	Chairman: Mr. Bono
	Rapporteur; Mr. Ayuk-takem
15.00 - 15-15	Country report on maize - Senegal
15.15 15.30	Country report on maize - Ghana
15.30 ↔ 15.45	Country report on maize - Ivory Coast
	Country report on maize - Cameroom
16.00 - 16.15	Discussion
16.15 - 16.30	Coffee
16.30 - 17.15	Development of successful national seed production program - Dr. Joshua
17.15 - 17.30	Discussion
18.30 - 20.30 P.M.	COCKTAIL PARTY - Hotel Independence

### 2nd Day. February 13, 1980

SESSION III-	Chairman:	Mr. I	Djigma	a		•
e say a service de la companya de l	Rapporteu	r: Mr	. Tem	bley		
8.00 ~ 8.15	Country re	eport.	on to	owpea		Nigeria
8.115 <b>-</b> 8.30	19	17	11	17	-	Senegal
8.30 - 8.45	11	17	17	17	_	Ghana
8.45 - 9.00	11	tt	11	<b>11</b>	-	$\mathtt{Niger}$
9.00 - 9.15	11:	17	17	1)	_	Cameroon
9.15 - 9.30	Discussion	n.				
9.30 9.45	Coffee.					•
9.45 - 10.30	IITA cowpe	ea co	re pr	ogram	- D:	r. Goldsworthy
10.30 - 11.30	Drought rereference					lants with Steponkus
11.30 - 11.45	Discussion	គារ				

11.45 - 12.00	Country report on cowpea - Gambia
12.00 - 12.15	n n n — Mali
12.15 - 12.40	Cooperation from IDRC cowpea breeding program - Dr. Aggarwal
12.40 - 13.00	SAFGRAD cowpea agronomy program - Dr. Brockman
13.00 - 13.15	Discussion
13.15 - 15.00	Lunch Break
SESSION IV	Chairman: Dr. P. Camara
	Rapporteur: Mr. Keita
15.00 - 15.15	Country report on maize - Rep. of Benin
15.15 - 15.30	" " - Tanzania
15.30 <b>-</b> 15.45	" " " - Upper Volta
15.45 - 16.00	n n n - Gambia
16.00 - 16.15	SAFGRAD maize breeding program - Dr. Asnani
16.15 - 16.30	SAFGRAD maize agronomy program - Dr. Rodriguez
16.30 - 16.45	Discussion
16.45 - 17.00	Coffee
17.00 - 17.15	Country report on maize - Mali
17.15 - 17.30	n n n — Mauritania
17.30 - 17.45	" " " - Cape verde
17.45 - 18.00	Training opportunities in SAFGRAD Program. Mr. Akadiri-Soumaila

#### SPECIAL SESSION

18.00 - 19.30 P.M.

Chairman: Dr. A. Taylor

Panel: Dr. Goldsworthy, Dr. Singh, Dr. Rathore Group discussion meeting of cowpea entemologists.

#### Third Day, February 14, 1980

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SESSION V	Chairman: Dr. O	. Leleyi
	Rapporteur: Mr.	Marchant
8.00 - 8.15	Country report	on cowpea - Tanzania
8.15 - 8.30	13 17	" - Upper Volta
8.30 - 8.45	u n	" - Open
8.45 - 9.00	SAFGRAD Entomol	ogy Program - Dr. Rathore
9.00 - 10.00	Storage Structu Rural Africa -	re for Maize and Cowpea in Mr. Bower
10.00 - 10.15	Discussion	
10.15 - 10.30	Coffee	
After the coffe a separate group in research workers will me and Session VII.		esearch Workers will meet as and cowpea for Session VI
SESSION VI	Cowpea group	Chairman: Dr. Brockman
		Rapporteur: Mr. Issaka
•	Maize group	Rapporteur: Mr. Issaka Chairman: Dr. Asnani
	Maize group	~ ~
10.30 - 13.30	Discussion on to	Chairman: Dr. Asnani

