

Basic Human Needs and the Distribution of Development Assistance
Among Countries: The Indicative Planning Allocation Procedure*

	<u>Page</u>
Contents	
Introduction	1
I. Political Background and Rationale	3
II. The Current Procedure	8
III. Issues	17
A. Fundamental Issues	17
B. Issues Regarding Need	21
C. Commitment and Effectiveness	35
D. Other Variables and Factors	42
Appendix I - Some Remedial Algebra	
Appendix II - The Straight-line Adjustment	
References	

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* The views expressed in this paper are personal and should not be construed as official.

Introduction

The Indicative Planning Allocation (IPA) procedure has been used by AID to determine allocations of bilateral development assistance on a preliminary basis, according to broad need and effectiveness criteria, modified by some general political and administrative constraints. These allocations indicate to AID missions potential funding levels for allocations five years from the current planning year. Missions respond to the indicative levels in the context of the Country Development Strategy Statement, which presents an assistance strategy for the five-year planning period; proposes the levels of assistance required to carry out the strategy; and analyzes the variation (if any) between the proposed level and the indicative level. These strategy statements are subject to critical review in AID/Washington, and target assistance levels can be further modified. Thus the IPA is the first step in an iterative process. The levels set forth in the IPA procedure are subject to considerable alteration (in either direction) over the course of this process.

AID's version of the IPA procedure was developed as part of the more comprehensive review of Bilateral Development Assistance conducted by the Task Force on Program Procedures. The final report of this task force presents a concise general description of the IPA procedure, and places it in an operational context.^{1/}

^{1/} See "Report By Task Force on Program Procedures," a memorandum to the Administrator of AID from Alexander Shakow (AA/PPC), February 3, 1978. The work of the task force, including development of the IPA procedure, was conducted under the directorship of Edward Hogan.

The purpose of this paper is to provide a more comprehensive, detailed analysis of the IPA procedure. The first section of the paper reviews several important statements of the purposes of foreign assistance, and the associated criteria for allocating assistance, as background for evaluating the current IPA procedure and some possible modifications. These statements point to increased satisfaction of basic human needs on a sustainable basis as the primary objective of development assistance, and identify need and effectiveness (as indicated by commitment, performance, progress and the current policy stance of each recipient) as the fundamental criteria for allocating assistance. The second section of the paper (along with the two appendices) explains the methodology currently used. Many aspects of this methodology were explicitly provisory, pending further investigation, collection of better data, etc. Accordingly, the third section of the paper analyzes some issues surrounding the IPA procedure, and discusses possible modifications.

I. Political Background and Rationale for the IPA Procedure

The immediate rationale for the IPA procedure is provided by directives from the Congress and the President concerning the purposes of development assistance and criteria for allocating assistance among countries. The Foreign Assistance Act of 1961, as amended through 1978 when the IPA procedure was implemented, states that: "...the first objects of assistance shall be to support the efforts of less developed countries to meet the fundamental needs of their peoples..." Proceeding from this broad objective, the legislation directs that:

"Development Assistance furnished under this chapter shall be increasingly concentrated in countries which will make the most effective use of such assistance to help the poor toward a better life (especially such countries which are suffering from the worst and most widespread poverty, and are in greatest need of outside assistance)."

The legislation goes on to identify the factors to be considered in evaluating effectiveness.

"In order to make possible consistent and informed judgements concerning which countries will make the most effective use of such assistance, the President shall propose appropriate criteria and factors to assess the commitment and progress of countries...In developing such criteria and factors, the President shall specifically take into account their value in assessing countries' actions which demonstrate genuine concern and effective action for materially improving the lives of the poor and their ability to participate in development, including but not limited to efforts to:

- (a) increase agricultural productivity per unit of land through small-farm, labor-intensive agriculture;
- (b) reduce infant mortality;
- (c) control population growth;
- (d) promote greater equality of income distribution

including measures such as more progressive taxation and more equitable returns to small farmers; and

(e) reduce rates of unemployment and under-employment."

The broad thrust of these directives did not originate in 1978, but rather stems from 1975 amendments to legislation introduced in 1973, which set forth "New Directions" in development assistance. Similarly, these directives have been reaffirmed in subsequent legislation.

This Congressional statement of the fundamental objectives of foreign assistance and the associated criteria for allocating assistance is echoed in the President's November 1977 decision memorandum on U.S. Foreign Assistance strategy, and in the analysis that led to that decision. One important analytical input was the Development Coordination Committee's Foreign Assistance Study.^{1/} Completed in October 1977, this study presented:

"a basic policy for U.S. development assistance programs, both bilateral and multilateral, over the next five years and beyond. That policy is based on the critical importance of improving the lot of the poor majorities in the less developed countries (LDCs). It focuses principally on meeting basic human needs and supporting LDC growth strategies which provide greater equity." ^{2/}

^{1/} For purposes of evaluating the IPA procedure, it is important to examine the DCC study at some length here, because it represents a relatively detailed study of the operational implications of the decisions eventually taken by the President, as perceived by those agencies which would participate in the implementation of the decisions.

^{2/} Development Coordination Committee, Foreign Assistance Study; October 1977. Part I, p. 1.

The DCC Report went on to outline for the President various sets of options concerning development assistance allocation patterns among countries. One set of options for overall concessional development assistance (both multilateral and bilateral) included three alternatives: concentrating on key developing countries of importance to the U.S., irrespective of level of development; concentrating on global problems (food, health, population, energy), regardless of per capita income levels or other economic and political considerations; and concentrating on poor countries in support of growth with equity and basic human needs (BHN). The wording of this last alternative is worth quoting, since it corresponds most closely to that actually selected by the President, and because subsequent sets of options in the DCC study were obviously predicated on acceptance of this alternative:

"Under this option, assistance would be provided to a broad spectrum of LDCs, with priority placed on the poor countries...Funding would be concentrated on countries with domestic policies favorable to equitable growth, with the more populous ones receiving larger allocations assuming their commitment to BHN." ^{1/}

Further on in the report, the paper outlined two sets of options for the country-mix of bilateral development assistance. The first set pertained to which countries might be included on a list of eligible recipients, distinguished between low- and middle-income countries (MICs), and pointed out that "Basic Human Needs objectives

^{1/} DCC Study, Part III, pp. 2-3.

are stated in terms of poor people rather than poor countries: this implies a willingness to assist in meeting basic needs in middle-income countries as well as in low-income countries."^{1/}

The alternatives cited including phasing out of MICs over the next five years; a more gradual withdrawal from MICs; and pursuit of opportunities to return to key MICs such as Colombia, Mexico, and Brazil. A second, distinct set of options dealt with criteria for allocating assistance once the list of eligible recipients was determined. These alternatives included allocating assistance according to: need criteria but not performance criteria; performance criteria only; or a combination of the two criteria.^{2/}

A second important input for the President's decision was the Brookings Institution's "Assessment of Development Assistance Strategies" also issued in October 1977. Regarding the overall assistance strategy, the Brookings Report stated that "The central problem of development is that the number of poor people is greater than ever, despite good aggregate economic growth;" argued that "U.S. development assistance should have as a major objective the more rapid satisfaction of basic human needs;" and recommended that the United States "make clear that it is prepared to join other donor nations in a long-range commitment to help the developing nations achieve a major advance against the worst aspects of poverty by the

^{1/} DCC Study; Part III, p. 10. The criterion used to distinguish between low- and middle-income countries was a 1975 per capita income of \$520.

^{2/} DCC Study; Part III, pp. 11-12. Performance would be evaluated in terms of BHN objectives. The distinctions between performance, progress and commitment, and the relationship of these concepts to need and to effectiveness are important, and will be discussed in the third section of the paper.

end of the century."^{1/} Regarding criteria for the allocation of bilateral development assistance among countries, the report recommended that "U.S. bilateral development assistance programs should be directed to the low-income countries," and that "As recipients approach the IDA cut-off point, concessional aid should simultaneously decline and the emphasis should shift from grants to credits, first on soft terms and eventually on hard terms."^{2/} The report also emphasized in several places the importance of "sound growth with equity policies" as a criterion for allocating U.S. foreign assistance.^{3/} Finally, in several places -- the discussion of a new development assistance agency and of Security Supporting Assistance -- the Brookings Report emphasized the important conflicts between political and developmental criteria for allocating assistance.^{4/}

These two reports provided bases for recommendations to the President by his Policy Review Committee. The President decided in November 1977 to adopt an assistance strategy that "would provide concessional assistance (both bilateral development assistance and PL-480) to meet the basic needs of poor people, primarily in low-income countries which would continue to receive top priority, but also in middle-income countries if enough aid were available.

