

ORGANIZATION FOR IMPLEMENTING STRATEGY

- Agricultural Economic Development in Africa -

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## PREFATORY NOTE

This paper was developed under PIO/T No. 698-135-6177056 which reads as follows:

1. Objective: Analysis of the technical manpower implications of a draft, AFR agricultural development strategy statement.
2. Background: AFR/DR/ARD, with the assistance of AFR/DP, TA/AGR, PPC and USDA/ERS is drafting a statement of strategy for agricultural development in Africa.
3. Scope of services: Using standard analytical methods, project the optimal and minimal field and Bureau technical organization and staffing required to implement the draft strategy (above) at levels contemplated in PPC and AFR program projections.

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I. SUMMARY

1. For a number of years AID has followed a policy that has weakened its technical staff capabilities to a level wholly incommensurate with foreign assistance obligations already assumed or in the making.
2. Among the subject matter fields affected, agriculture stands to suffer the most. Throughout the less developed world, agriculture is the preeminent source of survival and the priority development sector.
3. Among the regions, Africa lags furthest behind and its agricultural economy is the least advanced of them all.
4. Studies made in AID point the way to an attack on the disabilities of African agriculture. Subject to the reservations noted in the text, a revised list of priorities suggested by two strategy papers reads as follows:
  - a) Planning and policy analysis
  - b) Marketing, broadly defined
  - c) Research, training, extension and credit
  - d) Infrastructure
  - e) Inputs
5. Under these general guidelines, African sub-regions and the countries comprising them must develop their own order of priorities, with such assistance as AID/Washington can render under an improved system of communications between headquarters and the field.

6. To accomplish the foreseeable tasks of planning and implementation, a substantial strengthening of the technical agricultural staff, both in the field missions and in Washington, is imperative.
7. Three uncomplicated measures are employed to estimate additional staff needs in the AID program for African agricultural development. Using recommended (but unrealized) 1976 levels as a base, indicated staff increases relate proportionally to these measures:
  - a) Projected dollar outlays: well in excess of 100 percent
  - b) Number of projects: 73 percent
  - c) Country-by-country analysis: 82 percent
8. These calculations suggest a minimum of about 64 and an optimum of 80 new recruitments, not including special consultative services.
9. Recruitment should favor direct-hire, career-oriented individuals wherever possible, but all sources must be tapped according to availability.
10. Two obstacles to a functioning staff operation must be eliminated at the outset. These are the concept of maintaining a "low American profile" overseas and the application of arbitrary personnel ceilings. The first is outdated and the second confers personnel decisions upon those least competent to make them.
11. Adjustments in organization should be made in recognition of the towering importance of agriculture. Pending finalization of Agency-wide reorganization, a first step might be made by elevating the position of head of Agriculture and Rural Development to Director of an ARD Office and the Directorship of Development Resources to Associate Assistant Administrator.

## II. INTRODUCTION

Last year this writer and a co-author prepared a critical review of AID technical manpower policy and its effect on the agricultural economic development of Africa.<sup>1/</sup> This report traced the evolution of a series of administrative decisions which demonstrably had lowered the capability of AID to function as a catalyst of growth on the African agricultural scene -- and by clear implication -- in the other less developed regions of the world.

As the report pointed out, AID embarked a dozen years ago on a policy aimed at denigrating the specialist and exalting the generalist. Although its authors preferred the term "reform", what started out as mere obeisance to a discredited concept of public administration finally turned into a virtual purge of technical staff. Between 1968 and 1976, more than three-fourths of AID's technical staff was eliminated while the number of program analysts, or "generalists" was increased nearly four-fold. The axe was administered with a degree of impartiality: experts in agriculture, education, health and engineering left the agency in about equal proportions, leaving the crucial decisions in the hands of those with real or presumed "managerial" skills.<sup>2/</sup>

It is not necessary to repeat the unfortunate consequences of this dubious policy. It is enough to say that priority approaches to development problems became subordinated to the niceties of paper work. Jargon encroached upon reason. The general quality of project selection, design, implementation and monitoring inevitably declined. Administration in the hands of the generalists fared no better; on the front lines, overseas missions became a motley olio of differentiated structures with serious doubts arising as to who was in charge, and by what sanction. The ratio of Washington-to-field staff was inverted from 35:65 to 58:42. Appropriations declined as skepticism grew among Congressmen and the American people.

The handful of technicians that remained in AID were subjected increasingly to overt discrimination -- in grades, salary recognition, formal honors -- and most damaging of all, they were effectively barred from participation in the creative processes of program development and execution. The stark fact that agriculture is by all odds the principal means of survival in the Less Developed Countries became obscured in a bureaucratic tactic to muffle the very skills most essential to energize economic development where those talents were most needed. As 1976 drew to a close, AID was reaching its nadir as an instrument of US foreign policy and humanitarian performance.

"New directions" became the watchword of the administration that assumed charge in 1977, and the measures already adopted offer a refreshing contrast to the policies of its predecessors. In testimony before several Congressional Committees, the new Administrator promised to revitalize the technical staff, to strengthen AID missions abroad and to curtail the time-consuming elements of excessive paper work. In a message to Mission Directors in April, Mr. Gilligan said "I believe that AID needs to expand the capacity of our professional staffs, both in AID/W and in the field. I was dismayed to find that AID has only 82 professional agriculturists to administer an agricultural program of over one-half billion dollars."<sup>3/</sup>

This was followed by a later message which, among other things, shifted substantial decision-making authority from "AID's central staff offices to the Geographic Bureaus and in turn from the Geographic Bureaus to the field missions."<sup>4/</sup> This directive also eliminated the Project Review Paper (PRP) as one of the most demanding and least defensible steps in the lengthy procedures leading to project approval. It reduced the reporting load previously carried by the missions and otherwise simplified the requirements for mounting and maintaining AID-sponsored projects.

Active recruitment of additional agricultural staff at the middle and lower professional levels is now in progress. The awesome task of finding and placing senior agriculturists in appropriate positions, about which more will be said in succeeding sections, remains to be undertaken.

### III. RURAL DEVELOPMENT STRATEGY 5/

At one time or another, almost everybody has put his hand to the task of defining AID strategy in the dispensation of foreign assistance. In principle a rather commonplace exercise, strategy papers have tended to become trade marts for conflicting ideas, emotions and fractured facts. It is quite inconceivable that AID can proceed without some sort of guidelines, and these various attempts to codify them, unless they compound the confusion, are worthy of every thinking person's attention.

Two recent attempts at laying down agricultural-cum-rural development policy for AID may be examined, if not as paradigms of logic, at worst as shopping lists for one's own biases. The first, entitled "AID Agricultural Development Policy" was produced by the Bureau for Program and Policy Coordination and the second, "Africa Bureau Agriculture Development Strategy Statement, with Policy Guidelines", by the Africa Agriculture and Rural Development Task Force.

Considering the diverse persuasions of the authors, these two papers are remarkable for the common ground they reached, although some of the differences are striking. The similarities are as follows:

1. Both PPC and ARD accept the Congressional directives of the last five years as given elements of AID policy affecting agricultural/rural development programs. Stated explicitly or paraphrased, these are:
  - a) To accept the slogan "Prevention of Famine -- Freedom from Hunger".
  - b) To favor the most impoverished nations and within them the rural poor.
  - c) To seek more effective participation by women in the development process
  - d) To protect the environment, or the "quality of life".

2. Both acknowledged the paramount need for developing trained manpower and stable institutions in aid-receiving nations and noted the long-term aspects of this goal.
3. Both stressed the necessity of better indigenous mechanisms for problem analysis and planning in the LDCs.
4. Maximum involvement in decision-making and action, particularly by poor farmers, was a common theme.
5. Both saw the values of a comprehensive agricultural sector approach, while citing the merits of exceptions in the form of "horizontal", "vertical" or other variations in organization in selected cases.
6. There was agreement that the introduction of Title XII into the AID program is potentially one of significant impact.
7. The present staff imbalance in AID/W and in the field was recognized in both papers, meaning that a far greater number of qualified agricultural technicians is needed throughout the organization.