SESSION VII	Cowpea group.	Chairman: Dr. Brockman		
	-	Rapporteur: Mr. Issaka		
•				
*	Maize group	Chairman: Dr. Asnani		
		Rapporteur: Mr. Hounkpevi		
15.00 - 16.30	Discussion on data recording, field note books, seed despatches, monitoring tours etc. for SAFGRAD Program.			
16.30 - 16.45	Coffee Break.			
SESSION VIII	JOINT SESSION			
	Chairman: Mr. Kabore			
	Rapporteur: Dr.	Rodriguez		
16.45 - 17.00	Work plan of Maize Program - Dr. Asnani			
17.00 - 17.15	Work plan of Cowpea Program - Dr. Brockman			
17.15 - 17.30	Discussion			
17.30 - 17.45	Adoption of reco	mmendations		
17.45 - 18.00	Any other business			
	Any other busine	SS		
18.00 - 18.30	Any other busine Closing ceremony			
18.00 - 18.30  Fourth Day, February 1	Closing ceremony			
•	Closing ceremony	.se Experiment Station and		

15.00 - 17.00

Visit SAFGRAD Coordination Office and other Research Stations.

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# OPENING ADDRESS OF THE MINISTER OF RURAL DEVELOPMENT Read by :

# HIS EXCELLENCY DRAMANE SANOU, MINISTER OF YOUTH & SPORTS ON THE OCCASION OF THE SECOND SAFGRAD MAIZE AND COWPEA WORKSHOP

The Executive Secretary of the Oroganization of African Unity, Scientific, Technical and Research Commission, (OAU/STRC), The International Coordinator of the Semi-Arid Food Grain Research and Development (SAFGRAD), Representatives of the Diplomatic Corps accredited to Upper Wolta, Representatives of International and Regional Organizations, Representatives of SAFGRAD donor countries, Distinguished Researchers from the 25 Member Countries of the OAU covered by SAFGRAD, International Research Organizations, Honourable Guests, Ladies and Gentlemen,

Im the absence of the Minister of Rural Development, I have the konour and the pleasant duty to welcome you, distinguished delegates from OAU Member Countries covered by the Semi-Arid Food Grain Research and Development Project, as well as those of you from International Organizations who are here to give a helping hand in the second workshop on Maize and Cowpeas.

On behalf of His Excellency, Aboubacar SANGOULE LAMIZANA, the Government and the people of Upper Volta, I welcome you to Ouagadougou our capital.

Upper Volta attaches great importance to activities meant to develop food crops, since her main problem is self-sufficiency in food production without which mo meaningful development can be achieved. The same holds true for most African countries.

This second Maize and Cowpea workshop which is meant to enable you to examine and to analyse the results of experiments planted during the 1979-1980 season and to study the experimental programme for the next three years, fits well into the framework of food crop development and is an important step forward towards self-sufficiency in food production in our countries.

Indeed, maize and cowpea consumption continues to grow from year to year in our countries. It is therefore appropriate that the Organization of African Unity should, through the SAFGRAD Project, attach importance to these crops.

You are aware of the importance of maize and cowpeas in the diet of our people. It therefore stands to reason that you should attentively consider all the possible solutions.

In our humble opinion, SAFGRAD must not only support maize experiments in dry farming but also in irrigated farming even if it should be in an indirect way. Profitable irrigated varieties could lead to the setting up of a rotational cropping system in our irrigated plains.

With regard to cowpea, we are all aware of its high nutritive content and of the fact that our livestock have a particular liking for its foliage. It also contributes to nitrogen improvement. Serious problems are however encountered in protecting fields and harvest against insects and parasites. These are problems to which you must find satisfactory solution and in this respect, I wish you a lot of fortitude.

Distinguished delegates and honourable guests, once more on behalf of Upper Volta and of the Project's participating countries, namely:

Benin, Botswana, Cameroom, Cape Verde, Central African Republic, Chad, Ethiopia, Gambia, Ghana, Guinea, Guinea Bissau, Ivory Coast, Kenya, Mali, Mauritania, Niger, Nigeria, Senegal; Sierra Leone, Somalia, Sudan, Tanzania, Togo and Zambia.

I would like to thank all the donor agencies financing the Project.

Our thanks go first of all to the USAID that has financed the greater part of the project, to the United Kingdom, Canada, Holland, the European Development Fund (EDF), the French Aid and Cooperation Fund (FAC), the German Agency for Cooperation and to the Ford Foundation for their precious and necessary contribution.

We equally thank the Executing Agencies of the Project such as ICRISAT, IITA, IRAT and the Purdue University in the United States for their indispensable technical support.

The distinguished delegates and especially the personnel from OAU should kindly excuse us of short comings in organizing the conference - short comings due to the several meetings that we have organized lately.