^{1/} The Brookings Institution, "Interim Report: An Assessment of Development Assistance Strategies," October 6, 1977. The quoted passages are from pages 7, 8 and 15 respectively.

^{2/} The Brookings Study, pp. 18-19.

^{3/} Particularly on pages 15, 16.

^{4/} The Brookings Study; pp. 26-27 and 36,37.

The dominant factor in allocating aid among countries would be where it would do the most good to help poor people."

These directives from the Congress and the President, as well as the analyses underlying the Presidential decision all point to basic human needs as the primary objective of development assistance, and need and effectiveness as the fundamental allocation criteria associated with this objective. Indicators of effectiveness are variously described in terms of "commitment and progress" in the Congressional legislation; "performance" in the DCC Report; and "sound growth with equity policies" in the Brookings Report. The Presidential decision allows for inclusion of middle-income countries on the list of eligible recipients. However, once included, the appropriate level of assistance would be determined according to basic needs considerations and criteria.

II. The Current Procedure For Arriving At Indicative Planning Allocations (IPAs)

The IPA procedure is based on the premise that the primary objective of development assistance is to achieve increased satisfaction of basic human needs on a sustainable basis and that the fundamental criteria for allocating foreign assistance are provided by considerations of need and effectiveness. In this context need depends on the extent of poverty in a country and the resources available to the country to alleviate poverty.^{1/} Effectiveness is a function of the policy stance of the government with respect to

^{1/} In a basic human needs framework, the poor are those who cannot satisfy their basic human needs, so that alleviation of poverty and increased satisfaction of BHN are conceptually synonymous.

equitable growth, as indicated by current efforts as well as past performance and progress. The IPA procedure takes a stipulated amount of development assistance, and calculates preliminary allocations to a given set of recipients on the basis of these criteria.

The remainder of this section describes the current procedure for determining IPAs. The discussion covers the variables and data used to represent need and effectiveness; the weights attached to these variables to reflect their importance as perceived by policy-makers; the method for using these variables and policy weights to arrive at each recipient's share of foreign assistance; and adjustments to reflect some general political and administrative constraints.

The variables selected to indicate need (the extent of poverty and resources available to cope with poverty) are population and per capita income. Two population variables have been considered. Total population serves as a crude indicator of the extent of poverty in the sense that, for the same per capita income, a country with more people is likely to have more poor people. (Obviously, a critical factor is income distribution.) Using poor population (typically estimated as the number of people with incomes below a poverty line) instead of total population gives a more direct measure of the extent of poverty. It is still imperfect because the extent of poverty depends not only on the number of poor, but also

on the depth of their poverty.

Insofar as it can be accurately measured, poor population is the preferable variable as long as allocations are based on both need and effectiveness.^{1/} However, in the absence of satisfactory data on poor populations, total population was used.

Per capita income serves as an indicator of need, insofar as it reflects the domestic resources available to a country to cope with poverty. Countries with lower per capita incomes would tend to receive more assistance in the initial allocations. However, a per capita income of \$275 has different implications concerning poverty, depending on the country. Such an income might be below the actual poverty line in many Latin American countries, but above the poverty lines in Africa and Asia. Accordingly, the figures for per capita income were "deflated" using regional poverty lines defined by the International Labour Office.

More specifically, the ILO estimated poverty lines at \$320 in Latin America, \$205 in Africa, and \$175 in Asia (1972 prices). These poverty lines reflect the different costs of achieving the same (low) standard of living in each region. The adjustment carried out was to divide per capita income for each country by the ratio of its regional poverty line to the Asian poverty lines.

^{1/} If allocations were based solely on need, then total population would be preferable. This is because in two countries, with the same total population and the same per capita income, an allocation based solely on poor population and per capita income would favor the country with the more skewed distribution of income. This might be perverse in terms of penalizing rather than rewarding performance (and possibly current commitment) regarding equity.

Thus per capita incomes were diminished by a factor of 1.83 in Latin America and 1.17 in Africa; left unchanged in Asia; and changed in the Near East according to the pertinent African or Asian factor.

Effectiveness is the other fundamental factor. Following the legislation (cited on page 3), broad effectiveness considerations are embodied in a "commitment" rating, that in the current IPA reflects a general, informal appraisal by PPC staff and the regional bureaus of current efforts and recent performance and progress. Some general ratings -- "poor," "indifferent," "fair," and "good" were assigned to recipients, and numerical values (a scale of 1 to 4) were attached to the ratings. This procedure for evaluating commitment was explicitly provisory, to be supplanted by a more systematic procedure taking advantage of information provided by the response to Congressional directives to propose appropriate criteria and factors to assess the commitment and progress of countries.^{1/}

To compare countries, these three variables are combined into a single measure of each country's need and commitment. The following formula is used to calculate such a measure (or country weight, W):

$$W = (\text{Pop})^a(\text{PCI})^b(\text{Comm})^c$$

Where:

Pop refers to population

^{1/} See "Proposed Criteria and Factors for Assessing Country Performance: A Report Pursuant to Section 102 (d) of the Foreign Assistance Act." Agency for International Development, January 1978.

PCI refers to per capita income

Comm refers to commitment

The exponents a, b, and c are policy weights that reflect the importance that policy-makers attach to the different variables that represent need and commitment. The values of a and c are positive (the greater the population and commitment, the higher the value of W), while b is negative (the higher the per capita income, the lower the value of W).^{1/} The impact of these policy weights can be more easily explained after following through the rest of the allocation procedure.

Calculating the weight (W) for each country gives a measure of that country's claim on foreign assistance according to need and commitment, but does not in itself indicate how much of total assistance (TA) it should receive. To determine each country's share (S) of foreign assistance, all of the country weights are added to get a total weight (TW). Then, the share of a hypothetical country i is given by its weight relative to the total, or

$$S_i = \frac{W_i}{TW}$$

If the shares are converted to percentage terms then all of the shares will add up to 100 percent. Finally, the assistance (A_i) due to each country on the basis of need and commitment is calculated as its share of the total:

^{1/} Appendix I reviews a few simple rules for understanding the effects of different kinds of exponents, and demonstrates how they are useful for representing the priorities attached to indicators of need and commitment.

$$A_i = (S_i) (TA)$$

The role of the policy weights a, b, and c can now be more easily explained, by comparing the country weights or shares for two hypothetical countries, i and j. This comparison is given by:

$$\frac{W_i}{W_j} = \left(\frac{\text{Pop}_i}{\text{Pop}_j} \right)^a \left(\frac{\text{PCI}_i}{\text{PCI}_j} \right)^b \left(\frac{\text{Comm}_i}{\text{Comm}_j} \right)^c = \frac{S_i}{S_j} = \frac{A_i}{A_j}$$

The relative shares or weights for any two countries depend on comparisons (or ratios) between the countries in terms of population, per capita income, and commitment. Country i will have a greater weight or share (relative to country j) if it has more people; if it has a lower per capita income (since b is negative); and/or if it has a better commitment rating. The exponents a, b, and c can amplify or diminish these differences. Therefore, the value attached to each exponent reflects a policy judgement about how important the differences are. More specifically:

1) If a, the population weight, is set at 1.0, then the initial allocation of foreign assistance is neutral in terms of population size. In other words, considering two countries with the same commitment and same per capita income, the country with (say) twice the population would receive twice as much foreign assistance. Per capita assistance (or assistance per poor person) would then be the same for the two countries. A value of a less than 1.0 discriminates against (poor) people in more populous countries, and in favor of (poor) people in less populous countries.

2) b, the income weight, reflects the negative relationship between the per capita income level of a country and the amount of assistance it might receive, since countries with higher per capita incomes tend to have less widespread poverty, and also more domestic resources with which to alleviate poverty. In general, the higher the absolute value of b, the greater weight given to income differences in the indicative allocations, so that relatively poor countries are favored by high values of b.

As a hypothetical example consider two countries that are identical except for per capita income:

-- With b = -1, country i will get half as much foreign assistance as j in the first stage if i has twice the per capita income of j.