From there on, the weaknesses of both presentations become more apparent and the differences widen. Except for rather indecisive reference to Title XII, neither paper attacks the staffing problem with concise, constructive recommendations. Planning receives a ringing endorsement without much direction as to how to go about it. Specific techniques for encouraging local participation, especially by women, were lacking. Increased food production was portrayed as an imperative, but the major industry of many countries, livestock, was scarcely mentioned.<sup>6/</sup>

Irrigation was another subject that received short shrift in the PPC and ARD strategy proposals. This omission probably was not an oversight. Irrigation illustrates as well as any type of

development the built-in shortcomings of global strategy, especially if it evolves into some kind of universal dogma. Most of the countries served by AID lie in regions of fairly heavy precipitation in which irrigation commands little or no priority. (Supplementary irrigation has gained increasing acceptance in some sub-humid areas of the more advanced countries, but it is usually associated with high-value crops and expansive markets, neither being characteristic of the LDCs.)

In arid regions it is quite another story. Water is about as basic to the survival of flora and fauna as can be imagined. If it is lacking or in short supply, nothing, including man, can possibly hack it. Thus the slighting of irrigation in the PPC paper brought a prompt outcry from REDSO/West Africa which called attention to the unique status of the Sahel, a region plagued not only with chronic deficiencies in moisture supplies but a host of other rare features as well.<sup>7/</sup>

A realistic approach to irrigation in arid regions does not quite entail a discarding of the textbooks, but it verges on it. Most irrigation engineers and economists in the United States consciously or otherwise, are influenced by our experience in settling and developing the American West. Yet if we accept at face value the norms established even by such sanguine agencies as the Bureau of Reclamation and the Army Corps of Engineers, there probably never would be any U.S.-supported irrigation in West Africa.

Take, for example, the Matam or Bakel projects in Senegal. Both of these appear to be virtual pearls among the swinish alternatives. And by any of a great number of calculations, the cost-benefit ratio of either would exceed by three or four times the level generally regarded as economically marginal in U.S. irrigation projects.

What do to? First, on the assumption that water must be available if people, livestock and crops are to survive, it follows

that only three alternatives are conceivable: 1) a massive population transfer to more accommodating surroundings, 2) toleration of widespread malnutrition and disease at best or death by starvation at worst, or 3) assumption of the extraordinarily high costs of providing water supplies.

The first choice must be rejected because the social and dollar costs likely would be even more prohibitive than those of the third choice. The second already has been rejected on humanitarian grounds. Hard as it may be for economists to swallow, this leaves only the choice of selecting and constructing those irrigation projects which promise to involve lower costs and higher returns than other, even less attractive undertakings - a graphic choice of evils.

Decisions of this order are naturally conducive of graying hair, ulcers and random coronaries among foreign assistance planners. But they must be faced.<sup>8/</sup> Among the minor rewards that flow from this process is that it provides a partial response to the careless charge that those who administer the AID program are overpaid.

The order of priorities in the two strategy papers contained a few anomalies. In the PPC offering, land reform, which has never received much more than lip service from AID - and likely never will - was listed as the Number One priority. Land or "asset redistribution" reform later was related to "local participatory institutions" which, in turn, were rather curiously equated with "collectives".

Planning and Policy Analysis ranks as Number Two. If this item translates, as some cynics might surmise, into continued domination of AID by program officers and their overload of paper work, it might be subject to some critical doubt. On the other hand, if it connotes intelligent staff work, especially in the missions and by host country nationals, liberally seasoned at all stages by appropriate technical inputs, it has everything to recommend it. Although one might quarrel with the interpretation of policy and

planning analysis as presented in this document as well as the weighting given to the rest of the priority list, on the whole it is a respectable categorization. We might use it as a point of departure for a priority listing of our own, unburdened by the more ponderous academic overtones and accompanied by a shorthand rationale. The list would be:

- A. Planning and policy analysis
- B. Marketing, broadly defined
- C. Research, training, extension and credit
- D. Infrastructure
- E. Inputs

#### A. Planning and Policy Analysis

From its inception, AID has been obliged to operate in an atmosphere of crisis, with little opportunity to identify and evaluate the problems to be solved before launching a premature attack on whatever the problems were supposed to be. War or the threat of it, rather than rational planning, too often has forced precipitate actions that later proved to be ill-advised and wasteful. The specter of famine, which has always excited the humanitarian instincts of Americans, brings on crash programs that sometimes leave more social and economic debris in their wake than they are able to clean up. At different times and places, "impact" projects have enjoyed fashion.

It would not be useful to dwell upon these presumed errors in strategy. Some of them may well have prevented hostile actions. Other have contributed to the image of the United States as an action-oriented nation with the means and willingness to tackle difficult problems. For the most part they have engendered trust and good will in friendly countries.

Still there is no justification for perpetuating a policy that relies heavily on targets of opportunity. AID has or can

generate a capability for more thoughtful and longer term planning than is presently the case. From the moment AID establishes a mission, a stock-taking should precede the design of a country program. It need not be a highly sophisticated enterprise, but at a minimum an inventory of human and physical resources is an essential prerequisite of developmental activities. A first approximation of priorities should underlie the most elementary programming.

For this purpose, the Development Assistance Program (DAP) is a vital instrument that, wisely, has survived the recent reduction in program documents. Far more participation by technically qualified staff in DAP preparation is clearly indicated, and the aims of the host country ought to be given fair weight.

In agriculture, a sector analysis in one form or another is indispensable.<sup>9/</sup> The bits and pieces required for assessing the agricultural sector are available in almost all African countries; it remains to assemble existing data in meaningful form and to flesh them out by additional information collection where necessary. In a logical time sequence, the sector assessment should come first. Where it has not been done or is only partially complete, every effort should be made to press ahead with the task. It is only in this way that a satisfactory foundation for program development can be constructed.

Creation of in-country statistical and analytical services should comprise an integral part of AID's business overseas. What these services may lack in drama are more than compensated for by long run benefits. Training at all levels - again one of the less exciting but most rewarding inputs - deserves most serious attention.

The well springs of planning belong in the country which it is intended to benefit. AID/Washington's role should be largely that of stimulation, technical and policy support and assistance in obtaining suitable field staff. Attempts to rule the planning

process in detail from headquarters have been a patent failure in the past. And large numbers of planners in any location are not the answer; staff quality, balanced among the arts and the sciences, is superior to bureaucratic quantity.

### B. Marketing, Broadly Defined

In the abstract, marketing may be construed simply as the linkage between producer and the consumer. Functionally, however, marketing has its roots in the decisions and practices of the farmer, its fruits in the choices available to consumers. In between, it embraces a matrix of services, inputs, policies and customs. At various points, a delineation between marketing and other supporting services is not conceptually feasible. Hence the question of placing a higher priority on marketing than on research, extension, credit, or the infrastructure is somewhat academic, and it is not the intent here to debate the matter.

The advantage in focusing initially on marketing is that, despite its complexity, it is somewhat more susceptible to manipulation over the short run than are many of the other elements in the total scheme of development. In the policy realm, for instance, adjustments in prices, subsidies or, indeed, in the construction of feeder roads, storage or processing facilities, may be made much more expeditiously than, say, developing viable research, extension or credit programs.

If development is to be enduring, it necessarily involves all of these factors, but differences in their respective time frames suggests an early attack on deficiencies in the marketing system. This is particularly relevant to African agriculture. Most African governments practice intervention in the pricing of farm products, with vital consequences for farmer incentives. Setting aside for the moment the rather notorious inefficiencies of most price control programs, the fact remains that an official price may be modified with a stroke of a pen, as may the level of subsidies. For better

or worse, therefore, marketing in its various ramifications may be likened to the cadmium bar in nuclear fission.

Certain marketing activities are characterized by rapid, high returns. Without any other major changes, a well-sited feeder road may double farm incomes in a given area within a year. Pest-proof storage may save as much as 40 or 50 percent of a grain crop. A processing plant that can be built in a few months may virtually eliminate costly spoilage of fruits, vegetables or fish. Under an astute price policy, everybody benefits from such improvements in the marketing system.

Marketing, under a broad definition, lends itself very well to a position of center piece in a comprehensive rural development program.