I wish our eminent technicians and researchers meaningful and fruitful deliberations and declare open the workshop on maize and cowpea in Ouagadougou.

Long Live OAU,

Long Live International Cooperation,

Thank You.

## ADDRESS OF THE EXECUTIVE SECRETARY OF OAU/STRC Delivered By:

MR. AKADIRI-SOUMAILA, INTERNATIONAL COORDINATOR OF OAU/STRC

His Excellency the Minister of Rural Development, Distinguished Delegates, Ladies and Gentlemen.

I have the pleasure, on behalf of the Administrative Secretary General of the Organization of African Unity, His Excellency Mr Edem Kodjo, to welcome you to this Second Workshop on Maize which, this time, will also include cowpeas. All of us are ware of the importance of this meeting.

Mr Amos Odelola, Executive Secretary of OAU/STRC should normally be presiding over the Workshop byt unfortunately he has to attend the OAU Council of Ministers presently being held in Addis Ababa. He extends to you his best wishes and greetings.

During the 1st Workshop on Maize, all of you expressed the desire to meet yearly, and this is what we have tried to achieve. We hope to be able to do so regularly and get better equipped to combat hunger in Africa's Semi-Arid and Sudano-Sahelian Zones.

The very title of the Workshop indicates that it is a purely technical meeting that should enable national researchers and international research institutions to exchange ideas and experiences on maize and cowpea research.

Thus, from the proceedings of this 2nd Workshop, you will be able to put together pieces of vital information and to draw conclusions. You will also be called upon to help work out the SAFGRAD Maize and Cowpea Programme for 1980-1982.

For the information of those of you in attendance for the first time, the project presently includes 25 member states of the OAU, and the Coordination Office is located here in Upper Wolta.

May I briefly sum up the objectives of JP 31 SAFGRAD:

- 1) To conduct research on the improvement of cereal (maize, sorghum, millet) and grain legumes (cowpea, groundnuts) as well as cultural practices compatible with the production systems of small farmers in Africa's semi-arid zones.
- 2) To train specialists and African research assistants.

For further details, you may consult the second issue of "OUA JP 31 SAFGRAD Newslatter" which will be distributed in this hall.

JP 31 SAFGRAD's researchers began their activities at the Kamboinse/Saria research stations barely 7 months ago. Those stations are considered as regional research centres under JP 31. The 4-man research team from IITA began its trials late May 1979 and results obtained are quite interesting. In the course of the meeting, Dr Asnani, an eminent researcher and head of the team, will give you further details of the trials.

Purdue University in the United States has provided us with three researchers who comprise the Farming Systems Unit or the Production Systems Unit. They began their research activities early October 1979.

Very shortly, three researchers from ICRISAT will be posted to the Institute of Agricultural Research, Ahmadu Bello University at Samaru, Nigeria (which is also the second regional research centre under JP 31), to work on sorthum and millet.

The third regional centre, the National Agricultural Research Centre at Bambey (Senegal) will also be provided with two sorghum and millet pathologists. We wish to take advantage of this opportunity to reiterate our appeal to the donors who have promised to help us.

With regard to the recruitment and posting of Accelerated Crop Production Officers (ACPOs), the Coordination Office of OAU/STRC is leaving no stone unturned in its efforts to engage nationals, or where such personnel are not available, expatriates who will work under the umbrella of the Director of Agricultural Research in each Member State and handle SAFGRAD trials satisfactorily to achieve the objectives of the Project. For your information, ACPOs are already working in the following countries: Upper Volta, Mali, Cameroon and Togo. Very shortly, Guinea, Benin, Mauritania, Senegal and Ivory Coast will also be provide with ACPOs.

You can therefore see that JP 31 is well under way and making great strides. We appeal to you to sustain and stregthen your contribution to it because it is a "vital project" for those of us living in the semi-arid zones of the African continent.

I cannot conclude without expressing OAU's profound gratitude and appreciation to His Excellency the Head of State of Upper Volta, the Government and people of Upper Volta who have welcomed the delegates in the purest African tradition. We equally wish to express our gratitude to the United States Agency for International Development which is so far the largest donor under JP 31 SAFGRAD. We are also grateful to the French Government for the substantial financial and technical aid it has started to give us, and to the other donors too, whose aid we are eagerly awaiting. In the same vein we thank the research institutions like IRAT', CIMMYT, Purdue University, ICRISAT and IITA for their technical cooperation. I want to mention that SAFGRAD financed researchers work in close collaboration with IITA and ICRISAT researchers financed by UNDP and IDRC.

