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FBO AID	PROJECT AGREEMENT BETWEEN THE AID AND Ministry of Economic Development and Reconstruction	620-11-130 798	PAGE 2 OF 13 PAGES
		139	Original or Revision No.
	AS AGENCY OF THE GOVERNMENT OF Nigeria		
ANNEX A		Rice/Maize Production	

I. Introduction

This project utilizes technology and trained manpower from earlier institution-building activities in the Western State to test, initially on a limited scale, the feasibility of lowering production costs and increasing the acreage and yields of rice and maize; in order to improve the net income of the participating farmers.

For several years AID has assisted in strengthening institutions for agricultural research, extension, and credit services in the Western State. These efforts have produced production technology, implementing concepts, and cadres of trained supervisors and field agents. The success of a USAID-assisted effort in 1969 with about 30 maize farmers near Ogo and the success of a USAID-assisted rice program in Abeokuta Circle in 1969 and 1970 prompted this new project to test the feasibility of applying improved technology on a larger scale. These initial efforts resulted in maize yields of 1,500 to 2,000 pounds per acre using the improved "package," compared to 450 to 800 pounds with traditional practices. For rice, the comparison was 1,100 to 1,600 pounds per acre with improved practices versus 500 to 600 pounds with traditional methods.

The concept of this project is strongly supported by existing planning documents of the Federal Government, Western State, and USAID. The Federal Government has stated in its 1970-74 Plan that "emphasis should be placed on grain with high protein content...as opposed to high carbohydrate root crops." The stated policy of the Western State MAE is: "(a) to increase agricultural production in order to keep pace with population increases; (b) to improve human diets; and (c) to increase farmer income." The CSNEB Report (financed by AID) references food crops with the following recommendation: focus on food crops through a combination of expanded research and crop production campaigns, and promote superior foods which will contribute to higher nutritional levels. This project is designed to contribute to the achievement of these policy objectives.

The project is planned in two phases:

Phase I

Phase I is to be a (two year) pilot effort to determine the feasibility of the campaign approach and the results that can be secured from farmers applying new technology. The scope of

For the Cooperating Government or Agency	For the Agency for International Development
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the project's involvement during this pilot phase will be kept small, concentrating on: (a) seed multiplication; (b) training of a limited number of extension agents and farmers selected to participate in the pilot effort; (c) getting optimum results from the farmers participating in the pilot phase; (d) testing effectiveness of the use of the campaign approach of mobilizing appropriate resources towards substantially increasing yields, lowering costs of production and increasing net income of the participating farmers; and (e) testing the feasibility of all the innovations introduced. The "Course of Action" section outlines the steps involved in the campaign approach and the proposed innovations.

At the end of the first year an interim, in-depth evaluation will be made to determine the success to date and changes in direction and approach that should be made the second year. This evaluation will determine the economic and agronomic impacts of employment of "packages" of improved seed, fertilizers, and recommended cultural practices for each crop. This evaluation will determine costs of increased productivity under field conditions, including variables such as subsidized or unsubsidized fertilizer. In addition, production-volume implications will be assessed in terms of present market price and demand and the projected consequences of increased volume of production. Availability of credit and storage facilities will be taken into account.

The second year of the pilot effort will continue the same approach on a refined and expanded scale. As a result of the first year's seed multiplication efforts, ample improved seed should be available to all participating farmers. Better fertilizer and mechanization services should be available, as well as more credit and storage support. The second year of the pilot effort should provide a true test of project feasibility.

An even more extensive in-depth evaluation will be conducted following the second year's harvest. Details of what will be considered in this evaluation are outlined in III.J. "Evaluation and Feasibility Studies."

The results of this evaluation will determine whether the project will move into Phase II and what direction the project will take.

Phase II.

If the evaluation of Phase I proves favorable, the project will move into Phase II which will then expand the project benefits to more areas and more farmers. By project phaseout date in FY 1975, it is projected that the project would reach at least 50% of Western State producers of maize and rice with an average increase in yield of at least 50%. The project will concentrate first on the areas best suited to each crop and on the most responsive farmers. It will then gradually expand to include other areas and other farmers. The project may be expanded to include other rice and maize producing states at which time the project will come under Federal MANR sponsorship. Annual evaluation of direct results and studies of collateral effects (market price, storage needs, supply/demand relationships, cost/return ratio) will be made in order to pace subsequent activity or redirect areas of emphasis.