#### C. Research, Training, Extension and Credit

In a long-range plan, all four of these supporting services are indispensable. They are subordinate to marketing in this listing primarily because of being identified with longer periods of gestation. In specific circumstances, any one or all of these services may logically be elevated to a second or even first priority.

Research might be singled out as the principal carrier of the development burden. One recent report argues persuasively that foreign assistance should be focused on basic research to increase food production around the world.<sup>10/</sup> It proposes the establishment of a U.S. International Agricultural Development Administration. The IADA would draw heavily on American universities for staff and on the Title XII Board for policy guidance. It would be related only tangentially to AID. (This idea will be discussed later under another heading).

As the other extreme of the "crash program" syndrome, basic research suffers from a tantalizing slowness in a world crying for concrete results now. The fabulous, and by no means unfounded claims made for such facilities as CYMMIT in Mexico and IRRI in the Philippines are based as much on their sponsors' willingness to extend their findings into adaptive techniques and widespread dissemination as on their original scientific achievements.

Gains achieved through skillful experimentation have little meaning until they are translated into more food for hungry people. This hiatus persists as the most intransigent bottleneck of them all. Even in the United States, with demonstrably the most proficient extension services to be found anywhere, utilization continues to lag lamentably behind research findings. Recognition of the vast potential of research must always be tempered by the limitations inevitably encountered in its application. Thus research must continue to be regarded as a highly important but not the decisive component of agricultural development.

Training. Another in the roster of long range developmental undertakings, training becomes truly meaningful only when it is viewed across a wide spectrum. From elementary education to advanced academic training, formal and informal, short and long term, government and private, in-service and otherwise. In too many of the less developed countries, a dearth of trained people, especially in the technical and administrative fields, means that one of the most critical building blocks in the development process is missing.

How and where to begin the attack on a generalized condition of ignorance about modern technology is a formidable decision. It is deserving of the best talent available in professional educational fields, and it is not getting it. The attrition of educators in AID in the last decade has been no less damaging to foreign assistance than that of agriculturists.

The hard choices among the options for emphasis in a training program are hardly the fare of a generalist. Consider some of these options: functional illiteracy, elementary, secondary, high school, college, technical, aesthetic, the arts or the sciences and so on. Whenever retrospection offers clues, participant training may prove to have been one of the best investments ever made by AID, yet even that worthy program tends to reward those already favored in one form or another by the society of which they are a part. Another of significant value has occurred as an incidental result of employing nationals in overseas AID missions and exposing them to more efficient ways of doing business.<sup>11/</sup>

Extension. Farmer education may be carried out by a specific agency designed for that purpose, or as a part of the program of cooperative, credit or other organizations having some other activity as their primary function. In any case, extension is the delivery system for improved technology; it may or may not have the additional responsibility for providing fertilizer, seed or other physical inputs. Extension draws its strength from research and its results from demonstrating and convincing farmers to adopt useful farming techniques.

It is hard to visualize a successful agricultural program without an active extension facility, and many experienced technicians would place it in the forefront among the priorities. Here it is listed in a lower chronology purely because it is dependent upon materials from other sources for its working effectiveness.

At its best, an extension service is involved in a multiplicity of interactions. Innovative farmers often return as much or more than they receive from common pools of knowledge. It is the extension agent's task to disseminate this knowledge, whatever its origin, as expeditiously as possible. Various organizational devices are used to keep the agent close to his raw material on the one hand and to the farmer's problems on the other. AID has achieved some outstanding successes by encouraging joint administration of

agricultural colleges and the research and extension services.<sup>12/</sup>

Credit. In many respects, credit is the most crucial of all the farm services. Whether it is provided by the banking system, cooperatives or private money lenders, no farm program can thrive without it.

Farm credit is dimly understood by a lot of knowledgeable people, including altogether too many farmers who have no idea of its true cost under usurious lending practices.<sup>13/</sup> Whether it is supplied on reasonable or extortionate terms, however, credit is a prime moving force behind farm production.

Credit also has another singular quality. It serves extraordinarily well as a binder for a wide range of other goods and services and is a useful tool for expanding participation by the farm family in rural affairs. Multi-purpose cooperatives, for example, may not only furnish credit to their members but educational guidance, production inputs, consumer goods, marketing and social services as well. Credit in some form is found in every society, and no agricultural development program can afford to neglect it.

#### D. Infrastructure

Transportation, communications and the physical aspects of land, water and energy development must be evaluated in relation to the other priorities, and their importance will vary greatly from one region to another.

In some countries (e.g., India) railroad transport may enjoy certain advantages over highways. In most African countries, secondary and tertiary road construction returns handsome dividends. Elsewhere, along streams with a dependable year-round flow, water transport may be most economical.

In areas otherwise well developed (Taiwan) rural electrification - bringing as it does a train of demand for other consumer goods - is an excellent investment. Similarly, in parts of the Philippines (Mindanao) the presence of first-rate hydroelectric sites provides opportunities for low-cost electricity for great numbers of people.

The amount and seasonal distribution of precipitation usually determines the relative economy of irrigation. If water supplies can be obtained in no other practicable way, heavy construction costs for irrigation may be justified; as already noted, this is true in parts of West Africa.

Questions concerning the infrastructure frequently involve the economics of place and are thus linked to marketing and access to input and consumer supplies. In this context, treatment of land, water and soils ordinarily entails physical construction or modification and hence substantial initial overhead. Slight wonder, therefore, that economic planners approach such projects with skepticism based on experience. Further, the follow-up costs (operation and maintenance) may nullify an investment that appears to be sound at the outset.

In a real sense, decisions having to do with the infrastructure bring us back to Square One - planning and policy analysis.

#### E. Inputs

Production inputs (quantities, composition, supply methods) have meaning only in terms of the variables of environment. Worldwide, the order of their value and facility of application would be about as follows: 1) fertilizer, 2) improved seed, 3) farm equipment, 4) insecticides and pesticides and 5) herbicides. Lime might be added in areas of acid soils and where cheap supplies of lime are available. Various other soils conditioners are used in the more advanced countries, but have little relevance in the LDCs. Availa-

bility of water is assumed.

It is impossible to generalize about the relative benefits of the different inputs. Fairly constant rules of thumb may be knocked awry by shifting price relationships. The three major nutrients of fertilizer - nitrogen, phosphate and potash (NPK) - may be expected to increase grain yields in ratios of about 4:1, 3:1, and 2:1, respectively, per kilogram of fertilizer used. Until the energy crisis sent fertilizer prices soaring, while grain prices remained close to the same level, fertilizer use was a high-return investment almost anywhere. This may no longer hold in marginal areas, and these must be analyzed on an area-by-area basis.

A similar rationale obtains with respect to the introduction of animal traction and the equipment that accompanies it. The validity of substituting animal or mechanical power for human labor depends upon a host of variables: the supply of labor and its opportunity cost, pricing of the animals or the equipment, product prices and the relative efficiencies of power sources. Use of insecticides must be weighed against environmental hazards and the cost of improved seed against anticipated increases in yields.

As often as not, it is institutional factors rather than economics that govern the returns from any particular input. The capacity of government or private agencies to distribute fertilizer or seed in a timely fashion may outweigh the agronomic results. Price policies, subsidies, storage, marketing and a wide range of man-made factors may alter any given set of physical relationships.

IV. THE SIZE OF THE JOB

Of the various ways of measuring technical manpower needs for African agricultural development, present and projected dollar outlays perhaps offer the most concise insights. One set of summaries recently prepared by the Agriculture and Rural Development Office in the Africa Bureau presents the data on AID expenditures for food and nutrition grants and loans for FY 77 and 78 and, based on Annual Budget Submissions, the proposed levels for FY 79 (See Annex).\* In addition to the annual displays, the data are broken down by regions and program categories.

The tables serve several useful purposes. They indicate the drift in program emphasis, as well as trends in money costs, and they provide a degree of guidance for the recruitment and placement of Washington and field staff. The latter is our principal objective.