Ladies and Gentlemen, I wish you a happy stay in Ouagadougou and success im your deliberations.

#### REPORT

#### 1. INAUGURAL SESSION

The Second OAU/STRC Workshop on Maize and Cowpeas under the Joint Project 31 SAFGRAD was held at the Chamber of Commerce in Ouagadougou, Upper Volta, from 12 to 15 February 1980.

The meeting was chaired by His Excellency the Minister of Rural Development (represented by His Excellency Dramane Sanou Minister of Youth and Sports). In his opening address, the Minister observed that food crop improvement is an important step towards self-sufficiency in food in Africa. He noted the growing consumption of maize and cowpeas in Africa and welcomed the efforts made by the Organization of African Unity in agronomic research on these two crops. In his opinion, the SAFGRAD project should not only support maize experiments in dry farming but also find profitable varieties under irrigation.

After the Minister's speech, Mr. AKADIRI-SOUMAILA, International Coordinator of OAU/STRC read the address of the Executive Secretary of OAU/STRC. He regretted the inability of Mr. A.O. Odelola, Executive Secretary of OAU/STRC to personally preside at the Workshop since he was obliged to attend the OAU Council of Ministers in Addis Ababa.

#### 2. PARTICIPATION

Representatives from 15 Member States of OAU and 7 International Organizations attended the Workshop. The full list of participants is attached to this report.

#### 3. SECRETARIAT

The Secretariat comprised Mr. Akadiri-Soumaila, International Coordinator of OAU/STRC, Mr. A.B. McSWAIN, USAID/SAFGRAD Liaison Officer and Dr. V. Asnani, Leader of the Maize and Cowpea Research Team.

#### 4. PROCEEDINGS

#### a) Adoption of Programme

At the opening session, participants adopted the Workshop Programme as presented. There was however a slight change in the opening ceremony: the opening address was delivered by His Excellency Sanou Dramane, Minister of Youth and Sports (representing his counterpart for Rural Development) at 16 h 00 instead of 09 h 00 as scheduled.

#### b) Country and International Organization Reports

Delegates reported on the present state of agronomic research on maize and cowpeas in their respective countries. The presentation of each paper was followed by lively and fruitful discussions. Recommendations drawn up on the basis of these papers follow this report.

In his speech on the SAFGRAD Maize Breeding Programme, Dr. V. Asnani stressed the main aspects to be considered:

- Varietal trials,
- Breeding,
- Regional trials,
- Visits to national programmes.

He remarked the delay not only in receiving seed from cooperating Member Countries but also in receiving the results of regional trials. He recommended that a time limit be set at the latest by the end of November.

#### c) Working Croups

Two Workings Groups were set up by the Workshop to look into maize and cowpeas respectively. The common objective of these two Groups was to draw up a draft SAFGRAD Coordinated Regional Programme (2 - 3 years) and a specific programme for 1980. Members of the Groups were:

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A. KIM

J. EFRON

I. HEMA

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M. BJARSON

J.L. MARCHAND

M. BONO

J. SINGH

K. SENGHORE

D. HOUNKPEVI

V. ASNANI

T. LAWSON

A. BRUYER

#### GROUP 2: Varietal Improvement of Cowpeas

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M. J.F. ABU

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#### d) Recommendations

Recommendations on Maize and Cowpeas adopted during the Workshop follow this report.

The Third Workshop on Maize and Cowpeas will be held at IITA, Ibadan, NIGERIA in 1981.

#### R E C O M M E N D A T I O N S

#### Vote of Thanks to the Host Government

The OAU/STRC JP 31 SAFGRAD Second Maize and Cowpea Workshop wishes to express its sincere thanks to the Government of Upper Volta, the Ministry of Rural Development, and to the people of Upper Volta for the excellent facilities provided for the meeting in Ouagadougou, and for the hospitality and friendliness shown to delegates from OAU Member States.

#### Vote of Thanks to the Donor Agencies

The workshop also wishes to express its gratitude to the Donor Agencies that have supported the SAFGRAD Project, especially the United States Agency for International Development (USAID) for its strong financial support and technical support through the International Institute of Tropical Agriculture (IITA).