It is planned that Phase I will be implemented by USAID direct-hire advisors, but that Phase II (if implemented) would be supported by a USAID-financed contract team.

II. Targets

The project would be expected to have produced the following results by FY 1975:

1. Net income and standard of living of the participating farmers substantially increased.

2. Acreage of maize grown under improved management increased from 1,500 acres to 40,000 acres.

3. Average yield-per-acre of early maize grown by participating farmers raised from 800 lbs. to 1,600 lbs.; and average yields of late maize increased from 650 to 900.

4. Acreage of rice grown under improved management increased from 3,000 acres to 20,000 acres.

5. Average yield-per-acre of rice grown by participating farmers raised from 500 to 1,000 lbs.

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6. Per unit production costs of rice and maize lowered by at least 40%, making it profitable for farmers to produce for lower market prices, thus encouraging greater consumer consumption of grains (which are nutritionally superior to root crops such as cassava and yam).

7. Rice and maize readily available throughout the year because of increased amounts held in storage (this will help stabilize prices for both producers and consumers).

8. Adequate supplies of moderately priced maize for livestock and poultry feed (eliminating need of imports and stimulating production of high protein foods).

9. Most of the under productive crop land released to tree crops production (thus increasing exports and further increasing net income of farmers).

10. Existence of a regular cropping, marketing and storage reporting service within the MANR to help farmers get full value for their crops and help guide future agricultural planning.

11. Existence of effective communication and collaboration among various entities interested in agricultural improvement in Western State and in Nigeria as a whole (including Federal Ministry of Agriculture, Institute of Tropical Agriculture (ITTA), Western Nigeria Agricultural Credit Corporation (WNACC), Universities of Ibadan and Ife, Agricultural Schools at Ibadan and Akure, Nigerian Institute for Social and Economic Research, and ILO).

12. Existence of the organization and management capability within MANR needed for conduct of similar campaigns on other crops.

The 1973 evaluation will determine whether these targets are feasible or will have to be modified. The Project Work Plan will break down the targets by years.

It is anticipated that by FY 1975 at least half the rice and maize producers in Western State will be participating in the project and that the necessary infrastructure will exist to allow the momentum to continue and expand without any further USAID assistance.

For the Cooperating Government or Agency	For the Agency for International Development
SIGNATURE: Eomatins DATE: May 12 73	SIGNATURE: [signature] DATE:
TITLE: Ministry of Economic Development and Reconstruction	TITLE: John P. Hummon, Acting Director

III. Course of Action

A. Project Organization

The Western State MANR will establish a Rice/Maize Division, supported by five direct-hire USAID advisors. (See organogram on next page.) A State Rice/Maize Committee composed of key GON officers and USAID advisors will be formed under MANR sponsorship to plan annual work programs, attack "bottlenecks," and report progress. This committee will meet monthly, or as often as deemed necessary by the Chairman, the PAO (B). The PAO-B will be the project coordinator for the MANR. He will work directly with the USAID Project Leader in Ibadan. A senior officer from each of the four Circles will be appointed as Circle Rice/Maize Officer with both Circle Committee and State Committee responsibilities. The State Principal Agricultural Engineer and each of his four Circle Agricultural Engineers will also participate at both levels.