Parenthetically, the troublesome aspects of classification in such summaries as these should be flagged (but not allowed to stand in the way of useable approximations of staff needs and numbers). For example, references to "Africa" itself can be misleading; in this context, it relates to the region served by the Africa Bureau of AID, and is exclusive of the northern tier of countries for which the Near East and South Asia Bureau is responsible. The classifications as to program emphasis are inescapably arbitrary and might be questioned by any persevering purist intent on missing the point. Overlapping functions are unavoidable. The Africa Bureau now deals with four instead of three regions as shown in the tables, due to the administrative separation of Eastern and Southern Africa. Finally, upward and downward phasing of specific country programs is a constant process that inhibits the continuity of projections.

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\*This writer is indebted to Winton Fuglie of AFR/DR/ARD for the use of this material but accepts full responsibility for the interpretations.

After allowing for all of these caveats, a clear picture emerges: AID involvement in African agricultural development is expanding and will continue to do so for the indefinite future. It follows that the staff to support current and prospective activities in this field, already short, will soon be hopelessly inadequate unless prompt and decisive actions are undertaken to fill the gap.

#### A. Dollar Outlays

Under the assumption that the Annual Budget Submissions are realistic, grants and loans for African agricultural projects will increase by more than 100 percent between FY 77 and FY 79, a rise from \$115 to \$278 million. Although it is not uncommon for ABS estimates to be reduced in actual appropriations, the addition of a single new program (in the Sudan, for example) could easily offset reductions in present calculations. As a working guide, therefore, it may be assumed that the African agricultural program will be doubled in the next two or three years. It is apparent that a corresponding expansion in agriculturally-trained staff will be needed.

#### B. Number of Projects

Another method for gauging staff requirements is by a simple count of agricultural projects and projects closely related and contributory to agriculture. This measure gives the following results:

	<u>AID-Supported Projects in Agriculture</u>		
	FY 77	FY 78	FY 79*
Eastern-Southern Africa	28	25	34
Central-Anglophone West Africa	23	23	41
Sahel-Francophone West Africa	31	63	71
Regional	<u>6</u>	<u>7</u>	<u>6</u>
Total	88	118	152

\*From ABS data. Does not include Sudan, Somalia and Rwanda.

These data, while showing an increase in the number of projects of only 73 percent, nevertheless indicate that the average cost in AID grants and loans will increase by about \$4 million per project. Thus the need for quality administration and management of agricultural projects will be greater than ever.

It would be difficult to relate trends in program emphasis to the priorities already proposed, although this is a subject that merits continuing study. Bearing in mind that a three-year period is a short time for coming to grips with long range planning, the attached tables indicate:

- 1) An irregular increase in the utilization of planning and data systems.
- 2) A predominance of and substantial gain in projects associated with institution-building and increased production (The lumping together of these two categories might be questioned).
- 3) A decline in projects aimed at broadening access to needed inputs and services.
- 4) A declining interest in the rural infrastructure.

In individual cases these apparent trends may be deceptive. For example, road building in Ethiopia and Kenya accounted for allocations of more than \$11 million in FY 77. These are non-recurring investments that tend to distort straight trend analysis for the continent as a whole. Variations in regional patterns of expenditures probably are more a reflection of political demands than of methodical planning.

Once more, the point is that the overall direction in agricultural development activities is upward and logically must be accompanied by strengthening of staff capabilities.

### C. Country-by-Country Analysis

Table 1 is a compilation of estimated needs for technical agricultural manpower in the African missions, developed country-by-country and for the three regions currently in administrative use. This is a difficult approach to the problem, entailing as it does a series of assumptions concerning U.S. relations with specific governments, future programming demands, interest shown by host countries and mission leadership and, eventually the availability of qualified individuals to fill the posts as they are identified.

Two obstacles must be overcome at the outset. One is the obsession with maintaining a "low American profile" overseas, which enjoyed wide currency in the late 1960's and early 1970's. This policy, while applicable in unique circumstances, is of doubtful validity when it is pursued indiscriminately and without regard to the pressing needs of most African countries. The low profile notion was injected into our foreign operations by the top decision makers in the government. It follows that the policy must be re-examined and moderated at comparable levels. To this writer, it makes no sense to limit the number of specialists required for the task of economic development simply because bilateral rapport is equated with an inconspicuous American presence. The belief is unfounded in most instances and, in any case, it runs counter to the proposition that AID is responsible for seeing to it that U.S. funds are well spent.

The second obstacle is the capricious imposition of personnel ceilings, a practice too often followed in the past to thwart healthy adjustments in development programs and common sense in a single stroke. Selection of numbers and grades of people to do a job should be a derivative of sound planning, not a pox upon it. Among the other weaknesses of arbitrary ceilings is that they tend to confer powers of selection and deployment on persons who are poorly equipped for the assignment. Critical personnel actions are a function of management, not of personnel officers.

Under the presumption that it will be possible to cope with the above obstacles, Table I presents an illustrative distribution of personnel requirements for Africa in the technical agricultural field. Further underlying these figures are these assumptions:

1. Each Agriculture Division will be headed by a senior Agricultural Development Officer who reports directly to the Mission Director (Synonymous with senior AID officer regardless of present title).
2. In the active missions, there will be a Deputy Agricultural Development Officer.
3. Other specializations will vary according to the needs of the mission, but will favor the fields of agricultural economics, agronomy/plant sciences, livestock, sociology and home economics.
4. Within the limits of availability, use of IDIs will be encouraged, both for their present value and as replacement material for professionals.
5. Tentative provision is made for countries in a state of political transition (e.g., Rhodesia, Ethiopia, Mozambique, Central African Empire), even though precise requirements cannot be determined at present.
6. The activities of regional offices will be phased down, or eliminated, and largely confined to special services (e.g., logistical support, legal, cultural anthropology, hydraulic engineering).
7. Qualified women will be added to most staffs, in home economics or any other field where their competence is apparent, in direct proportion to demonstrated need.
8. Each Agriculture Division will be strongly supported by technical backstopping services in AID/Washington, and a continuing system of communications and reporting will be established between the two.

With these factors in mind, the overall total rises from 94 to 178 agricultural technicians in the countries served by the Africa Bureau. This calculation, made separately from those based on expenditures and projects, nevertheless approximates the ratio of 2:1 - proposed to present staff requirements - determined by the other means.

Thus a substantial recruitment undertaking is in the offing. For a variety of reasons, direct-hire, career-oriented individuals should receive first call, but all sources -- USDA, personal services, university and IQC contractors, IPAs and PASAs -- should be tapped according to availability. In addition, lateral transfers from other regions and from the shakeout resulting from the expected re-organization of AID/Washington should be exploited.

TABLE 1. SCHEMATIC DISTRIBUTION, AID TECHNICAL AGRICULTURAL PERSONNEL, PAST AND PROPOSED, AFRICA REGIONS, 1977

<u>Eastern-Southern Africa</u>	<u>Past<sup>1/</sup></u>	<u>Proposed<sup>2/</sup></u>
Ethiopia	6	6
Kenya	7	14
Somalia	-	4
Sudan	-	12
Tanzania	8	14
REDSO East	4	-
OSARAC 3/	7	-
Lesotho	-	6
Botswana	-	6
Swaziland	-	4
Malawi	-	4
(Mozambique, Namibia, Rhodesia)	-	6
Sub-total	<u>32</u>	<u>76</u>
 <u>Central-Anglophone West Africa</u>		
Cameroon	7	11
Ghana	4	6
Liberia	3	8
Africa Wide Regional (Plus Portuguese Speaking Africa)	1	4
Nigeria	2	1
Zaire	3	8
Sierra Leone	-	3
Burundi	-	2
Rwanda	-	2
Central African Empire	-	3
Sub-total	<u>20</u>	<u>48</u>
 <u>Sahel-Francophone West Africa</u>		
Chad	5	7
Mauritania	-	2
Area Development Office, Dakar	8	12
Upper Volta	6	10
Area Development Office, Niamey	6	7
Mali	6	11
Regional Economic Development Service Office, WA	11	-
CILSS, Bamako 4/	-	5
Sub-total	<u>42</u>	<u>54</u>
 TOTAL	 <u>94</u>	 <u>178</u>

## TABLE I continued ...

- 1/ Based on recommended levels, Motheral-Davis report, July 1976, in some cases modified by the February 1977 staffing pattern. Includes vacancies and positions not yet established but considered essential. Also includes IDIs but not secretarial or other supporting services.
- 2/ Based on requirements of projects: a) under implementation; b) well advanced toward final approval and c) those included in Annual Budget Submissions, FY 79, which are likely to be favorably received. (See text for discussion of criteria).
- 3/ It is assumed that within the foreseeable future a) OSARAC will not be needed for most technical services and b) the countries indicated will be staffed up to ordinary mission strength.
- 4/ Assumes a) that REDSO/WA will not be needed for most technical services and b) that CILSS, for which commitments are already made, will fill most of the gap.