-- With b = -0.5, country i will get half as much foreign assistance as j in the first stage if i has four times the per capita income of j.^{1/}

3) c is a commitment weight, reflecting the positive relationship between commitment and foreign assistance. The higher the value of c the greater the weight attached to differences in commitment, so that more committed countries are favored by a high value of c.

As a hypothetical example consider two countries that are identical except that country j has a rating of "poor" (1.0) on commitment.

-- with c = 1.0, country i will get twice as much assistance as country j if country i has an "indifferent" rating (2.0).

^{1/} Assigning an exponent of .5 is equivalent to taking the square root. See Appendix I for more detail.

-- with $c = 0.5$, country i will get twice as much assistance as country j if country i has a "good" rating (4.0).

It is important to note that the essence of this procedure is the use of population, per capita income, and commitment variables to reflect need and effectiveness as the fundamental criteria in determining indicative planning allocations. The decision of what weights to use is strictly a policy judgement, reflecting the importance of population, per capita income, and commitment as perceived by policy makers.^{1/} If any of the weights is set at zero, then the corresponding variable has no influence on the allocations. If all three weights are placed at zero, then each recipient would have the same IPA.^{2/}

At this point, the IPA procedure calculates allocations solely on the basis of need and effectiveness considerations as embodied in the variables, data and policy weights that make up the formula for the country weight. The next step in the procedure takes into account some general administrative and political constraints on levels of foreign assistance, constraints that exist without special consideration of country identity.

^{1/} However, the population weight is somewhat different from the income and commitment weights. In the latter two instances there is clearly no single "correct" value. On the other hand, a case can be made that the population weight should be exactly 1.0, so that per capita allocations are not influenced by population size. See pages 24-26.

^{2/} A further adjustment to the per capita income variable is discussed in Appendix II.

Two such constraints were incorporated for the current IPAs. First, a ceiling was imposed in terms of the maximum portion of total assistance that any recipient might receive. This ceiling, specified at 25 percent of total assistance, was justified on the basis of avoiding undue concentration in any one country. The ceiling effectively constrains assistance for only one country, India, which on the basis of need and commitment considerations alone would have received about one-third of the total. Secondly, a floor of \$5 million was specified, on the basis of administrative considerations of what might be a minimal program in any country. This constraint raised the IPAs of four countries. These judgements about political and administrative constraints represent decisions to modify allocations determined solely by need and commitment criteria. There are various methods for making these modifications, which affect not only India and the four countries receiving minimal amounts of assistance, but also the other recipients whose IPAs are larger by virtue of the assistance not allocated to India. It can be formally demonstrated that the method used in the IPA procedure yields IPAs adhering as closely as possible to need and commitment criteria, while still satisfying the floor and ceiling constraints.^{1/}

The IPA procedure presented here produced indicative allocations for 58 countries for the year 1985, based on an expected total of \$4 billion in bilateral development assistance. The fifty-eight countries included 29 countries with 1976 per capita GNP at \$250 or less; 17 countries within the \$250-\$580 range; and 12 countries

^{1/} See "Floors and Ceilings in the Aid Allocation Formula," February 1978, and "Some Properties of the Optimal Allocation of Foreign Assistance According to Need and Commitment Criteria," March 1978.

with per capita incomes of \$580 or above. The allocations were explicitly indicative, and subject to modifications (in either direction) depending on factors that could best be considered in a country-specific context, factors such as other donor assistance, absorptive capacity, a more specific analysis of effectiveness, etc. Proposed modifications were set forth in the Country Development Strategy Statements.

The next section of the paper discusses a number of issues pertaining to the IPA procedure, including issues of what other factors might be included in determining the IPA's and how need and effectiveness considerations can be more adequately reflected.

III. Issues

A. Fundamental Issues

1) Are the objectives and the allocation criteria underlying the IPA still valid?

The rationale for the IPA procedure, as expressed in the various documents mentioned in part I, is based on the goal of increased satisfaction of basic human needs as the primary objective of development assistance, and on the associated allocation criteria of need and effectiveness, as indicated by commitment, performance, progress, etc. with respect to equitable growth. A fundamental issue is whether the statements cited in the first section of the paper continue to represent the purposes the IPA procedure is supposed to serve, and, therefore, provide criteria for evaluating and improving the procedure.

This is not a rhetorical question insofar as some of the issues that have been raised in response to the IPA procedure are fundamentally issues regarding the purposes of development assistance, and the allocation criteria that derive from these purposes.^{1/}

(2) Why use a process such as the IPA procedure?

A second basic issue is whether a technical, quantitative procedure such as the IPA procedure is a suitable one for implementing the Congressional and Presidential directives. In particular, the Congressional directives concerning need and commitment date from 1975, and allocation procedures since then have presumably moved to conform with this mandate.

In fact, empirical analysis of the 1979 allocations of bilateral development assistance indicates that these allocations are in some respect at odds with need and effectiveness considerations as represented in the IPA procedure, and in other respects have little to do with these criteria.^{2/} The analysis essentially investigated the extent to which the IPA formula could explain the 1979 allocations, and the implicit policy weights on the variables corresponding to need and commitment. Several tests were made using different population variables (total population, and poor population as estimated in the 1975 report on the "Implementation of 'New Directions' in Development Assistance"); 1975 per capita GNP; and the effectiveness evaluations used

^{1/} See, for instance, the DCC Preliminary Issues Paper on "Countries With Per Capita Income Over \$580," a paper discussing U.S. policy towards middle-income countries, March 1979.

^{2/} This section summarizes the methodology and results of a short paper entitled "How Well Does the Need/Commitment Formula Explain Current Allocations of Bilateral Development Assistance?", June 1978. The 1979 allocations were determined in 1977.

in the IPA procedure. The list of countries was substantially the same as for the current IPAs, except that several tests were made in which seven countries receiving \$1.5 million or less (and, therefore, plausibly at their "floors") were excluded.^{1/} The results of the analysis were first of all that the IPA formula could explain a significant portion of the allocation pattern among countries, ranging from 45 to 60 percent for the full list of countries, and from 60 to 80 percent for the abbreviated list of countries. Thus, the 1979 allocations looked as if they might have been generated in large part by a process equivalent to the IPA procedure, with population, per capita income, and commitment as the key variables.

However, the analysis indicated that the implicit policy weight on per capita income was positive, so that the less needy a country, the more assistance it would receive. Values of this weight ranged from .45 to .93 indicating that a country with PCI at \$800 would receive two to nearly four times the assistance allocated to a country with PCI of \$200, other things equal. Secondly, the values of the policy weight on population were within a range of .5 to .6 indicating a sharp bias against populous countries, or countries with large poor populations. Considering that over three-quarters of the developing

^{1/} The basis for excluding such countries is explained in the papers on floors and ceilings mentioned earlier, page 16, footnote 1. Collectively, these countries accounted for about 1% of assistance.

world's poor are in countries with populations currently above 25 million it is arguable that such a bias is in conflict with directives to allocate assistance according to need.^{1/} Finally, the implicit policy weight on commitment was about .5 in all cases, but was not statistically significant in tests involving the full list of countries.

The analysis reviewed above indicates that the 1979 allocations can in large part be explained by need and commitment criteria as embodied in the IPA formula. However, in terms of per capita income, less needy countries received more assistance; in terms of population, countries with more widespread poverty received more assistance, but in sharply reduced proportion to their greater need; and commitment (or broad effectiveness) considerations played at best only a small role in accounting for the allocations. Thus, one answer to the question posed as issue 2 (Why use a process such as the IPA procedure?) is that procedures in use heretofore have produced allocations that appear to be in considerable conflict with need criteria, and only weakly (if at all) related to commitment criteria.

A rejoinder might be that there are good reasons for the apparent conflict with need criteria, specifically involving considerations of

^{1/} The issue of the appropriate policy weight on population was mentioned earlier, and will be discussed later in this section. The figure of 25 million is significant, because in the current IPA procedure countries above that benchmark are penalized by a lower population weight, while countries below that benchmark benefit. The figure of 75% of the LDC poor is documented in a paper on "Basic Human Needs, Development Planning and Resource Targets -- Problems and Possibilities," January 1979.

absorptive capacity and effective use of assistance in a more narrow sense; balance of payments considerations; political considerations; etc. However, this rejoinder cannot be analyzed in the context of the procedures that produced the 1979 allocations, because the procedures did not systematically consider these various factors. Thus, a second important justification for the IPAs in the context of the overall procedure including the Country Development Strategy Statements and their review, is that the factors which provide for departures from basic need/commitment criteria are explicitly set forth. Their effects can be measured by comparison of the IPAs to the final allocations, and can be explained by reference to the Country Development Strategy Statements, and their reviews.^{1/} Thus, even in the extreme case in which the allocations arrived at using IPAs, the CDSS, etc. looked just like the allocations determined by less systematic procedures, the new program procedures would have the advantage of facilitating a relatively precise explanation of the factors underlying the allocations. In cases where the allocations appear to be at odds with criteria set forth by Congress and the Executive Branch, the conflict can be explained.