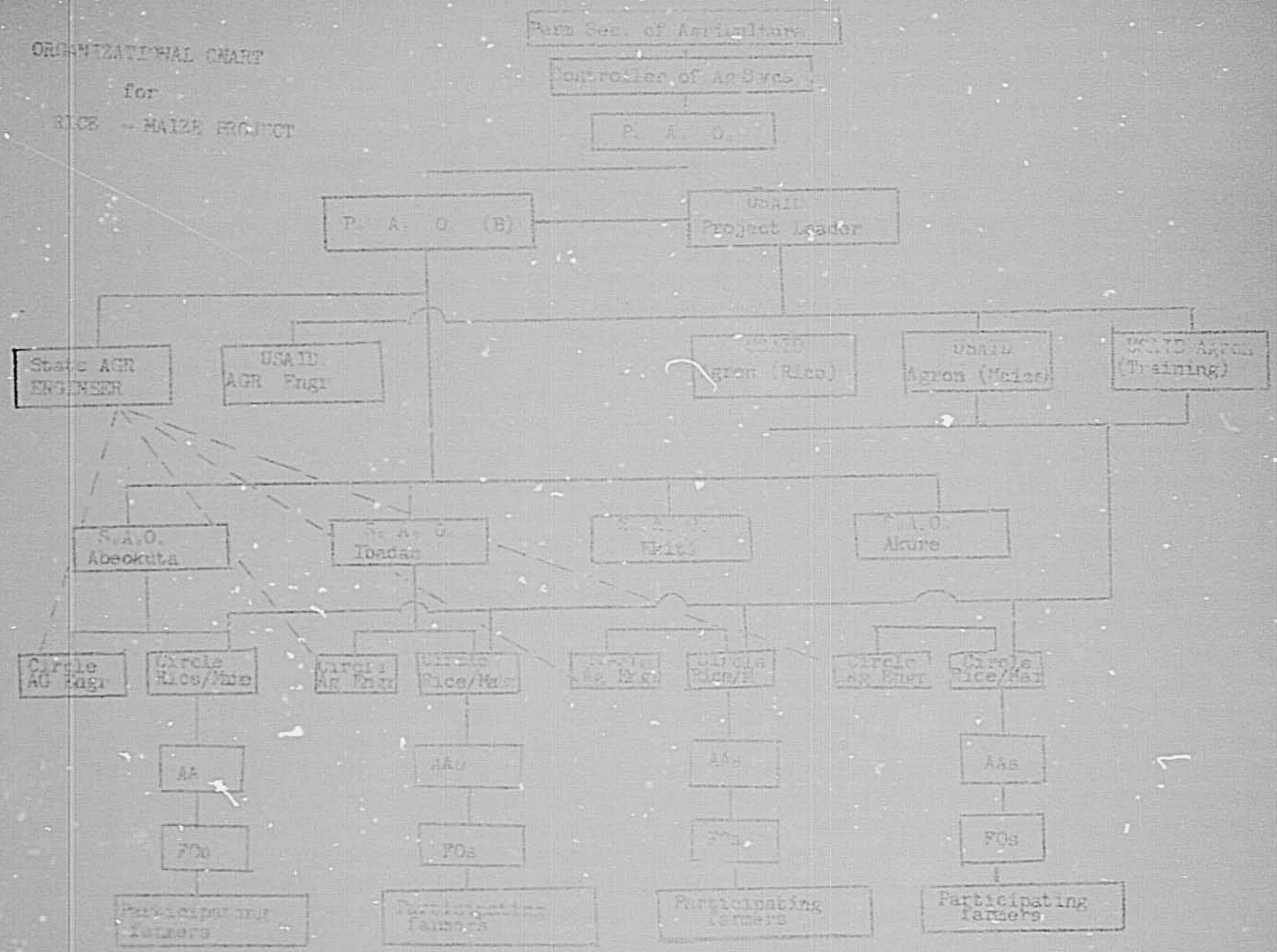
The Circle Rice/Maize Officers will be responsible for the project implementation in their respective Circles. Each Circle is divided into Divisions. The head officers of each Division will conduct the Rice/Maize program through their field extension staff with guidance from the Circle Rice/Maize Officer and the USAID advisors. For the crop year of 1971, each Circle Rice/Maize Officer will designate at least nine Field Overseers (FO) to participate in this campaign, under the supervision of their Agricultural Assistant (AA). Each FO will assist at least four farmers or groups in the project. Statistics on acreage, variety, practices, yields, and costs will be maintained on each farmer, and the Circle Senior Agricultural Officer will designate nine additional FO's to work in the campaign.

It is expected that each staff member from AA upward will spend 50 percent of his time on implementation of this project. FO's will devote the majority of their efforts to farmers in their zone participating in this project. The three USAID Agronomy Advisors will assist the four Circle Officers to implement the project in their respective Circles; additionally, the USAID advisors will be assigned specialist responsibilities as follows: the advisor based at Abeokuta will specialize in rice, the advisor based at Ibadan will specialize in maize, and the advisor based at Akure will formulate and carry out training for both staff and farmers. The training program will be assisted by the staff in the two Farm Institutes at Ilesha and Odeda.

ORGANIZATIONAL CHART

for

RICE - MAIZE PROJECT



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Production mechanization, grain drying, seed processing, and grain storage will be coordinated by the Principal Agricultural Engineer, working with the USAID Agricultural Engineer based in Ibadan. Each Circle Agricultural Engineer will be responsible for these activities in his Circle.

B. Training

Circle SAO's and Rice/Maize Officers will determine training needs for their AA's, FO's, and farmers. In-service training sessions for professional staff, supported by the USAID Agronomist (Training), will be centered at the Ilesha and Ofada Farm Institutes. Staff training sessions slated for CY 1971 number five for maize and four for rice. Costs of training professional staff will be borne by MANR.