#### I. RESEARCH ACTIVITIES

#### A. RECOMMENDATIONS ON MAIZE

#### 1. SARMAT 1980

The Semi-Arid Regional Maize Adaptation Testing (SARMAT) initiated in 1979 having proved effective in accomplishing the objective of making elite maize germplasm available to maize scientists to identify and develop varieties for the various national programs, it was recommended:

- that these testings should be continued in 1980.

#### 2. SAFGRAD Regional Trials:

For the 1980 season, it was recommended:

- that the following regional trials should be conducted:

#### a) Regional Family Testing Trials

- (i) RFTT-1: Full-sib families of early maturing yellow composite.
- (ii) RFTT-2: Full-sib families of early maturing white composite.

RFTT-1 and RFTT-2 will be conducted in Upper-Volta, Senegal, Rep. of Benin, and Kenya.

- (iii) RFTT-3: Full-sib families of medium maturing composite
- (iv) RFTT-4: Full-sib families of medium maturing streak resistant composite

RFTT-3 and RFTT-4 will be conducted in Upper Volta, Senegal and Ivory Coast.

#### b) Regional Uniform Variety Trials

(i) RUVT-1: will include early maturing (80-95 days maturity) varieties and will be conducted at 24 locations namely:

Senegal (2), Mauritania (2), Gambia (2), Ghana (2), Mali (4), Guinea (1), IITA Nigeria (2), Cameroon (3), Rep. of Benin (1), Upper Volta (2), Ivory Coast (1), Kenya (1) and Sierra Leone (1).

(iii) RUVT-2 : will include medium maturing
 varieties (95-115 days maturity) and
 will be conducted at 25 locations namely :
 Senegal (2), Ivory Coast (1), Ghana (2),
 Mali (1), Upper Volta (3), IITA Nigeria (2),
 Cameroon (3), Gambia (2), Guinee (1),
 Rep. of Benin (2), Kenya (2), and Sierra
Leone (1).

#### c) Spacing in SAFGRAD Regional Trials

It was recommended:

- that the SAFGRAD regional trials involving early maturing varieties should be conducted at 75  $\times$  40 cm spacing with two plants per hill and the medium maturing varietal trials at 75  $\times$  50 cm spacing with two plant per hill.

#### 3. Populations and Varieties to be Used

It was recommended:

- that populations and varieties used in RFTT and RUVT trials last year should again be included in RFTT and RUVT trials for the 1980 season. Only minor changes in the composition of RUVT-1 and RUVT-2 were suggested.

#### 4. Hybrids

Since most of the countries were not yet prepared for the production and distribution of conventional inbred line hybrids, it was recommended:

that hybrids from commercial companies should not be included in the regional testing. However, such inter-varietal hybrids, the parental seed of which is not a secret and can be easily given to any country interested in the parental varieties, could be included.

#### 5. Breeding for Earliness and Drought Resistance

It was recognized that breeding for earliness and drought resistance are the two priority areas of research in SAFGRAD's maize breeding programme. It was therefore recommended:

- that local varieties in the semi-arid regions should be collected and evaluated in the SAFGRAD programme with a view to identifying a local germplasm which might contribute to the two characters indicated above.

#### 6. Visits to National Programmes

The visit by national maize researchers to various national programmes organized by SAFGRAD during 1979 was commended. It was therefore recommended:

 that such visits to national and other regional programmes should continue to be organized by SAFGRAD to develop the necessary skills and contacts for rapid progress.

#### 7. SAFGRAD Research Team on Maize and Cowpea

The leadership provided by IITA research team was highly appreciated and it was recommended:

- that all efforts should be made to strengthen the SAFGRAD regional research activity by providing enough funding and other necessary research facilities.

#### 8. Maize Agronomy and Entomology Programme

Concerning the agronomy and entomology programme it was recommended:

- that a simple entomology trial to identify the major insect pests and their severity be conducted by national programmes where an entomologist is available to supervise the trial;
- that this activity be coordinated by a SAFGRAD entomologist.

#### 9. Contact with Agronomists

It was recommended:

- that the SAFGRAD maize agronomists should contact other agronomists working in the various national programs to discuss the plans for regional agronomic trials;
  - that the SAFGRAD maize agronomist coordinate all the regional agronomic trials included in the interested national programmes.

The trial will be conducted in the following Member States: Guinea (2 sites), Benin (2 sites), Botswana (3 sites), Mali (2 sites), Tchad (2 sites), Ghana (1 site) Niger (1 site), Nigeria (3 sites), Senegal (2 sites), Comeroon (2 sites), Gambia (1 site), Upper Volta (3 sites).