B. Issues Regarding Need

1) Population

^{1/} See the commentary in "Approved Assistance Planning Levels for FY 1981-85," memorandum from Allison Herrick to Alexander Shakow, PPC/AID, May 25, 1979, which among other things sets forth the factors accounting for differences between the IPA and the approved assistance levels -- factors such as absorptive capacity, political instability or uncertainty, an inadequate CDSS, other donor assistance, political/human rights factors (both positive and negative), etc.

a) Total or poor population In the context of a foreign assistance strategy aimed at increased satisfaction of basic needs, and in view of Congressional directives that assistance should be increasingly concentrated in "countries which are suffering from the worst and most widespread poverty," it is apparent that the number of poor is the relevant population variable.^{1/} This was recognized early, however, the only readily available data were the aforementioned estimates in the 1975 report on implementation of the New Directions. These estimates were based on a poverty line of \$150 per capita, applied to a variety of countries without consideration of variations in purchasing power.^{2/} Recent work on comparisons of real national product suggests that as nominal per capita income (measured in constant dollars) doubles, real per capita income (as indicated by purchasing power) increases by a factor less than two (about 1.75). Accordingly, an income of \$150 would purchase less in a middle-income country than in a low-income country, so that estimates of population in poverty would be biased against middle-income countries. This bias has been corrected in estimates of populations in poverty prepared by the Development

^{1/} See page 3 of this paper.

^{2/} The discussion that follows is based on a more detailed analysis contained in the two brief papers: "Some Notes On The Kravis Estimates of Real GDP And Their Usefulness" and "Estimates Of The Extent Of Poverty In Various LDC Groups." The papers review and analyze work by Irving Kravis on purchasing power comparisons, and discuss estimates by the DAC of percentages of population in poverty using country-specific poverty lines of equivalent purchasing power.

Assistance Committee of the OECD.^{1/} The DAC estimates are derived by applying country-specific income distribution data to figures for per capita GNP that have been corrected for purchasing power variations according to the methodology developed by Kravis. Thus, the estimates are not biased against middle-income countries.

The most frequent criticism of the estimates is that the per capita poverty line -- \$200 in 1970 in the United States, equivalent in purchasing power to an income of \$50 to \$75 per capita in most LDCs -- is too low.^{2/} However, the portion of the population below even this low poverty line is above 75 percent in a number of countries, including eight of the fifty-eight countries in the current IPA procedure. Secondly, what's important in the context of the IPA procedure is relative incidence of poverty, i.e. the percentage of the population in poverty in one country relative to another.^{3/} Use of a higher poverty line would raise the estimates of the percentage of poor population in all countries. The percentage of poor in Bangladesh, Ethiopia, and Haiti would be high relative to the percentage of poor in Sri Lanka, Botswana and Jamaica, for any reasonable

^{1/} See "Salient Features of Recent Development Experience And Developing Country Participation In The World Economy," DAC(78)15; May 16, 1978.

^{2/} There has been some confusion about the base year for the GNP figures and poverty lines, stemming from an inaccurate presentation in one of the IBRD papers that served as a source for the DAC work. This confusion surfaced in the Tunisia CDSS review, and was clarified in conversations between Annette Binnendijk and the authors of the paper. See her memorandum of February 23, 1979: "Clearing Up An Issue Raised In The Tunisia CDSS."

^{3/} See page 13 of this paper.

poverty line is used.^{1/} Thirdly, the DAC estimates of the total number of LDC poor - 672 million - are comparable to ILO estimates of the number of destitute (706 million) and to IBRD estimates of LDC poor (766 million and 644 million) using two different approaches.^{2/} Finally, while the DAC estimates exclude people who might legitimately be considered poor (those close to, but above the DAC poverty line), the estimates nonetheless identify the "worst" poverty, and thus serve the purposes of the Congressional Mandate.

To conclude, the issue of which population variable to use was decided on the basis of data availability, so that total population was used in the current IPA procedure. Poor population is preferable on conceptual grounds, and it now appears that useful data are available.

b) The Weight on Population ^{3/} The policy weights on income and commitment are clearly a matter of judgement by policy-makers regarding the appropriate role of need and commitment criteria in allocating assistance. Accordingly, there is no logical basis for any particular weight. However, in the context of a foreign assistance strategy motivated by considerations of the number of people in the developing world who cannot presently satisfy their basic needs, there is a strong argument that the policy

^{1/} A per capita poverty line of \$20,000 would, of course, tend to equalize the percentage of poor, at a level close to 100 percent.

^{2/} See "Growth and Poverty in Developing Countries," September 1978. Background Paper #6, World Development Report 1978 by M. Ahluwalia, N. Carter and H. Chenery, and "Poverty, Unemployment and Underemployment" by Peter Richards in Background Papers, Volume 1, World Employment Conference, ILO, 1976.

^{3/} The discussion in this section assumes for the most part that the population variable used is poor population.

weight on poor population should be 1.0, so that each poor person is counted equally, without regard to the overall number of poor within a country. This has the effect of allocating assistance on a per poor capita basis, with variations depending on how needy and committed is the country where they live. Considering two countries evaluated as equally needy and equally committed, the country with the larger number of poor people would be allocated a proportionately larger amount of assistance (as an indicative allocation).^{1/} Using a weight of less than 1.0, allocations on a per poor capita basis would decline, the larger the overall number of poor within a country.

The arguments in favor of discriminating against large populations have generally been set forth in the context of total population (not poor population) and have in most instances addressed various considerations of need. One argument has been that in countries with large populations, the role of trade is less significant so that foreign exchange needs are less. However, this argument ignores the important role of foreign assistance in supplementing domestic saving. Furthermore, foreign exchange needs depend on a variety of other factors, including natural resource and other factor endowments, the level of per capita income and domestic demand, and the pattern of economic activity. There is no reason to expect any population variable to reflect adequately these factors, particularly a variable corresponding to the number of poor. To the extent that foreign exchange needs are important, they are more accurately considered on a country

^{1/} A mathematical justification for this interpretation of the IPA procedure is presented in "Further Thoughts On The IPA Procedure," April 1978.

specific basis in the CDSS response to the IPAs.

A second argument has been that there are economies of scale in populous countries in terms of costs of institution building, so that large countries need less assistance. This argument is difficult to evaluate. However, it is plausible that the costs associated with institution building represent a very small component of the total amount of resources required to meet basic needs in any country, so that the effect of such factors on overall need is negligible.^{1/}

The more fundamental argument in favor of population weight biased towards countries with fewer poor people, rather than a neutral population weight of 1.0, has little to do with need and effectiveness criteria. The latter weight (1.0) tends to concentrate a substantial portion of assistance in relatively few countries, particularly in Asia and secondarily in Africa, even when assistance in India is constrained to 25 percent. For both political and bureaucratic reasons such concentration is frequently judged to be undesirable. The concentration is not inherent in the IPA procedure per se. Rather, it results from the stated objectives of foreign assistance (increased satisfaction of basic needs on a sustainable basis) and the fact that approximately three-quarters of the world's poor are located in about ten to twelve countries.^{2/} The degree of conflict

^{1/} A second counter argument would be that if there are significant economies of scale in large countries, the weight on population should be greater than 1.0, a bias in favor of larger countries on grounds that assistance is more effective.

^{2/} See "Basic Human Needs, Development Planning and Resource Targets - Problems and Possibilities," January 1979.

between political/bureaucratic considerations and basic needs considerations depends importantly on the total amount of assistance to be allocated; a small share of assistance may still be a significant absolute amount (in political and bureaucratic terms) if the total amount of available assistance is large.