Observation-study trips to countries where successful cereals campaigns have been conducted will be sponsored by the USAID (in mid-1971). These trips will be of approximately six weeks' duration and may include visits to Mexico, Tunisia, and the Philippines. Invitations will be extended to a representative of the Federal Ministry of Agriculture, two or three top Western State officials, the USAID Team Leader, and/or Project Manager.

USAID participant training will be provided in the U.S.A. and third countries for a limited number of MANR staff, particularly key personnel involved in seed production, drying processing, and distribution.

C. Rice and Maize Production

The participating farmers will be expected to adopt a "package" of improved practices. For maize the "package" will include: (1) use of improved varieties, (2) timely land preparation, (3) optimum planting dates (earlier), (4) optimum plant population, (5) use of fertilizer, (6) adequate weeding and thinning, (7) drying and storing part of the harvest.

For rice growers the "package" will include: (1) use of improved variety, (2) proper land preparation, (3) optimum seeding rate, (4) optimum planting date, (5) use of fertilizer, (6) adequate weed control, (7) pest control, (8) drying and storing of part of the harvest, and (9) improved parboiling to eliminate off-flavors.

D. Research

Although the project will rely heavily on the results of research in formulating recommendations to farmers, it will not engage directly in research. Stepped-up research is required to identify better varieties and the related practices (fertilizer, planting dates, plant populations and cultural methods) needed to secure the yield potential from each new variety. Research is also needed on farm management, cropping systems, economics of application of improved technology and farmer motivation. The project will rely on the following institutions to supply the research component: Federal Research Station at Moor Plantation, International Institute for Tropical Agriculture (IITA) (which is partially supported by AID), University of Ibadan, MASER, the AID-supported Regional Cereals Project, and the AID-supported Institute of Agricultural Research and Training (which combines the research work formerly conducted by Western State MANR and University of Ife).

E. Seed Production

1. Improved Varieties

The production portion of the project will be built around popularizing the use of high yield potential varieties recommended by research. During the first year, the project will use R81, Western Yellow I, and Pioneer Hybrid X306 yellow maize for livestock feeds; Western White I for green (fresh) maize consumption; and the standard Lagos White for dry grain production. Since Western White I has certain shortcomings, researchers will give high priority to developing a better high lysine variety. The rice variety OS-6 will be promoted as the best adapted upland variety and BG-79 will be promoted for swamp rice. As better varieties are released they will be substituted for the above varieties, as appropriate.

2. Seed Multiplication

The bulk of improved seed is currently produced on government farms. Substantial increases are necessary to meet the needs of this project. The project will work towards gradually shifting seed production to the private sector. The following chart indicates the targeted acreages and seed harvest for the first year:

	1970	1973
Maize (early crop)	45-50 acres 40 tons of seed	250 acres 250 tons of seed
Maize (late crop)	30-35 acres 2 tons of seed	250 acres 125 tons of seed
Rice	70-80 acres 30 tons of seed	500 acres 250 tons of seed

The Project Work Plan will project seed production levels for the succeeding years of the project.

3. Drying and Storage

Currently, all maize must be dried at the Seed Processing Plant at Moor Plantation. IITA plans to have a small dryer in operation in Oct 1971. The goal for drying rice at Moor Plantation should be 50 tons. This rice should be used for multiplication in the second year and the rest (for distribution to farmers) can be air-dried. A limited amount of USAID commodities will be provided to support the seed drying and processing activities.

The USAID will provide the services of two specialists (an agronomist and an agricultural engineer) from Mississippi State University in the spring of 1970 to help with develop a plan for coping with the massive seed drying and processing problems anticipated in supplying the seed requirements of the project. They will also be asked to recommend low cost grain drying units for farmers who will be producing a marketable surplus of maize during the rainy season.

F. Fertilizer and Insecticides

The MOEDR will continue to improve their program of making fertilizer and insecticide easily available to the participating farmers at the time and place required. Efforts will be made to gradually shift fertilizer and insecticide sales and distribution over to the private sector.

G. Mechanization Services

Most farmers of Western State are limited in their crop production to the acreage they can cultivate with family hand labor.

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		5. Project/Activity Title Rice/Maize Production	

AID's representative in Nigeria, USAID, with Government of Western State approval, has which responsible to funding provided by CSMS. Upon completion of the construction of the quarters, AID may remove any equipment owned which is not installed, and, if requested to do so, will release additional parts of quarters to State initial occupancy conditions here and land.