## V. THE STAFF TO DEAL WITH IT

### A. Field Missions

Last year, an attempt was made to estimate numbers and types of personnel required to support a viable agricultural program in Africa.<sup>14/</sup> For the three regions then established, adjustments from present to proposed field positions were suggested as follows:

	<u>Present</u>	<u>Proposed</u>
Eastern-Southern Africa	25	36
Central-Anglophone West Africa	17	20
Sahel-Francophone West Africa	27	38
Total	69	94

It was noted then, and should be emphasized now, that these recommendations were conservative; they are even more so today. Southern Africa has assumed a position of such prominence that it was separated for administrative purposes from Eastern Africa. Total budgetary costs have risen in all regions. New and reactivated programs in certain countries have emerged. At least eight authorized positions were then vacant in field missions. In most cases, the staffs on hand were badly overextended and were receiving insufficient support from the depleted AID/Washington backstop unit and contract and PASA employees.

In view of the expanding program and more serious official recognition of agricultural problems, the 1976 proposals were puny indeed! It is therefore recommended that the total field staff for agriculture be increased to a minimum of 178. This translates into an immediate recruitment of about an additional 80 professionals for field assignment, including IDIs. The precise distribution of new staff, by specialists and countries, must be determined on a case-by-case basis and, considering the rapidity of changes occurring in Africa, should be flexible.

Nothing has occurred to alter radically the 1976 recommendations for distribution of personnel among the regions by job categories. These were identified in general terms as follows:

PROPOSED POSITIONS, 1976				
	Eastern- Southern Africa	Central- Anglophone West Africa	Sahel- Francophone West Africa	Total
Agricultural Development Officer	7	6	7	20
Technical Specialist	2	3	6	11
Agricultural Economist	5	1	3	9
Assistant Agricultural Development Officer	11	1	0	12
Project Manager, Agriculture	7	5	16	28
International Development Intern	4	4	6	14
Total	36	20	38	94

If there is to be any hope of coping with the workload already in sight, each of these numbers must be raised by 50-100 percent. The figures are useful in identifying the relative magnitudes involved, indicating that each mission engaged in agricultural programs of any scope should be staffed about as follows:

- Agricultural Development Officer
- Deputy Agricultural Development Officer
- Agricultural Economist/Farm Management/National Planning Expert
- Plant Scientist/Agronomist
- Livestock/Range Specialist
- Extension/Sociology
- Finance/Cooperation
- Project Managers - numbers dependent on number of projects

- Home Economist
- IDIs - optional numbers

As the senior agriculturist in the mission, the Agricultural Development Officer is the key figure. His field of specialization within agriculture is less important than the breadth of his experience, his maturity and demonstrated ability as a planner/administrator of agricultural programs.

Within limits and in consonance with differing conditions among countries, the other positions are roughly interchangeable. Taking into account the effective loss of staff time because of annual, home and sick leave, absences for supplementary training, plus frequent cases of dead time attributable to recruitment, retirements, resignations and transfers, a total agricultural staff in major missions of 10 - 12 positions is close to an irreducible minimum. In practice, this number may represent no more than 8 man years in a 12-month period. As a general rule, no project manager should be responsible for more than 2 projects. The 3 previous regions would be converted to 4.

#### B. Washington Staff

The Agricultural and Rural Development Office, Africa Bureau, should have authority for and be responsible for planning, implementing and evaluating all programs/projects in agriculture and fisheries, including rural development related to agriculture. Within this sphere, responsibilities would include full participation in:

1. Formulation and interpretation of relevant policies
2. Planning and program analysis
3. In collaboration with the field staff, project identification and formulation
4. Review and feasibility determination of all proposals
5. Professional backstopping of field staff
6. AID/W management/monitoring of programs/projects

7. Arranging for consultants and contractors
8. Maintaining liaison with other Agency offices, institutions and the professional community
9. Recommending and participating in selection/assignment of personnel.

In order to discharge these duties, the Office would require the following positions:

1. Head of Office
2. Deputy
  - Secretary
  - Administrative Assistant

Eastern Africa

3. Agricultural Development Officer
4. Assistant Agricultural Development Officer
  - Secretary
  - IDI

Central West Africa

5. Agricultural Development Officer
6. Assistant Agricultural Development Officer
  - Secretary
  - IDI

Sahel-Francophone Africa

7. Agricultural Development Officer
8. Assistant Agricultural Development Officer
  - Secretary
  - IDI

Southern Africa

9. Agricultural Development Officer

10. Assistant Agricultural Development Officer  
 Secretary  
 IDI

Agricultural Planning, Policy and Analysis

11. Agricultural Development Officer (Planning)  
 12. Assistant Agricultural Development Officer  
 13. Agricultural Economist  
 14. Agricultural Economist  
 15. Rural Sociologist  
 16. Home Economist  
 Secretary  
 Clerk/Typist  
 IDI

Scientific Support

17. Agronomist  
 18. Livestock Specialist  
 19. Agricultural Engineer  
 20. Soils Specialist  
 21. Extension Specialist.  
 Secretary  
 Clerk/Typist  
 IDI

TOTALS

21 Officers  
 7 Secretaries  
 2 Clerk/Typists  
 6 IDIs  
 1 Administrative Assistant

For the Agriculture and Rural Development Office to perform its functions effectively and be responsive to the field offices, at least two actions are critical. First, the number of professional

officers must be increased; along with an increase in numbers, the mix capability and level of professionals are highly relevant. Second, the office must be structured within the Bureau so as to promote efficient professional support to the field operations.

Of all the deficiencies identified or implicit in this report, the foremost needing correction is not susceptible of quantification. It is an attitude, a mind set fostered by those who have no real understanding of, or compassion for agriculture or the millions who toil on farms around the globe. It will require the strongest kind of administrative direction from the top to modify this passive view of the world's most basic industry and its practitioners. Until the priority of agriculture receives serious acceptance, as opposed to rhetoric, AID will continue to fall short as an instrument for enhancing the lives of people in impoverished nations.

Organization is central to a solution of this problem. Those trained in agriculture rightly complain that they have no effective voice in AID policy making and implementation. And the dearth of agriculturists in key positions is ample confirmation of the validity of this complaint. An organizational structure that assures participation by persons knowledgeable of agriculture would go a long way toward righting the present imbalance.

Without knowledge of the eventual form of Agency-wide organization, it is difficult to prescribe for the Africa Bureau. However, as a starter, the position heading the Agriculture and Rural Development unit should be elevated to the level of Director of an Office. This implies that the Directorship of Development Resources, a position concerned predominantly with agriculture, would be raised to that of Associate Assistant Administrator. Similar conversions throughout AID would tend to place agriculture in a role consonant with its importance.

NOTE: This report was reviewed in draft by the ARD staff and many constructive suggestions were offered. The critique, however, did not alter the main substance of the report. Therefore in the interest of bringing these views before others in AID during this period of transition, the findings are being submitted without taking full cognizance of the preliminary criticism. The latter will be dealt with in a separate memorandum.

ANNEX I

FOOTNOTES

FOOTNOTES

- 1/ "The Role of Agriculture in the Economic Development of Africa, with Emphasis on Technical Manpower Requirements", Joe R. Motheral and Donald Davis, December 1976.
- 2/ A logical extension of the philosophy supporting this observation would relegate agronomic judgments to history majors, range management to political scientists, irrigation projects to cultural anthropologists, health programs to retired filling station attendants and school curricula to the morticians. If these examples seem far fetched, it is suggested that the reader examine in detail the background of many of those who occupied key decision-making positions during this interregnum.
- 3/ State 080342, April 9, 1977.
- 4/ State 136885, June 3, 1977.
- 5/ Word usage becomes important only when variants in language affect strategic considerations. Without belaboring the semantics, it should be observed that the term "rural development" is used in lieu of "agricultural development" for the excellent reason that people are complex organisms whose aspirations are not limited to crop and livestock production, nor even to the enhancement of real income. The interplay between income and non-income goals is far too intricate for proper analysis here, but the point is that a bare-bones interpretation of "agriculture" is too confining for the real world.