2) Per Capita Income: Correction for Purchasing Power Disparities ^{1/}

In formulating the current IPA procedure, it was recognized that the disparities in need between the middle-income countries in Latin America and the low-income countries in Asia and Africa were probably not as great as indicated by differences in per capita incomes, so that some adjustment was in order. At the time, the best available information was the regional purchasing power factors implicit in the ILO estimates of poverty lines in various regions. (See Section II, page 10 of this paper.) However, the results of work by Irving Kravis suggest that the ILO purchasing power factors are inappropriate deflators for per capita incomes for individual countries. Kravis' work, covering a sample of fifteen developing and developed countries, indicates that the real income of a country (as indicated by purchasing power) can be almost completely explained by reference to its per capita income as conventionally measured, and an adjustment factor that bears no relation to region. Based on a sample of seven LDCs,^{2/} a

^{1/} This section is in large part based on "Some Notes On The Kravis' Estimates of Real GDP and Their Usefulness," January 1979.

^{2/} Kenya, India, Philippines, Korea, Colombia, Iran and Malaysia for 1970.

relationship in which 10 percent difference in observed PCI corresponds to an eight percent difference in real PCI can explain over 90 percent of the observed variation in real incomes among the sample countries. Thus, countries with the same measured PCI should have about the same real PCI, regardless of the region.

These results are quite significant in a statistical sense, despite the fact that the sample of countries is small. It is expected the sample of developing countries will soon have been expanded to 15, and the observations updated to 1975. If the statistical results are similarly significant, then this work should provide a good basis for adjustments to per capita income to reflect differences among countries in the purchasing power of a dollar.^{1/}

An alternate procedure is not presently implementable, but may become so over the next several years.^{2/} This procedure would involve establishing country-specific poverty lines (in local currency) which in turn would presumably reflect a weighted average of urban and rural poverty lines. This poverty line could then be used in a manner analogous to the current use of regional poverty lines, to adjust (or deflate) figures for PCI. One problem in such a procedure is defining the "consumption bundles" underlying the poverty lines in such a way as to provide for comparable standards of living among countries, while simultaneously allowing for differences in climate (which affects

^{1/} A separate improvement would be to use an average of several years for per capita income, since per capita income as reported in the World Bank Atlas can be quite variable from year to year.

^{2/} This alternative is examined in further detail in a short paper entitled "Further Thoughts On The IPA Procedure," April 1978.

housing and clothing costs) and other country-specific factors. A second difficulty has to do with estimating the number of people in urban and rural areas below the poverty line, so as to establish the weights for averaging. On the other hand, accumulation of such data is an important early step in formulating programs and policies to meet basic needs. The advantages of such a procedure include use of a relatively small number of price or cost observations that could be easily updated in each country (whereas Kravis looks at a great many prices in a few countries, and then makes estimates of real GDP for others). Secondly, the vagaries of exchange rate movements and inflation rates could be avoided, by measuring both per capita GNP and the poverty line in local currency.

3) Use of the PQLI

For purposes of the discussion in this paper, need has been considered in terms of the extent of poverty in a country compared with domestic resources available to alleviate poverty. In a basic needs context, the poor are those who cannot satisfy their basic needs, and the extent of poverty is the collective gap between their current consumption of essential goods and services (food, housing, health, education, clean water, etc.) and minimum standard consumption levels required to satisfy basic needs.^{1/} One approach to incorporating the extent of poverty in the IPA procedure is to rely on estimates of the number of people with incomes below a poverty line that corresponds to the cost of satisfying basic needs. Typically

^{1/} Leaving aside consideration of intangible needs. See "Basic Human Needs: A Development Planning Approach," AID Discussion Paper No. 38, October 1978.

these estimates are based on income distribution data pertaining to earned cash income. They in many cases ignore income in kind (e.g. food, services of owner-occupied dwellings); transfers in kind (e.g. free health and education); and other distributive effects of tax/subsidy policies.^{1/} Thus they provide only an approximate indicator of poverty in a basic needs sense, one that focuses on income as a necessary but not sufficient condition for meeting basic needs.

Some have argued that the PQLI (Physical Quality of Life Index) represents a superior alternative (or at least a complement) to an earned income indicator of poverty. The PQLI is an index based on infant mortality, life expectancy at age one, and literacy. It is thus an "ultimate" indicator of the extent of basic needs satisfaction in the sense that the cumulative effects of adequate diets, housing, education, health, etc. are eventually represented in improvements in life expectancy, infant mortality and literacy. To arrive at the PQLI, infant mortality is indexed on a scale from 0 for 229 deaths per thousand to 100 for 7 deaths per thousand; for life expectancy at age one the index reflects a range from 38 to 77 years; and adult literacy is not rescaled. The three indices are then averaged, with scores ranging from 93-97 for the industrialized countries to figures around 20 for some African countries.

^{1/} See "Size Distribution of Income: A Compilation of Data" by Shail Jain. IBRD 1975.

The two indicators -- PQLI and percentage of population in poverty -- are highly but not completely correlated; the correlation coefficient is about $-.75$. This is consistent with a hypothesis that the PQLI contains information not only about the level and distribution of income generated by economic activity but also about government interventions to redistribute income in various ways -- transfers, the pattern of public expenditures, etc. Indeed, the example of Sri Lanka -- with 1976 per capita income of only \$190 and a PQLI of 82 -- suggests that the PQLI is quite sensitive to government policies.^{1/}

The health component of the PQLI suffers from the same drawback as per capita income, namely, that life expectancy and infant mortality are calculated as nationwide averages, so that distributional considerations are ignored. This drawback is not as serious as for per capita income because the range of variation for life expectancy and infant mortality is more narrow.^{2/}

Considering the issue of whether (and how) to include the PQLI in the IPA procedure, it is evident that using both the number of poor and the PQLI would involve a large measure of double counting. For instance, consider two countries with the same total population, per capita income, and commitment (or effectiveness) rating. Suppose the first country had twice as many poor people and a PQLI one-half as great as the second country. Using both variables, the first country would appear to have four times as much poverty as the

^{1/} Other countries with PQLIs in the low to mid 80s (and 1976 PCI): Portugal (\$1660), Bahamas (\$3310), Korea (\$700), Argentina (\$1580), Yugoslavia (\$1750).

^{2/} The 1979 World Development Report cites an estimate that life expectancy in northeast Brazil is 20 years less than in Sao Paulo.

second, and, depending on the policy weight, might receive four times as much assistance. This suggests that if both variables (PQLI and percentage poor) are used, then they need to be combined into a composite variable, based on some sort of weighted average. One approach would be to transform the PQLI into a measure of the percentage of population with basic needs unmet. For instance, each country's PQLI could be subtracted from 100 or from some lower number that represents a more reasonable standard for poverty alleviation in an LDC context. If one of the two variables can be transformed in some satisfactory way so as to be compatible with the other, then the next issue would be how heavily to weight each variable in arriving at a composite indicator of the extent of poverty.

Some guidance would be provided by perceptions of the relative importance of various operational objectives and policies inherent in the basic needs approach. The problem of meeting basic needs is commonly perceived as two-pronged; raising employment and incomes of the poor and ensuring adequate, accessible supplies of essential goods and services. To the extent that there is a predominant emphasis on the employment/income problem, this would argue for a high weight on percentage poor. On the other hand, if the predominant emphasis is on provision of health, education, food, etc. then this would argue for a higher weight on the PQLI because it is more sensitive to such measures.^{1/} In the case of low-income countries, with which U.S.

^{1/} These two examples of relative emphasis are illustrated by ILO work on the one hand and papers by Paul Streeten on the other. See Employment, Growth, and Basic Needs: A One-World Problem, International Labour Office, 1976; and "The Distinctive Features of a Basic Needs Approach to Development," Paul Streeten. Basic Needs Paper No. 2, IBRD, August 1977.

bilateral development assistance is mainly concerned, it is arguable that the employment problem is the more important, since incomes on average are quite low and there is not much to redistribute.

A second consideration pointing to a high (if not exclusive) weight on percentage poor is that the PQLI is more closely related to government actions explicitly aimed at greater equity. Thus, using the PQLI as an indicator of need tends to cancel out the positive emphasis on commitment and effectiveness elsewhere in the IPA formula.