Permanent Secretary
Ministry of Agriculture and Natural Resources
Western State

6th May 1971

Date

Field Administrative Officer
USAID/Nigeria

Monday 1971

Date

For the Government of Nigeria Permanent Secretary Ministry of Economic Development and Transmigration	For the Agency for International Development John T. Bennett, Acting Director

PROAG CONTINUATION SHEET SHEET B	PROJECT AGREEMENT BETWEEN AID AND Ministry of Economic Development and Reconstruction AN AGENCY OF THE GOVERNMENT OF Nigeria	1. Project/Activity No. 620-11-130-798	PAGE 15 OF 15 PAGES
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In accordance with the Authority granted to the Mission Director by the Provisions of Manual Order 712.4, Section III, paragraph 3a, the usual procedure for concurrent sub-obligations for all commodities is hereby waived. Sub-obligating PIO/C's may be issued at anytime within 6 months of the issuance date of this ProAg.

John Hummon, Acting Director
USAID/Nigeria

For the Cooperating Government or Agency	For the Agency for International Development
SIGNATURE: Eomattins DATE: May 12 May 14, 1971	SIGNATURE: DATE:
TITLE: Ministry of Economic Development and Reconstruction	TITLE: John P. Hummon, Acting Director

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title: Food Crop Production (FFS)

Date of Program:
Total U.S. Funding: $3,[illegible],000
Date Prepared: 3/[illegible]/73

NARRATIVE SUMMARY Program or Sector Goal the broader objectives to which this project contributes:	OBJECTIVELY VERIFIABLE INDICATORS Measures of Goal Achievement:	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS Assumptions for achieving goal targets:
1. Reduce the aggregate volume of land and labor resources in food production.	1. Productivity and use of land and labor on cereals and manioc with and without improved technology.	1. Farm survey data.	A. The RG and State Governments will allocate adequate resources and talent to coordinate activities of government and private sector.
2. Accelerate growth in G.D.P.	2. Rate of growth in G.D.P.	2. F.M.R. reports.	B. Farmers will adopt the new production technologies if property are sound and if inputs are available.
3. Generate employment.	3. (a) Changes in seasonal levels of farm employment and changes in levels of technologies employed. (b) Changes in off farm employment and incomes.	3. Farm survey data.	C. Farmers are motivated to increase output of other (estimated) products with decreases in reserves as alternate for their food production.
4. Improve distribution of income.	4. Per farmer income under old and new technologies.	4. Farm survey data.	D. FMG will judiciously employ measures to improve marketing and support cereal prices, but that prices will be allowed to decline as productivity increases.
5. Improve nutrition.	5. Changes in food consumption patterns, particularly increased use of protein.	5. Farm survey for farm population; periodic special urban consumption surveys for non-farm population.	E. Consumers will use cereals in lieu of tubers as cereal prices decline relatively, and personal incomes increase.

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Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status		Assumptions for achieving purpose:
Phase I			
1. Develop a coordinated program for each major food crop encompassing acquisition of knowledge for increasing productivity, improving the dissemination of such knowledge and enhancing the private and public sectors' support for the flow of improved inputs and products.	1. A national program developed for each major food crop to include selection of technology, means to effectively extend research results, agreement on priority areas and targeted rates of application of the new technologies are essential infrastructure of marketing, pricing, credit and other supporting services.	1. Review of documented national program proposal.	a) FMG will agree to the merit of comprehensive program planning, concurrent studies and evaluations. b) FMG and cooperating state leadership will concur in planning for active promotion of private enterprise, adjustment in focus of state ministries, and training of personnel for private enterprises c) Governmental units will agree to organization and methods evaluations of their institutions and release of appropriate personnel for training. d) Governmental units will agree to establishment of essential positions and most highly qualified personnel available will be appointed to them. e) FMG and state governments will concur in planning regional specialization in accordance with probable comparative advantages.
2. Develop a program specifically suited to each of selected states which is effectively harmonized with the coordinated national program and allows for appropriate regional specialization.	2. Operational programs developed for at least three (hopefully more) states which provide for a full "package" of knowledge and inputs for farmers, prompt and timely movement of physical inputs and public and commercial services, especially credit. In each state there should be provision for: a) An effective government/private enterprise seed multiplication network accompanied by an appropriate federal/state seed inspection and certification service. b) Adequately staffed zonal research/testing stations and effective linkages with relevant major research institutions in Nigeria. c) Adequately staffed extension networks which effectively link research/testing stations, private sector distribution/processing/financing elements and farmers. d) An effective government credit agency to supplement commercial banks in financing both intermediate private sector elements and farmers.	2. Review of documented state program proposals.	