The obvious hazard in employing the broader phrase "rural development" is that it opens the way to crowding every special interest fantasy under a single heading, with a consequent erosion of priorities and loss of the very concentration of effort required for effective project results.

To assume that increased efficiency in agricultural production lies at the heart of rural well-being is not to deny the values of the other corollary elements of a better life. It is rather to place into perspective the means by which given ends are achieved. Put another way, it is to minimize wastage of resources.

The current rage over poor farmers, health, environment and women's rights is an expression of uneasiness (and sometimes, unfortunately, of opportunism) about laudable objectives too long suppressed. There is nothing inconsistent, however, about focusing on the primary instruments for supporting these activities while recognizing that the one is not exclusive of the other. To encumber every agricultural project with large expenditures for welfare would be, as demonstrated in innumerable community development efforts of the past, to hamper the project with operational anarchy.

6/ On this score, the authors are due a measure of charity. Livestock perhaps represents the most intractable example and the component of agricultural development least susceptible to dramatic improvement of any in the conventional catalogue of subsectors. The reasons are about as numerous as the experts. For instance, the maturation cycle of the large animals is about five times as long as that of annual crops and, hence, about five times as difficult to alter. For the same reason, land tenure, which is so frequently keyed to annual agreements, is wholly unsuited to the requirements of livestock production.

In the competition for land resources, livestock are disadvantaged in that input requirements are roughly seven times as high, pound for pound of product, as are foods grown for direct human consumption, notwithstanding the superiority of meat and milk as a source of protein.

To add to the complications, livestock producers -- especially nomadic herdsman -- are a special breed. Celebrated for their indomitable character and the survival capacities both of themselves and their charges, they are often the despair or range management specialists. Having weathered a hostile environment over the centuries, they are understandably loath to accept the counsel of a fresh college graduate. Indeed, those who would summarily modify the periodic ravaging of sparse vegetation by these sturdy iconoclasts had best be prepared for vigorous opposition.

The care of livestock is more demanding than that of most crops. Moreover, marketing and the processing that proceeds it entails a generally higher level of technology than, say, the cereal grains, and its transfer to "primitive" people is more difficult.

Finally, in those countries influenced by the former European colonial powers, livestock programs historically have tended to begin and end with the dominance of the veterinary sciences. Breeding, nutrition, water and range management usually command lower priorities than disease control. This factor is highly significant in the design of livestock projects for Africa.

7/ A management survey team is currently studying the structure and procedures of Africa/DR. Its first draft paper expressed puzzlement over the role of the AID unit responsible for Sahel development (SDA); it seemed to fit no standard slot in the organization chart of the Africa Bureau. The answer to that understandable bit of dismay is that the Sahel cannot and should not be crammed into a conventional organization plan. The Sahel is unique among the regions of the world whether measured economically, physically, socially, politically or otherwise. It differs historically from all others and literally has its own Lingua Franca. It is no happenstance that SDA defends and receives its budget separately from the rest of Africa. Only the most

generalized criteria of prudent management may safely be applied to the Sahel program.

Thus we are presented with a mutation that simply does not lend itself to stereotyped treatment. There are others, though few if any quite as distinctive as the Sahel. The moral is that development priorities must always be projected against a background of widely different regional conditions. It also underlines the wisdom of a strong field staff with the competence to devise regionally adapted strategies and to pursue them through the program-policy-project cycle. The perils of an impartial application of global strategy was never more apparent than in this case.

- 8/ The epic example of tough decisions falling in this category was the Indus Basin settlement of 1960, which finally engaged the combined resources of India, Pakistan and an assortment of multi-lateral, bilateral and private agencies in the greatest engineering works in history. It was labeled a political settlement, the main purpose of which was to prevent a bloody war in the Asian Subcontinent. (Technically, in this it failed, but it unquestionably mitigated a worse disaster).

If assessed by orthodox cost-benefit analysis, the Indus Basin accord was patently uneconomical. Indeed, in compliance with U.S. legislation, a Presidential waiver was obtained before construction was authorized. During negotiations, however, the sponsors of this unprecedented endeavor presented a cogent argument to the effect that moving some 50 million people and replicating the infrastructure to support them would be even more costly than the enormous task of rehabilitating the Basin, which was rapidly becoming uninhabitable.

- 9/ Op. Cit., "The Role of Agriculture in the Economic Development of Africa", pp. 13-14.
- 10/ "Building more Effective National Systems in Developing Countries to Increase Food Production, Improve Nutrition, and Promote Rural Development", Office of Technology Assessment, Congress of the United States, January 1977.
- 11/ For example, Koreans were introduced to double-entry bookkeeping and the principle of the independent audit by the U.S. Operations Mission. Farmers there learned to grow vegetables without the contamination of night soil under a demanding procurement program of the Eighth U.S. Army. English became a highly useful second language for thousands, and many a Korean acquired a university degree while working as a USOM employee.
- 12/ Americans pride themselves on their inventive natures, but it is the dynamic exploitation of ideas from everywhere that has been the mainstay of U.S. economic development. One exception is what

might be called the "Land-Grant College-USDA Model". This is a pure American invention which, except where it has been transplanted, has no equal as an organizational device for promoting explosive agricultural productivity. The huge periodic surpluses of farm products in this country, which, ironically, have plagued the policy makers for so long, are a direct derivative of this unparalleled system. The conception of farm experience, academic learning, research and extension as one interrelated, ongoing process is novel among the nations and more than anything else accounts for the long lead in productivity enjoyed by American agriculture.

Transfer of this exceptional methodology to the LDCs is often made difficult by the addition of the latter to administrative compartmentalization among the different service components. For instance, in many countries, the agricultural colleges are under the aegis of a Ministry of Education while research and extension are directed, sometimes independently, by a Ministry of Agriculture. In extreme cases there is hardly any dialogue among the functionaries of the three services.

- 13/ In one overseas mission, an executive who had surfaced under the ill-starred "Operation Tycoon" once heatedly demanded to know when the farmers in Country X were going to be independent and would no longer require any credit. He was told that this was a matter of conjecture, but that during the preceding 30 years, American farmers, who had racked up the highest growth of productivity in history, increased their volume of credit by 1,000 percent!
- 14/ Op.cit., "The Role of Agriculture in the Economic Development of Africa, etc." (Annexes 4-9)

ANNEX II

TABLES

A F R I C A

TABLE - 1 A.I.D. DEVELOPMENT ASSISTANCE, FOOD & NUTRITION GRANTS, EMPHASIS BY CATEGORY,  
FY 77-79 AND PROPOSED LEVELS (\$000) 1/