4) Future Trends

In considering need in terms of a comparison of the extent of poverty with domestic resources available to alleviate poverty, the focus has been on current (or recent) data pertaining to population, percentage poor, per capita income, etc. However, in the context of a foreign assistance strategy motivated by the problem of achieving substantial alleviation of world poverty over the long run, there is a strong argument for looking not only at the current need of recipients, but also at their prospects for the future.

The importance of this consideration is suggested by the 1978 World Development Report (WDR) as well as the draft of the 1979 WDR. Both of these reports distinguish between low- and middle-income countries based on 1976 per capita income of \$250.00.^{1/} The 1978 WDR projects an increasing concentration of world poverty in the LIC group through

^{1/} Note that this criterion is well below the IDA-eligibility criterion (\$580) used in most U.S. Government discussions of low- and middle-income countries. About 20 countries with a collective population of 300 million comprise the group of countries with 1976 PCY between \$250 and \$580, the largest of which are Nigeria, Thailand, the Philippines, and Egypt.

the year 2000.

Projected Decline in Absolute Poverty, 1975-2000^{1/}

Country Group	Population (millions)	1975		2000 (Base Scenario)	
		Percentage Poor	Absolute Number	Percentage Poor	Absolute Number
Low-income countries	1200	52	630	27	540
Middle-income countries	900	16	140	4	60

The preliminary draft of the 1979 WDR includes projections of growth rates in per capita income for low-and middle-income countries (defined as in the 1978 WDR) that point to a widening absolute and relative gap in their average per capita incomes.

Current and Prospective Per Capita Income^{2/}
(1975 dollars)

Country Group	1975 PCI	Base Scenario	
		Average Growth Rate	1990 PCI
Low-income	\$147	2.7	\$211
Asia	148	2.8	219
Africa	146	1.0	165
Middle-income	950	3.4	1,475

^{1/} World Development Report 1978, pages 5,33.

^{2/} World Development Report 1979 (draft). This report includes projections of the number of poor in the year 2000 of 440 million in LICs and 160 million in MICs. However, the base year (1975) figures are not given, and are obviously incompatible with the base year figures in the 1978 WDR. This problem may be resolved in the final draft.

These figures suggest that among the current IPA list of eligible recipients -- including 29 countries with PCI below \$250.00; 17 with PCI between \$250.00 and \$580.00; and 12 with PCI above \$580.00 -- those most in need of assistance by virtue of current indicators are even more needy in view of their prospects relative to higher-income countries. Ideally, it would be desirable to incorporate such considerations into the IPA procedure on a country-by-country basis. A more general approach would be to use higher policy weights (than otherwise would be chosen) for the variables corresponding to need.

C. Commitment and Effectiveness

The third variable in the IPA procedure has come to be known as the commitment variable. In the current IPAs, countries were placed in broad categories on the basis of informal appraisals by AID/Washington staff of each country's policy stance with respect to equitable growth, as indicated by current efforts and recent performance and progress. This method was explicitly provisory, pending further progress in the "102d exercise."

The 102d exercise is the direct response to Congressional directives to define appropriate criteria and factors to assess the commitment and progress of countries, with the object of identifying countries in which assistance would be used most effectively to meet basic needs.^{1/} At this point, seven broad categories of indicators

^{1/} See page 3.

have been established, specific indicators within these categories have been identified; and data have been collected by AID/Washington and the missions.^{1/} There are several issues involved in establishing a more meaningful variable to represent effectiveness considerations in the IPAs, including: more specific determinants of effectiveness; the conflict between need and effectiveness criteria; the problem of identifying unambiguous indicators that are valid on a cross-country basis; the role of subjective informal appraisals; and problems of weighting and scaling.

1) More Specific Determinants of Effectiveness

Following the legislation, the current IPA procedure has incorporated effectiveness criteria by reference to indicators and evaluations of commitment, performance and progress as embodied in the commitment rating described above.^{2/} It is clear that such indicators gauge effectiveness in a broad, medium-term sense having to do with the basic orientation of the government and society. These indicators would not necessarily reflect other more specific determinants of effectiveness - e.g. recent changes in policy and policy-makers within a country; specific opportunities for a particularly good project; the quality and quantity of the AID mission staff, etc. Such considerations are significant determinants of effectiveness and should play an important role in determining

^{1/} See "Socio-Economic Indicators of Basic Needs, Progress and Commitment For Ninety-two Developing Countries," available from Annette Binnendijk, and "Proposed Criteria and Factors For Assessing Country Performance," AID, January 31, 1978. The seven categories pertain to equity and participation; sustainable economic growth; employment; agricultural productivity; health and nutrition; education; and population growth.

^{2/} This section summarizes the discussion contained in "Some Thoughts on Procedures for Evaluating Commitment/Effectiveness" April 1979

assistance levels. The question is whether they can and should be embodied in the IPA procedure, as opposed to incorporating them in the CDSS responses to the IPAs and the CDSS review process. Several considerations suggest the latter approach. First, the specific factors cited above can be relatively transitory, and, therefore, unsuitable for a procedure determining planning levels seven years in the future. On the other hand, broader considerations of performance, progress, and commitment are likely to be more stable. Secondly, the importance of the more specific factors in many instances depends on levels of assistance under consideration. Therefore, these factors should come into play in response to the IPAs rather than in advance.

The main objection to the absence of more specific effectiveness factors in the IPA procedure has been based on an assumption that Missions would automatically accept the IPAs as given. According to this expectation, the indicative allocations would inevitably become the approved allocations, thus excluding considerations of the factors mentioned above (as well as other important factors such as political/human rights concerns, other donor assistance, etc.).

In fact, in the recently completed process whereby Missions formulated proposed assistance planning levels in the CDSS's, which were then subject to critical review and approval, the levels set forth in the IPAs underwent substantial changes in both

directions.^{1/} Downward adjustments in levels proposed by Missions amounted to about \$1 billion (out of a total of \$4 billion) indicating that Missions were not reluctant to forego funding if they perceived that funds could not be effectively used. Upward adjustments in the proposed levels amounted to over \$400 million. Further adjustments occurred in the review process. In several instances, approval of proposed levels was withheld, pending formulation of a more acceptable CDSS. In other cases, there were indications that, based on the quality of the CDSS, funds in excess of proposed levels would be available.

2) The Need/Effectiveness Conflict

The essence of this conflict is that effectiveness is, broadly speaking, a function of priorities and of various types of resources. For instance, performance with respect to education depends on the priority attached to education and the resources available to a country, which it can allocate to pursue educational goals.^{2/} The greater the priority attached to education, and the greater the volume and quality of resources available, the better would be performance.^{3/} The conflict arises because plentiful resources provide for better performance and increased effectiveness but also diminished need. Expressed somewhat differently, needy

^{1/} See "Approved Assistance Planning Levels for FY 1981-85," a memorandum from Allison B. Herrick to Alexander Shakow, May 25, 1979, and "A Brief Analysis of Variability of the Indicative Planning Allocations," June 1979.

^{2/} There are other factors, e.g. age structure of the population.

^{3/} Resources defined to include institutions, skillful administrators, etc.

countries tend to be poor performers in most respects, for reasons that have to do with scarcity of different types of resources (physical capital, human capital, physical and institutional infrastructure, etc.) as distinct from priorities. Further, some measures of commitment (e.g. expenditures allocated to education) are also heavily dependent on overall resource availability.

An approach directed towards resolving this dilemma is to use linear regression techniques to establish a quantitative relationship between per capita income and various indicators of effectiveness, and then observe which countries have done much better or much worse than predicted by their per capita income levels.^{1/} For instance, there is a significant positive relationship between PQLI and per capita income. However, some countries at low levels of income have remarkably high PQLIs (and conversely). Presumably such over-performance (compared with expected performance at a given income level) indicates a social and political context in which a high priority is attached to widely accessible education, health, etc.^{2/}

^{1/} See papers by Hunt Howell and Annette Binnendijk, particularly "Criteria for Assessing Basic Human Needs Performance and Commitment in Tunisia," and "Possible Quantitative Approaches to Assessing Basic Human Needs Performance and Commitment in Aid Recipient Countries," April 1979, by Annette Binnendijk.

^{2/} Environmental and natural resource factors can complicate things, however. Oil exporting countries with currently high per capita incomes will generally look like bad performers, because increases in income have been exceedingly rapid, and because the benefits of growth based on mineral exports are in the first instance (prior to government redistributive policies) rather concentrated. Similarly some countries face environmental conditions that are not conducive to good health. These considerations are problematic but not (in my view) prohibitive.