program must all come at the same time

Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status	Assumptions for achieving purpose:
	c) A meaningful government operated or supervised market news services.	
3. Develop competence and experience at National and State level in planning fully integrated agricultural development programs, including scheduling activities of public and private entities involved.	3. a) Nigerian personnel involved and taking leadership in developing NAFFP and related state crop plans. b) Follow-up planning and implementation of program after Phase I effective.	3. a) Evaluation at end of Phase I. b) Concurrent economic research to measure effectiveness of planning, and evaluation at end of Phase II.

Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status:		Assumptions for achieving purpose:
Phase II Introduce improved technology to increase yields and lower cereal production costs toward world levels and reduce consumer prices of foods by: . Activating elements of the private sector to relieve government institutions of some of the present servicing responsibilities to smallholders; . Improving the efficiency and effectiveness with which remaining government services are provided so economic environment of smallholders is enhanced toward optimum levels.	1 a) Private agencies established to supplement and gradually replace government units in storing and distributing material inputs and marketing, storing and processing products. b) Existence of effective government/private enterprise seed multiplication networks accompanied by appropriate government operated seed inspection and certification service(s).	1. a) Inventory number private ventures activated, employees, volumes of business and farmers served. b) Seed plots established at different stages and total output of each seed.	1. FMC and cooperating state leadership will actively promote development of private enterprise and adjust the focus of state ministries.
	2. a) Existence of adequately staffed zonal research/testing stations and effective linkages with relevant major research institutions in Nigeria. b) Existence of adequately staffed extension networks which effectively link research/testing stations, private sector distribution/processing/financing elements and farmers. c) Existence of effective government credit agency to supplement commercial banks in financing both intermediate private sector elements and farmers. d) Existence of a meaningful government operated or supervised market news service.	2. a) Inventory stations and personnel and evaluate competencies of each and their horizontal and vertical linkages. b) Inventory extension staffs, their competencies, and vertical linkages with institutions/farmers. c) Inventory number of service units established, number of employees, money loaned and farmers served. d) Observation of system and frequency, coverage and accuracy of news reporting.	2 a) Governmental units will be amenable to improving organizations and methods aspects of their institutions. b) Essential positions in government institutions will be established and most highly qualified personnel available will be appointed to them.

Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status:		Assumptions for achieving purpose:
3. Promoting appropriate regional specialization of production.	3. a) Food moving freely between states.	3. a) Transportation research studies and/or source of food studies in particular markets.	3. Government will foster inter-state movements of foods.
	b) Food production patterns change to reflect the new comparative advantages.	b) Farm production data	

Output:	Magnitude of Output:	Means of Verification
Phase I		
1. An integrated National Food Production plan for each of the five food crops (rice, maize, sorghum/millet, wheat and cassava) indicating all interrelated activities and government policies.	1. One national plan embodying programs for maize, rice, sorghum/millet, wheat and cassava.	1. FMANR publications or notices.
2. Detailed state plans for production and marketing of selected food crops that are effectively harmonized and coordinated with the national plan and indicating relevant interrelated activities required and specifying responsibilities of various public and private entities for each activity and scheduling of activities.	2. a) Completed state plans for rice, maize and sorghum in each of the six states. b) State plans completed for wheat and cassava in at least one state each. c) Plans under preparation for at least one crop in all states.	2. State publications or official notices.
3. Strong planning capacity at national and state levels with Nigerian personnel trained and experienced in the systems approach to integrated planning of various public and private activities involved in a crop production program.	3. a) Each coordination center will have personnel who have actively participated in developing the national program for each crop for which the center is responsible. b) Personnel in at least six states Ministries of Agriculture will have been actively involved in preparation of complete plans for one or more crops. c) Some personnel in each state instructed in planning procedures and participating in development of preliminary plans for at least one crop.	3. a) Evaluations at end of Phases I and II.