<u>PROGRAM CATEGORIES</u>	<u>FISCAL YEARS</u>					
	<u>FY 77</u>		<u>FY 78</u>		<u>FY 79<sup>2/</sup></u>	
	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
<u>1. PLANNING &amp; DATA SYSTEMS</u>	<u>6,294</u>	<u>8.0</u>	<u>23,151</u>	<u>13.2</u>	<u>25,522</u>	<u>11.4</u>
<u>2. INSTITUTION BLDG. &amp; INCREASING PRODUCTION</u>	<u>46,069</u>	<u>58.2</u>	<u>116,735</u>	<u>66.7</u>	<u>168,283</u>	<u>75.2</u>
a. Research Oriented	( 4,804)	( 6.1)	( 13,931)	( 8.0)	( 27,781)	( 12.4)
b. Human Res. Development-Schools, Univ- Men's (Training - Fac.)	(11,142)	(14.1)	( 13,438)	( 7.7)	( 23,023)	( 10.3)
c. Extension-Rainfed Crops	( 6,919)	( 8.7)	( 17,667)	(10.1)	( 24,359)	( 10.9)
d. Extension-Irrigated Crops	( 4,780)	( 6.0)	( 16,580)	( 9.5)	( 14,610)	( 6.5)
e. Extension-Livestock/Fish	( 7,283)	( 9.2)	( 13,172)	( 7.5)	( 22,575)	( 10.1)
f. Rural Development Oriented	(11,141)	(14.1)	( 41,947)	(24.0)	( 55,935)	( 25.0)
<u>3. BROADENING ACCESS TO NEEDED INPUTS/SERVICES</u>	<u>8,300</u>	<u>10.5</u>	<u>8,660</u>	<u>4.9</u>	<u>8,074</u>	<u>3.6</u>
a. Marketing/Storage/Coops	( 4,669)	( 5.9)	( 4,558)	( 2.6)	( 2,475)	( 1.1)
b. Input Procurement Distribution	( 728)	( .9)	( 1,535)	( .9)	( 1,815)	( .8)
c. Rural Industry Development	( - )	( - )	( 1,000)	( .6)	( 1,000)	( .4)
d. Credit Programs	( 2,903)	( 3.7)	( 1,567)	( .9)	( 2,784)	( 1.2)
<u>4. RURAL INFRASTRUCTURE</u>	<u>18,476</u>	<u>23.3</u>	<u>26,515</u>	<u>15.1</u>	<u>21,829</u>	<u>9.8</u>
a. Roads	15,601	19.7	17,993	10.3	10,530	4.7
b. Irrigation/Water Supplies	1,750	2.2	1,400	.8	4,575	2.0
c. Resource Mgmt/Conservation	1,125	1.4	7,122	4.1	6,724	3.0
TOTAL GRANTS	79,139	100.0	175,061	100.0	223,708	100.0
TOTAL LOANS	35,800		34,400		54,250	

1/ Includes Sahel Development & Security Support. A few projects not listed under FN heading in ABS's Also in  
2/ Taken from Mission submissions and are preliminary.

EAST AND SOUTHERN AFRICA

TABLE - 2      A.I.D. DEVELOPMENT ASSISTANCE, FOOD & NUTRITION GRANT EMPHASIS BY CATEGORY,  
FY 77-79 AND PROPOSED LEVELS (\$000)

<u>PROGRAM CATEGORIES</u>	<u>FISCAL YEARS</u>					
	<u>FY 77</u>		<u>FY 78</u>		<u>FY 79</u>	
	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
<u>1. PLANNING &amp; DATA SYSTEMS</u>	<u>653</u>	<u>2.4</u>	<u>1,560</u>	<u>4.2</u>	<u>5,792</u>	<u>13.9</u>
<u>2. INSTITUTION BLDG. &amp; INCREASING PRODUCTION</u>	<u>11,709</u>	<u>43.2</u>	<u>32,032</u>	<u>85.5</u>	<u>31,124</u>	<u>75.1</u>
a. Research Oriented	( 1,782)	( 6.6)	( 3,437)	( 9.2)	( 6,885)	(16.6)
b. Human Res. Development-Schools, Univ.- Men's (Training - Fac.)	( 2,640)	( 9.7)	( 3,477)	( 9.3)	( 3,441)	( 8.3)
c. Extension - Rainfed Crops	( 1,125)	( 4.1)	( 1,000)	( 2.7)	( 2,636)	( 6.4)
d. Extension-Irrigated Crops	( - )	( - )	( - )	( - )	( - )	( - )
e. Extension-Livestock/Fish	( 3,546)	(13.1)	( 2,939)	( 7.8)	( 2,773)	( 6.7)
f. Rural Development Oriented	( 2,616)	( 9.6)	(21,179)	(56.6)	(15,389)	(37.1)
<u>3. BROADENING ACCESS TO NEEDED INPUTS/SERVICES</u>	<u>2,046</u>	<u>7.5</u>	<u>2,662</u>	<u>7.1</u>	<u>3,394</u>	<u>8.2</u>
a. Marketing/Storage/Coops	( - )	( - )	( - )	( - )	( - )	( - )
b. Input Procurement/Distribution	( 728)	( 2.7)	( 1,535)	( 4.1)	( 1,815)	( 4.4)
c. Rural Industry Development	( - )	( - )	( - )	( - )	( - )	( - )
d. Credit Programs	( 1,318)	( 4.9)	( 1,127)	( 3.0)	( 1,579)	( 3.8)
<u>4. RURAL INFRASTRUCTURE</u>	<u>12,723</u>	<u>46.9</u>	<u>1,195</u>	<u>3.2</u>	<u>1,128</u>	<u>2.7</u>
a. Roads	(11,148)	(41.1)	( - )	( - )	( 250)	( 0.6)
b. Irrigation/Water Supplies	( 450)	( 1.7)	( - )	( - )	( - )	( - )
c. Resource Mgmt/Conservation	( 1,125)	( 4.1)	( 1,195)	( 3.2)	( 878)	( 2.1)
 TOTAL GRANT	 27,131		 37,449		 41,438	
 TOTAL LOANS	 24,300		 20,400		 21,000	

Does not include Sudan.

S A H E L

TABLE - 3 A.I.D. DEVELOPMENT ASSISTANCE, FOOD & NUTRITION GRANT EMPHASIS BY CATEGORY  
FY 77-79 AND PROPOSED LEVELS (\$000) 1/

PROGRAM CATEGORY	FISCAL YEARS					
	FY 77		FY 78		FY 79	
	\$	%	\$	%	\$	%
<u>1. PLANNING &amp; DATA SYSTEMS</u>	<u>2,798</u>	<u>8.9</u>	<u>20,070</u>	<u>17.9</u>	<u>17,612</u>	<u>11.8</u>
<u>2. INSTITUTION BLDG. &amp; INCREASING PRODUCTION</u>	<u>23,768</u>	<u>75.5</u>	<u>67,967</u>	<u>60.5</u>	<u>113,558</u>	<u>75.9</u>
a. Research Oriented	( 300)	( 1.0)	( 3,934)	( 3.5)	( 13,517)	( 9.0)
b. Human Res. Development-Schools, Univ.- Men's (Training-Fac.)	( 5,050)	( 16.0)	( 6,133)	( 5.5)	( 12,942)	( 8.6)
c. Extension-Rainfed Crops	( 4,994)	( 15.9)	(16,222)	(14.4)	( 20,431)	(13.6)
d. Extension-Irrigated Crops	( 4,780)	( 15.2)	(16,580)	(14.8)	( 14,610)	( 9.8)
e. Extension-Livestock/Fish	( 3,619)	( 11.5)	(10,233)	( 9.1)	( 19,642)	(13.1)
f. Rural Development Oriented	( 5,025)	( 16.0)	(14,865)	(13.2)	( 32,416)	(21.7)
<u>3. BROADENING ACCESS TO NEEDED INPUTS/SERVICES</u>	<u>3,419</u>	<u>10.9</u>	<u>1,678</u>	<u>1.5</u>	<u>500</u>	<u>.3</u>
a. Marketing/Storage/Coops	( 3,419)	( 10.9)	( 1,678)	( 1.5)	( 500)	( .3)
b. Input Procurement/Distribution	( - )	( - )	( - )	( - )	( - )	( - )
c. Rural Industry Development	( - )	( - )	( - )	( - )	( - )	( - )
d. Credit Program	( - )	( - )	( - )	( - )	( - )	( - )
<u>4. RURAL INFRASTRUCTURE</u>	<u>1,500</u>	<u>4.7</u>	<u>22,650</u>	<u>20.2</u>	<u>18,026</u>	<u>12.0</u>
a. Roads	( 1,500)	( 4.7)	(16,723)	(14.9)	( 10,280)	( 6.9)
b. Irrigation/Water Supplies	( - )	( - )	( - )	( - )	( 2,900)	( 2.0)
c. Resource Mgmt/Conservation	( - )	( - )	( 5,927)	( 5.3)	( 4,846)	( 3.2)
TOTAL GRANTS	31,485	100.0	112,365	100.0	149,696	100.00
TOTAL LOANS	-		2,000		16,100	

1/ Includes Chad, Niger, Upper Volta, Mali, Mauritania, Senegal, The Gambia, OHVS, Entente Area and Regional Sahel Development Program Projects.