3) Problem of Ambiguous Indicators

While a number of indicators of commitment and performance have been identified, some of these are ambiguous in that in any given country they could indicate positive or negative performance. For instance, a high rate of expansion in modern sector employment may not be a favorable indicator if such expansion results from an over-allocation of investment resources to the modern sector, and sub-optimal levels of investment in other sectors. Secondly, there are at least in theory a variety of approaches to achieving basic needs objectives of growth in earned income of the poor and adequate supplies of essential goods and services.^{1/} For instance, the role of agriculture is in principle highly variable, depending on resource endowments, the current structure of the economy, etc. Thus, a number of the indicators focusing on agricultural productivity may be quite useful in many countries, but not very useful in a few others. (Similarly with certain trade indicators).

Obviously, this problem needs to be considered on an indicator by indicator basis. Perhaps one useful approach would be to use selected countries to test indicators. For instance, suppose there are a number of countries known to be good performers and others that are clearly bad performers, with respect to basic needs in general. Indicators could then be appraised according to how well

^{1/} See "Basic Human Needs: A Development Planning Approach" (AID Discussion Paper No. 38) and "Evolution of the Basic Human Needs Concept," a DCC Staff Working Paper.

they distinguish among these particular sets of countries.

4) The Role of Non-quantitative Appraisals

Even if a good set of indicators is established, it is clear that the current commitment of governments to equitable growth will not necessarily be reflected adequately in such indicators. (Although past performance is certainly important in evaluating current commitment.) Therefore, more judgemental, critical appraisals by regional bureaus and missions are vitally important if the commitment ratings are to have much validity. The 102(d) questionnaire calls for a number of responses which are judgemental and would reflect recent developments and non-quantifiable considerations. The issue is one of how to integrate the quantitative indicators and judgemental factors about the general policy stance of the government.

5) Weighting and Scaling

Assuming that a reasonable procedure can be formulated for evaluating the policy stance of recipient governments according to several broad categories (e.g. good, average, poor and perhaps some intermediate ratings), what basis is there for assigning numerical values to these categories? First of all, it is important to realize that for a given policy weight on commitment, the choice of numerical values to attach to the commitment ratings (say a scale of 1 to 4 or 1 to 10) will have significant effects on the allocations. In this sense the choice of a scale and the choice of a policy weight are interdependent. For instance, a scale of 1 to 4 and a policy weight

of .5 is equivalent to a scale of 1 to 2 (with appropriate intermediate values) and a policy weight of 1.0.

Accordingly, a procedure that might clarify the effects of commitment ratings on the allocations would be to set the policy weight at 1.0 and then decide on a scaling system that reflects judgements of policy makers about the importance and validity of these ratings in representing broad effectiveness considerations. One approach would be to consider two countries perceived to be at the extremes in terms of commitment (perhaps Costa Rica and Paraguay); imagine them equal in terms of need; and then decide how \$100 million (or some other amount) of assistance should be divided between the two of them. A decision of \$80 million and \$20 million would imply a scale with 4 and 1 at the extremes. Intermediate values could then be determined in a similar manner.

D. Issues Regarding Other Variables and Factors

Discussions of the IPA and other allocation procedures inevitably raise questions of other variables and criteria that might be taken into account in determining indicative levels. Some of these have to do with various aspects of need, performance, and commitment while others introduce different criteria. This is appropriate insofar as foreign assistance is not solely to be directed towards meeting basic needs, and need and effectiveness are not the only criteria for allocating assistance. Indeed the floors and ceilings in the current procedure, and the use of a policy weight

on population that discriminates against large countries are all cases in which political and administrative criteria already affect the indicative allocations. In considering other factors, the main issues have to do with whether and how other factors can adequately be incorporated in the IPAs, as opposed to introducing them at a prior stage (in the selection of eligible recipients) and/or at a later stage (in the CDSS response to the IPAs, and the subsequent reviews). The earlier discussion of variability of the IPAs suggests ample scope for adjusting the IPAs in either direction in response to other factors, while the commentary accompanying the approved levels indicates that other factors did come into play.^{1/}

1) Other Donor Assistance

While per capita income (suitably adjusted) is probably the best single indicator of domestic resources available to a country, it gives no indication of foreign resources that might be available, a factor which also determines need. Recent data on allocations of the IBRD, the regional multilateral banks, other bilateral donors, and OPEC sources is available on a country-by-country commitments basis, in a format that would permit ready use in the IPA procedure.^{2/} The data could be used in two alternative ways. First, per capita assistance could be added to per capita income (e.g. to reflect foreign and domestic resource availability in a single variable.) Alternatively, assuming stability in allocations from other sources, the IPA procedure could determine indicative

^{1/} See p36-38 and p. 21 (footnote) of this paper, respectively.

^{2/} Much of this data is available in the AID publication, U.S. Overseas Loans and Grants, published annually in June (known informally as

allocations that would bring the overall allocation pattern as close as possible to one reflecting need and commitment criteria.

The main problems with incorporating assistance from other sources is instability both in the total amount available from each source, and the pattern of allocation, in the context of an allocation procedure with a five to seven year horizon. (This is somewhat mitigated by the fact that data are on a commitments basis.) A second consideration is the degree of concessionality of assistance. A third possible consideration has to do with how assistance from other sources is used, which depends not only on the priorities of the recipient, but also on the objectives of the donor. In this respect, assistance from some donors may be much more effective in meeting basic needs than assistance from others.

2) Absorptive Capacity

For reasons mentioned in the earlier discussion of effectiveness, inclusion of a general variable that points to efficiency of resource use and absorptive capacity is undesirable insofar as such considerations are more suitably incorporated in the CDSS, in response to the IPAs. To the extent that absorptive capacity can be represented on a preliminary basis as a maximum amount of assistance that can be effectively programmed, this could be factored into the IPA as a ceiling constraint, based on preliminary mission estimates of such limits.

3) Human Rights

Human rights considerations enter into the current IPA procedure in several respects. First, the list of eligible recipients

reflects such considerations. Secondly, the commitment variable is fundamentally oriented towards one of the three basic components of human rights (economic and social rights). Further, the specific emphasis on participation in evaluating commitment is supportive of a second component, political rights. At the same time the commitment variable excludes other considerations of human rights, indeed those aspects of personal and political rights which receive the most attention in other contexts.^{1/}

An issue, then, is whether and how human rights considerations other than those embodied in the commitment variable might enter into the IPA procedure. In considering this issue, it is interesting to note that there are some important examples of countries which appear very good in terms of participation and satisfaction of basic needs, but deficient in terms of other aspects of human rights. For instance, Tanzania, Burma, Taiwan, and Korea all have negative ratings on political rights and civil liberties yet are commonly viewed very positively regarding economic and social rights. Conversely, Colombia, Gambia and Djibouti have very positive ratings on political and civil liberties, but are not rated positively in terms of satisfaction of basic needs.^{2/}

^{1/} Put another way, most evaluations of human rights give very short shrift to the factors that are the main concern of the commitment variable, and focus on the more dramatic and obvious elements of personal and political rights. See Report on Human Rights Practices in Countries Receiving U.S. Aid, Department of State, February 8, 1979.

^{2/} Ratings on political and civil liberties are taken from Appendix I of the human rights report. For a more detailed discussion of possibilities and problems of disparate performance regarding various elements of human rights, see "Some Notes on the Relationship of Basic Human Needs and Human Rights", February 1979.

A second consideration is that indicators of political and personal rights are relatively volatile -- arbitrary arrest, suspension of elections, suppression of the press, martial law -- whereas the IPA procedure has a longer term focus. A third consideration is whether development assistance is an appropriate and effective instrument for enhancing human rights, apart from its direct contribution to more widespread participation and increased satisfaction of basic needs. For instance, the history of efforts to use economic assistance to foster democracy in developing countries is not a particularly encouraging one.

For these reasons it would appear that human rights considerations other than those embodied in the commitment variable should enter into the allocation procedure first in the selection of eligible recipients and secondly in the CDSS preparation, where Missions would have the opportunity to demonstrate the effectiveness of altered assistance levels in terms of promoting human rights.