Output:	Magnitude of Output:	Means of Verification	Assumptions for providing output:
Phase II Personnel Trained: a) Government research, extension and administrative staff.	1. Personnel Trained: a) Government installations 1) National commodity research stations: Maize: Moor Plantation - Target 11 senior staff. Rice : Ibadan(Hdqtrs) - Target 13 senior staff. Wheat: Samaru - Target 12 senior staff. Sorghum/Millet: Samaru - Target 12 senior staff. Cassava: Umudike - Target 10 senior staff. (Effectiveness of output will be subjective judgment.) 2) Zonal sub-stations: Maize: Target - 6, each with 3 senior staff. Rice : Target - 11, each with 3 senior staff. Wheat: Target - 3, each with 3 senior staff. Sorghum/millet: Target - 6, each with 3 senior staff. Cassava: Target - 3, each with 3 senior staff.	1. FMG/GON records.	1. (a-c) Relatively high potential trainees will be selected; institution will have problem solving orientation and will be based on results of observation/research in Nigerian environment.

Output	Magnitude of Output:	Means of Verification	Assumptions for providing output:
	3) Extension specialists: Targeted number: Maize: 12 state and 100 divisional Rice : 12 " " 100 " Wheat: 12 " " 25 " Sorghum/millet: 6 state and 60 divisional Cassava: 6 state and 60 divisional 4) Administrative personnel - adequate number to man all stations		
b) Credit institutions and cooperatives.	b) Credit institutions - full cadre for headquarters and field offices.	b) FMG/GON[1] records.	b) Farmers will be serviced in groups both in extension and credit and effective media (demonstration, cinema, printed materials will be employed. Private sector also will be a conduit.
Coordination center/plant breeding/ adaptive testing stations established.	2. Coordination centers and zonal stations established (given in 1.a. above).	2. FMG/GON records.	2. Testing programs will be closely linked to latest applied research findings and will be practically oriented.
Institutional linkages established. Production research through product marketing.	3. Institutional linkages (to be identified).	3. Documentation and observation of performance.	3. The systems approved will be accepted by Nigerian personnel and dynamic sustained leadership will be appointed to components of the system to ensure coordinated operations.
Farm field trials conducted - economically sound technical packages identified.	4. Farm field trials conducted and documented by states for maize, rice, sorghum/millet, wheat and cassava.	4. FMG/GON and research station records.	4. Concurrent farm management research will be conducted as basis to choose most feasible technical package, taking account that production systems advocated are compatible with other production systems of individual farmers.

1/ State Government records.

Output:	Magnitude of Output:	Means of Verification	Assumptions for providing output:
5. Cooperatives or other farm organizations established.	5. Farmer services organizations established in each state.	5. State MANR and cooperative division records.	5. Initiative for establishing cooperatives will be shifted from state ministries to farmer/village levels with support/guidance of Cooperative Development Officers. Main thrust of cooperative development divisions will be shifted from inspectorate to developmental.
6. Local credit service units established.	6. Credit institutions established in each state.	6. National Agricultural Credit Bank and State Credit institutions.	6. Sub-offices of state institutions will be granted authorities for decisions on applications and credit services will be linked to extension to attain a degree of "supervision" to loans.
7. Commercial units established to handle input sales, product purchases and mechanical repairs.	7. Business entities formed in each state for handling fertilizer and other chemicals and for assembling, storage and marketing of products.	7. Records of ministries of Industries (MOIs) and other state and local institutions.	7. Ministry staffs will cooperate in relinquishing distribution responsibilities and will invest in promotion of private enterprises.
8. Processing and/or storage facilities established.	8. Government facilities in place to supplement private (above).	8. State MANRs and MOIs and Trade.	8. Realistic structures and operations will be linked to production/distribution systems.
9. Expanded acreages on which new technology is applied.	9. Acreage on which new technology is applied, by commodity, states/divisions/circles. Targets to be determined in Phase I.	9. Special farm management surveys and regular (improved) Federal	9. Total system will be gauged to prescribedphased expansion lest price repercussions become intolerable and income distribution patterns badly disrupted.
10. Government procedures developed for providing judicious price support.	10. Policies established, programs, announced, including price targets and supporting procedures, field facilities in being, MANR field technicians and farmers aware of program.	10. Government documentation of programs and observations.	10. Meaningful support techniques will be employed while allowing sufficient freedom for inter-state flows of commodities.