#### b) Agronomic Trials

The objective of the SAFGRAD regional cowpea agronomic trials is to develop appropriate management practices for the different agroecological zones of the region.

Three trials have been formulated for the 1980 season:

- (i) Cowpea Management Trial I and II: designed to determine the relative importance of the various management factors in determining yield in the Sudan and Sahel Savanna. These two trials will be conducted in Benin (1 site), Mali (4 sites), Tchad (4 sites), Ghana (1 site), Senegal (2 sites), Cameroon (2 sites), Gambia. (2 sites) and Upper Volta (4 sites).
- (ii) Maize/Cowpea Cropping System Trial: designed to provide information to develop a maize/cowpea cropping system for the different rainfall zones. This trial will be conducted in Benin (1 site), Mali (4 sites), Senegal (1 site), Gambia (2 sites), Guinea (2 sites, Upper Volta (2 sites).

#### c) Entomological Trials

The long term objective of the SAFGRAD regional activities in cowpea entomology is to develop methods of managing the insect problem with major emphasis on host plant resistance. Two regional trials have been planned:

- (i) Cowpea Insect Sampling Trial has been designed to determine seasonal populations of cowpeas pests in the various cowpea growing areas of the region using a standardized sampling procedure. This trial will be conducted in Guinea, Mali, Nigeria, Ghana, and Upper Volta. In addition, entomologists in Benin, Botswana, Senegal, Tchad, Cameroon, and Niger will be contacted to determine the possibility for collaboration in this trial.
- (ii) Minimum Insecticide Trial: has been designed to test lines previously identified as having some degree of resistance to certain insect pests. This trial will be conducted in Benin (2 sites), Senegal (1 site), Nigeria (1 site), Cameroon (4 sites), Niger (1 site) and Upper Volta (6 sites).

#### II. COORDINATION

After considering the need to coordinate all the international and regional trials which are sponsored in the region by several organizations such as IITA, CIMMYT, IRAT, FAO, and SAFGRAD, it was recommended:

- that SAFGRAD should coordinate this activity, and as an initial step, two maize varieties identified as most promising (based on RUVT trials conducted last year) should be included as check varieties in all the maize trials sponsored by the various international and regional institutions (CIMMYT, IRAT, IITA, FAO, etc..).
- that two experimental varieties identified as most promising through CIMMYT International Testing trials conducted in this region over past years should be included in SAFGRAD regional trials.

#### 1) Field Note Books and Data Sheets

The field note books and other data sheets prepared by SAFGRAD headquarters last year sent along with all the trials were considered appropriate and it was recommended:

- that the same format for field books and data sheets should be continued.

#### 2) Analysis Compilation of Data

It was recommended:

- that one copy of the data sheets should be promptly returned after the harvest of the trial to the coordinator of SAFGRAD regional trials for analysis and compilation;
- that the data sheets should at the latest be returned by the end of November by all cooperators.

#### 3) Report on Data

It was recommended:

- that after analysing and summarising all the data the coordinator of SAFGRAD regional trials should send one copy of the report to all cooperators.

#### 4. Annual Workshop on Maize and Cowpea

The workshop on Maize and Cowpea proved extremely useful in the exchange of ideas and results. It was recommended:

- that such workshop be held every year;
- that in order to maintain the continuity and progress
  in the programme, all efforts should be made by the OAU/STRC
  Coordination Office to invite the same research workers
  from the various Member Countries;
- that all research workers actively involved in maize and cowpea research work should get a copy of the invitation letters which are sent to their respective governments.

.../...

#### 5) Research and Development

After considering the two aspects of the SAFGRAD project namely (1) Research and (2) Development, it was recommended:

- that both aspects of SAFGRAD activities be further strengthened and, special mention was made to strengthen the development and extension work in the various national programme;
- that the OAU/STRC Coordination Office should try to place ACPO's in each of the Member Countries as soon as possible to strengthen the development programmes;
- that the research officers who will contribute entries to be included in the Regional Variety Trial send five kilogrammes of seed of each variety to the coordinator of SAFGRAD regional trials based in Upper Volta;
- that data sheets be printed and sent with the protocol for trials.

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# SECOND WORKSHOP ON SORGHUM AND MILLET, SAFGRAD OAU-STRC JP 31 UPPER VOLTA

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