4) Other Foreign Policy Considerations

The issue has been raised whether other foreign policy considerations besides those inherent in the objective of meeting basic needs and the associated criteria of need and commitment should enter into the IPAs.^{1/} This issue is a familiar and fundamental one, and was most explicitly and critically examined in the Brookings Report, which emphasized the importance

^{1/} See, for instance, the DCC Preliminary Paper on "Countries With Per Capita Income Over \$580," March 1979. One method for incorporating such considerations would be to give each country a "political importance" rating.

of development as a foreign policy objective in itself, and the negative impact of subjecting development assistance to non-developmental criteria.

In general, the arguments against introducing non-developmental foreign policy considerations include the following:

1) Introducing other political and foreign policy considerations provides for considerable instability in allocations, with detrimental impact on the effectiveness of development assistance.

2) The effectiveness of development assistance in serving other political and foreign policy interests often depends on very rapid disbursement and a high degree of fungibility, whereas effective development programs often lack these characteristics.

3) A substantial portion of United States official development assistance is already allocated on the basis of political criteria (Economic Support Funds) along patterns heavily at odds with need and commitment criteria, and to countries and programs in which the impact in terms of increased satisfaction of basic needs is doubtful.

4) Introducing other foreign policy criteria tends to divert assistance away from countries in which developmental needs and problems are the most serious, since the poorest countries tend to be the least important countries from a general foreign policy standpoint.

Appendix I - The Mathematics of the IPAs

To fully understand the IPA procedure and the role of the policy weights, it is necessary to be familiar with a few simple algebraic rules governing the effects of exponents. The most familiar example of exponents is illustrated by the following equations:

$$y^2 = y \times y$$

$$4^2 = 4 \times 4 = 16$$

$$4^3 = 4 \times 4 \times 4 = 64$$

In these equations, the numbers 2 and 3 are exponents, and indicate operations in which a given quantity is multiplied by itself (e.g. squared or cubed). While positive whole numbers are the most familiar exponents, exponents can also be fractions.

For example:

$$x^{1/2} = x^{.5} = \sqrt{x}$$

$$4^{1/2} = 4^{.5} = \sqrt{4} = 2$$

$$64^{1/3} = 64^{.333} = \sqrt[3]{64} = 4$$

In the first two examples, assigning an exponent of $\frac{1}{2}$ (or .5) to a number is equivalent to taking the square root. Assigning an exponent of $\frac{1}{3}$ (or .333) is equivalent to taking the cube root. Accordingly:

if	$x^2 = y$	(e.g. $10^2 = 100$)
then	$x = y^{\frac{1}{2}}$	(e.g. $10 = 100^{\frac{1}{2}}$)

Further, exponents can be negative, with the following effects:

$$x^{-2} = 1/x^2 = (1/x)^2$$

$$x^{-3} = 1/x^3 = (1/x)^3$$

$$4^{-2} = 1/(4^2) = (1/4)^2 = 1/16$$

$$2^{-3} = 1/(2^3) = (1/2)^3 = 1/8$$

$$4^{-\frac{1}{2}} = 1/\sqrt{4} = \sqrt{1/4} = 1/2$$

The effects of exponents valued 1, -1, and 0 are particularly noteworthy:

$$x^1 = x$$

$$2^1 = 2$$

$$x^{-1} = 1/x$$

$$2^{-1} = 1/2$$

$$x^0 = 1$$

$$2^0 = 1$$

An exponent of 1 has no effect on x; an exponent of -1 inverts x (or divides 1 by x) and an exponent of zero gives a value of 1, whatever the value of x.

Finally, the following rule is important in evaluating the IPAs.

$$x^2/y^2 = (x/y)^2 \quad 10^2/3^2 = (10/3)^2$$

These properties of exponents make them very useful for expressing the importance or priority attached by policy makers to a particular indicator. For instance, suppose that Country A has a commitment rating of 4 (good) and Country B has a commitment rating of 1 (poor) and that allocations of assistance are based solely on considerations of commitment:

i.e.
$$\frac{A_A}{A_B} = \frac{(\text{Comm}_A)^c}{(\text{Comm}_B)^c} = \frac{4^c}{1^c} = \left(\frac{4}{1}\right)^c$$

Where A_B stands for assistance to Country B, Comm_A represents the commitment rating of Country A, and c gives the policy weight attached to commitment.

- a) If a weight of 1 is used, then Country A gets 4 times as much assistance as Country B.
- b) If a smaller weight is used (a lower priority to commitment) e.g. .5, then Country A gets twice the assistance of Country B.
- c) An intermediate weight, e.g. .75, would give A more than twice as much assistance but less than 4 times. (Actually 2.8 times as much as B).
- d) A weight of zero on commitment (zero priority) means that the two countries receive the same amount of

assistance. In this case commitment has no bearing on the allocations.

e) A weight of -1 on commitment (a negative priority) means that the country with the lower commitment rating would get more assistance. In this case, Country B would get 4 times as much as assistance as Country A.

Appendix II

Before implementation, the procedure was modified by a further adjustment to the per capita income variable. This adjustment can best be explained by assuming that countries are equal with respect to population and commitment, but have different per capita incomes. In the formulation described so far, need is considered to be inversely proportional to per capita income:

$$\text{Need} = 1/\text{PCI}$$

Comparing two countries, i and j

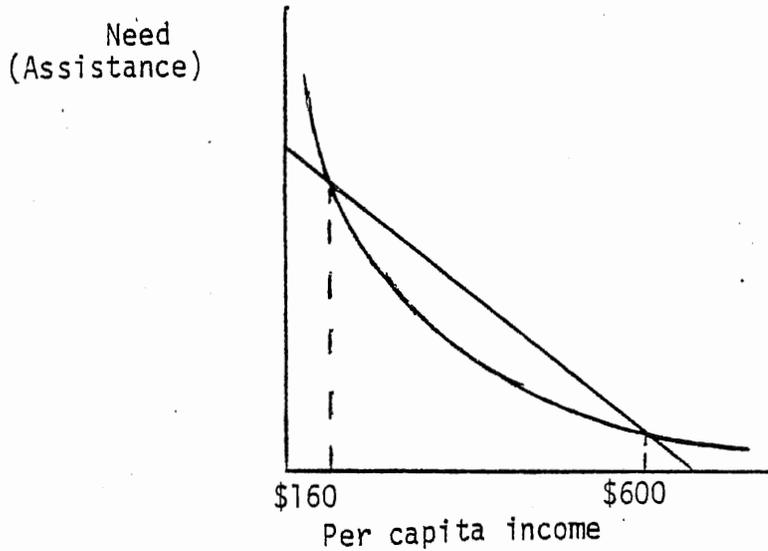
$$\frac{\text{Need}_i}{\text{Need}_j} = \frac{\text{PCI}_j}{\text{PCI}_i}$$

Accordingly, any country with one-half the per capita income of another would be considered twice as needy, whether the two incomes were \$400 and \$200 or \$200 and \$100. Suppose that assistance depended only on per capita income (need), with an income weight of -1.0. Then, if per capita income doubled, need would be halved, and assistance would tend to be cut in half.

It was judged, however, that a more appropriate relation between need and per capita income would be reflected by a linear relation between the two:

$$\text{Need} = A - B(\text{PCI}) \quad (\text{A and B represent positive numbers})$$

In both equations, the lower the per capita income, the greater the need of the recipient. The distinction between the two can best be explained by using a graph:



The straight line formulation focuses on absolute differences in per capita income. For every difference of \$100, whether comparing per capita incomes of \$100 and \$200 or \$700 and \$800, the level of need changes by the same absolute amount. The non-linear formulation focuses on percentage differences in per capita income. Thus, a difference of \$100 has a much greater effect on relative need comparing per capita incomes of \$100 and \$200 than in comparing incomes of \$700 and \$800.

The more practical distinction between the two formulations can be seen by focusing on income levels where the two lines intersect, in this case \$160 and \$600. Countries between these two incomes are evaluated as more

needy by the straight-line formulation than by the non-linear formulation. Countries outside the range are less needy using the straight-line formulation. Of the 58 countries included in the list of recipients, nearly half had adjusted per capita incomes below \$160 and two had adjusted per capita incomes above \$600.^{1/} Accordingly, the straight-line formulation on the whole shifted the IPAs in the direction of higher income recipients.

^{1/} Recall that per capita incomes in Latin America were deflated by a factor of 1.83 to reflect purchasing power considerations, and that per capita incomes in Africa were deflated by a factor of 1.17.

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