Inputs:	Implementation Target (Type and Quantity)	Means of Verification	Assumptions for providing inputs:
Nigeria A. Personnel 1. Required professional staff and resources to support them, including logistical support.	**Nigeria** A. Personnel 1) National Accelerated Cereal Production, including Executive Secretary and staff. 2) Three National Coordinators (Samaru, Ibadan and Umudike). 3) Five Assistant Coordinators at National Research Stations. 4) Agronomists: a) Production - 32 b) Experiments - 32 c) Training - 32 5) Plant breeders - 6 6) Plant Pathologists - 5 7) Irrigation Engineers - 3 8) Soils and Fertility Specialists - 3 9) Agricultural Engineers (Mechanical) - 3 10) Entomologists - 3 11) Production Economists - 3 12) State and Divisional staffs - 386	1. FMANR records.	1. Development of appropriate terms of service and provision of ample support for essential travel.

Inputs:	Implementation Target (Type and Quantity)	Means of Verification	Assumptions for providing inputs:
2. Participant trainees	2. Number trained to prescribed levels within Nigeria or overseas.	2. FMANR records	2. Adequate numbers trained can be identified and will be effectively deployed upon completion of training.
3. In-service training, government staff.	3. One week training annually for all zonal and state project staffs.	3. FMANR records.	3. Adherence to training schedule and allocation of supporting funds.
4. Training; extension and research for activating the private sector.	4. Institutions have undertaken these services; measures of throughput and research accomplishments.	4. Records from institutions involved.	4. Adequate emphasis by top government leadership and essential financial support.
Material			
1. Financial support for agri-business or joint ventures with them.	1. Several establishments involved in each state and funds deployed.	1. FMANR and state records.	1. Adequate emphasis by top government leadership.
2. Permanent physical facilities.	2. National and zonal research stations and other supporting infrastructure.	2. FMANR, institute and state records.	2. Adequate financial support.
3. Equipment and supplies.	3. Arrival of items at point of use, including laboratory and field equipment/supplies mini-kits, etc.	3. Records from research and service units, and FMANR and state units.	3. Adequate financial support.
4 Maintenance and repairs.	4. Staff and facilities supported by government unless/until provided by private sector.	4. Records from government installations and/or surrounding private sector.	4. Programmed provisions, including spare parts.
5. Seeds.	5. Functioning seed certification, multiplication and distribution programs, linked to private sector; importation of promising varieties.	5. Certification/inspection regulations, records from research and testing stations, F.O.S. import data.	5. Commitment to immediate installation of certification/inspection program maximum use private sector for distribution and methods to expedite imports of limited quantities promising seeds.

Inputs:	Implementation Target (Type and Quantity)	Means of Verification	Assumptions for providing inputs:
6. Fertilizers.	6. Quantities used on stations and distribution to farmers.	6. Records of government stations, states, private firms and FOS.	6. Timely ordering, adequate financing and encouragement to private sector emphasis on high analyses.
7. Credit.	7. Flow of funds from National Credit Bank, state affiliates and private banks to agri-business and farmers.	7. Records of credit institutions and samples of agri-business and farmers.	7. Adequate support from Central Bank.
8. General funding (for purposes other than specified above and for price support).	8. Flow of funds for designated purposes.	8. Records of FMANR or other FMG institutions.	8. Adequate fund allocations.

Inputs:	Implementation Target (Type and Quantity)	Means of Verification	Assumptions for providing inputs:
USAID			
1. Counterpart-manager to NAFP Project.	1. Project Manager through FY 78. Total - 4-5 man-years.	1. USAID records.	1. Adequate funding by AID.
2. Agricultural economist/systems planner.	2. 5 man-years.	2. USAID records.	2. Qualified specialists and consultants can be recruited by contractor.
3. Three coordinators for crop coordination centers.	3. 2 man-years FY 74; 3 man-years FY 75 and 76. Total - 8 man-years.	3. USAID records.	3. Qualified Nigerian participants trainees will be made available and posted in programmed positions upon return.
4. Five advisors to Nigerian Assistant (Crop) Coordinators.	4. 5 man-years thru FY 75. 3 man-years, FY 76-FY 78. Total at least 14 man-years.	4. USAID records.	
5. Consultancies in food production/distribution and related sectors.	5. 120 man-months thru FY 79.	5. USAID records.	
6. Consultancies for planning.	6. 60 man-months FY 74-75.	6. USAID records.	
7. Participant training - short term practicals.	7. Training courses attended: 52 participants for 6-8 months FY 74-79. Total - 364 man-months.	7. USAID records.	
8. Attendance at international conferences.	8. Expenditures for the purpose up to $20,000 per year.	8. USAID records.	
9. Committies.	9. Vehicles for 9 U.S. counterpart crop specialists (est. $45,000).	9. USAID records.	