O A W A

TABLE - 4 A.I.D. DEVELOPMENT ASSISTANCE, FOOD & NUTRITION GRANT EMPHASIS BY CATEGORY,  
FY 77-79 AND PROPOSED LEVELS (\$000) 1/

<u>PROGRAM CATEGORIES</u>	<u>FY 77</u>		<u>FY 78</u>		<u>FY 79</u>	
	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
<u>1. PLANNING &amp; DATA SYSTEMS</u>	<u>2,758</u>	<u>17.8</u>	<u>1,436</u>	<u>8.5</u>	<u>2,018</u>	<u>9.0</u>
<u>2. INSTITUTION BLDG. &amp; INCREASING PRODUCTION</u>	<u>5,870</u>	<u>37.9</u>	<u>9,926</u>	<u>58.7</u>	<u>15,107</u>	<u>67.0</u>
a. Research Oriented	( - )	( - )	( 2,750)	( 16.3)	( 3,385)	( 15.0)
b. Human Res. Development-Schools, Univ.- Men's (Training-Fac.)	( 2,452)	( 15.8)	( 1,828)	( 10.8)	( 5,640)	( 25.1)
c. Extension-Rainfed Crops	( 800)	( 5.2)	( 445)	( 2.6)	( 1,292)	( 5.7)
d. Extension-Irrigated Crops	( - )	( - )	( - )	( - )	( - )	( - )
e. Extension-Livestock/Fish	( 118)	( 1.0)	( - )	( - )	( 160)	( .7)
f. Rural Development Oriented	( 2,500)	( 16.0)	( 4,903)	( 29.0)	( 4,630)	( 20.5)
<u>3. BROADENING ACCESS TO NEEDED INPUTS/SERVICES</u>	<u>2,160</u>	<u>16.8</u>	<u>2,880</u>	<u>17.0</u>	<u>2,738</u>	<u>12.1</u>
a. Marketing/Storage/Coops	( 1,250)	( 8.1)	( 2,880)	( 17.0)	( 1,975)	( 8.6)
b. Input Procurement/Distribution	( - )	( - )	( - )	( - )	( - )	( - )
c. Rural Industry Development	( - )	( - )	( - )	( - )	( - )	( - )
d. Credit Program	( 1,360)	( 8.8)	( - )	( - )	( 763)	( 3.5)
<u>4. RURAL INFRASTRUCTURE</u>	<u>4,253</u>	<u>27.5</u>	<u>2,670</u>	<u>15.8</u>	<u>2,675</u>	<u>11.9</u>
a. Roads	( 2,953)	( 19.1)	( 1,270)	( 7.5)	( - )	( - )
b. Irrigation/Water Supplies	( 1,300)	( 8.4)	( 1,400)	( 8.3)	( 1,675)	( 7.4)
c. Resource Mgmt/Conservation	( - )	( - )	( - )	( - )	( 1,000)	( 4.5)
<b>TOTAL GRANTS</b>	<b>15,491</b>	<b>100.0</b>	<b>16,912</b>	<b>100.0</b>	<b>22,538</b>	<b>100.0</b>
<b>TOTAL LOANS</b>	<b>11,500</b>		<b>12,000</b>		<b>17,150</b>	

Does not include Burundi

1/ Includes Cameroon, Ghana, G.V., CAE, Guinea Bissau, Liberia, Sao Tome, Sierra Leone, Zaire, Rwanda

AFRICA REGIONAL

TABLE - 5 A.I.D. DEVELOPMENT ASSISTANCE, FOOD & NUTRITION GRANT, EMPHASIS BY CATEGORY  
FY 77-79 AND PROPOSED LEVELS (\$000) 1/

<u>PROGRAM CATEGORIES</u>	<u>FISCAL YEARS</u>					
	<u>FY 77</u>		<u>FY 78</u>		<u>FY 79</u>	
	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
<u>1. PLANNING &amp; DATA SYSTEMS</u>	<u>85</u>	<u>1.7</u>	<u>85</u>	<u>1.0</u>	<u>100</u>	<u>1.0</u>
<u>2. INSTITUTION BLDG. &amp; INCREASING PRODUCTION</u>	<u>4,722</u>	<u>93.8</u>	<u>6,810</u>	<u>81.7</u>	<u>8,494</u>	<u>84.7</u>
a. Research Oriented	(2,722)	(54.1)	(3,810)	(45.7)	(3,994)	(39.8)
b. Human Res. Development-Schools, Univ.- Men's (Training-Fao.)	(1,000)	(19.9)	(2,000)	(24.0)	(1,000)	(10.0)
c. Extension-Rainfed Crops	( - )	( - )	( - )	( - )	( - )	( - )
d. Extension-Irrigated Crops	( - )	( - )	( - )	( - )	( - )	( - )
e. Extension-Livestock/Fish	( - )	( - )	( - )	( - )	( - )	( - )
f. Rural Development Oriented	(1,000)	(19.9)	(1,000)	(12.0)	(3,500)	(34.9)
<u>3. BROADENING ACCESS TO NEEDED INPUTS/SERVICES</u>	<u>225</u>	<u>4.5</u>	<u>1,440</u>	<u>17.3</u>	<u>1,442</u>	<u>14.4</u>
a. Marketing/Storage/Coops	( - )	( - )	( - )	( - )	( - )	( - )
b. Input Procurement/Distribution	( - )	( - )	( - )	( - )	( - )	( - )
c. Rural Industry Development	( - )	( - )	(1,000)	(12.0)	(1,000)	(10.0)
d. Credit Programs	( 225 )	( 4.5 )	( 440 )	( 5.3 )	( 442 )	( 4.4 )
<u>4. RURAL INFRASTRUCTURE</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
a. Roads	( - )	( - )	( - )	( - )	( - )	( - )
b. Irrigation/Water Supplies	( - )	( - )	( - )	( - )	( - )	( - )
c. Resource Hgmt/Conservation	( - )	( - )	( - )	( - )	( - )	( - )
<b>TOTAL GRANTS</b>	<b>5,032</b>		<b>8,335</b>		<b>10,036</b>	
<b>TOTAL LOANS</b>	<b>-</b>		<b>-</b>		<b>-</b>	

1/ Includes certain projects not in Food and Nutrition Section but having this emphasis  
i.e. Improved Rural Technology, Accelerated Impact Program, AMPP, and AAASA.

**TABLE 6 - FOOD & NUTRITION PROJECTS AS SHARE OF TOTAL PROJECT FUNDING (GRANTS)**  
**ABS/OP SUMMARY, FY 77-79 (\$000)**

	<u>FY 77</u>		<u>FY 78</u>		<u>FY 79</u>	
	<u>F/N</u>	<u>TOTAL</u>	<u>F/N</u>	<u>TOTAL</u>	<u>F/N</u>	<u>TOTAL</u>
<u>OAWA(excl. Regional)</u>	15,491	28,513	16,912	36,713	22,538	50,792
(%)	(54)	(100)	(46)	(100)	(44)	(100)
<u>ESA</u>	27,131	37,787	37,449	64,105	41,438	71,287
(%)	(72)	(100)	(58)	(100)	(58)	(100)
<u>SAHEL</u> <sup>2/</sup>	31,485	33,751	112,365	124,975	149,696	194,759
(%)	(93)	(100)	(90)	(100)	(77)	(100)
<u>AFRICA REGIONAL</u> <sup>3/</sup>	5,032	22,473	8,335	34,012	10,036	37,081
(%)	(22)	(100)	(25)	(100)	(27)	(100)
<u>TOTAL</u>	79,139	122,524	175,061	259,805	223,708	353,919
(%)	(65)	(100)	(67)	(100)	(63)	(100)

<sup>1/</sup> Includes population, health Education, Selected Development Activities, and Supporting Assistance.

<sup>2/</sup> Includes 382 Rice Res. & Prod.; 391 Agric. Prod. Credit; 393 SAFGRAD; 407 Rural Technology; AID Accelerated pact. CAWA column includes country projects listed under Regional.

<sup>3/</sup> Includes Sahel Development Program, including regional SDP projects not listed in ABS. SDP projects were broken down into Food/Nutrition and other, as ABS Table II does not list SDP funding by functional category. Does not include Burundi and Sudan.