

*directing council*



PAN AMERICAN  
HEALTH  
ORGANIZATION

XXIX Meeting

*regional committee*

WORLD  
HEALTH  
ORGANIZATION



XXXV Meeting

Washington, D.C.  
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Provisional Agenda Item 14

CD29/15 (Eng.)  
22 July 1983  
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DISTRIBUTION OF THE FINANCIAL RESOURCES OF THE PAN AMERICAN HEALTH ORGANIZATION

The Executive Committee considered Document CE90/17 (annexed), which examined the question of the distribution of the financial resources of PAHO, along with the presentation of the Secretariat Task Force which prepared the document. After discussions, the Committee recommended to the Directing Council that the study findings and conclusions be taken into account by the Director in establishing planning ceilings for the 1986-1987 country program budget. Particular attention should be given--in addition to the appropriate quantitative indicators--to regional and national priorities as expressed in the Regional Strategies and the Plan of Action for Health for All, to the degree of governmental commitment, to the absorptive capacity of the national administrations, and to special situations within countries.

The Executive Committee considered that the question of how to allocate resources among Members of PAHO should be examined periodically, in consultation with Member Governments. That examination was thought to require particular attention to the adequacy of the appropriate factors in light of changing conditions within the Region. Finally, the Executive Committee suggested that the Director include in his report on the 1986-1987 program budget to the 94th Meeting of the Executive Committee an analysis of how the study had influenced the allocations within that proposed program budget.

The Committee adopted the following Resolution IV, which contains a proposed resolution for the consideration of the Directing Council:

THE 90th MEETING OF THE EXECUTIVE COMMITTEE,

Considering Document CE90/17 which examined the question of the distribution of the financial resources of PAHO, the presentation by the task force which prepared that document, and the ensuing discussion; and

Bearing in mind Resolutions XVI of the XXVIII Meeting of the Directing Council and XIV of the XXI Pan American Sanitary Conference, which requested the Director to study the allocation of PAHO budget resources among Member Countries,

RESOLVES:

1. To recommend to Member Countries that they continue examining the study recommendations prior to the XXIX Meeting of the Directing Council.

2. To recommend to the XXIX Meeting of the Directing Council that it adopt the following resolution:

THE XXIX MEETING OF THE DIRECTING COUNCIL,

Having considered Document CD29/15 which examines the question of the distribution of the financial resources of PAHO, and having heard the presentation from the Executive Committee on this subject;

Bearing in mind Resolutions XVI of the XXVIII Meeting of the Directing Council and XIV of the XXI Pan American Sanitary Conference, which requested the Director to study the allocation of PAHO budget resources among Member Countries; and

Noting the recommendations made by the 90th Meeting of the Executive Committee,

RESOLVES:

1. To note the report on the distribution of the financial resources of PAHO (Document CD29/15).

2. To thank the Director and the task force for the detailed and revealing study and the Executive Committee for its careful review of this matter.

3. To urge the Director to take into account the recommendations contained in the study and the observations made during the discussions of the Executive Committee for establishing planning ceilings for the 1986-1987 country program budget, including the importance of regional and national priorities as expressed in the Regional Strategies and the Plan of Action to attain the objective of health for all by the year 2000, governmental commitment, the absorptive capacity of the national administrations, and special situations, in addition to the appropriate quantitative indicators.

4. To urge the Director to continue to examine this question periodically, and particularly to review, with the participation of the Member Countries, the appropriate factors in light of the different and changing circumstances within the Region.

5. To ask the Director to include in the report on the 1986-1987 program budget to the 94th Meeting of the Executive Committee an analysis of the impact of this study on the distribution of resources contained within that proposed budget.

Annex

*executive committee of  
the directing council*

PAN AMERICAN  
HEALTH  
ORGANIZATION

*working party of  
the regional committee*

WORLD  
HEALTH  
ORGANIZATION



90th Meeting  
Washington, D.C.  
June-July 1983

CD29/15 (Eng.)  
ANNEX

Provisional Agenda Item 7

CE90/17 (Eng.)  
2 May 1983  
ORIGINAL: ENGLISH

DISTRIBUTION OF THE FINANCIAL RESOURCES OF PAHO

The Director submits for the consideration of the 90th Meeting of the Executive Committee a study on the distribution among countries of the financial resources of the PAHO/WHO program budget. This study has been prepared in response to Resolution XIV of the XXI Pan American Sanitary Conference and Resolution XVII of the 88th Meeting of the Executive Committee.

Introduction

The XXI Pan American Sanitary Conference in September 1982 approved Resolution XIV which requested the Regional Director "To make a study of the matter with a view to establishing a more equitable form of distributing PAHO resources, endeavoring to pay due attention to the most characteristic needs of the countries, and to report thereon to the 90th Meeting of the Executive Committee." In 1981, the XXVIII Meeting of the Directing Council requested in Resolution XVI that the Director develop "within the context of global, regional and national strategies of health for all by the year 2000, a rational foundation for the allocation of resources among country programs in a manner that reflects: i) the relative health needs among countries, and ii) the relative capacities of countries to implement global and regional priority programs within their national health systems...." In June 1982 the Executive Committee at its 88th Meeting approved Resolution XVII calling for the Director "to continue studying the question of the most equitable distribution of PAHO/WHO resources among the Member Governments and to report on this subject to the 90th Meeting of the Executive Committee in June 1983" (see Annex I for resolutions).

The present study was undertaken in response to those directives. Four general areas were explored in the preparation of the study. The first action was to examine the constitutional obligations of the Organization to Member Countries, the impact of those obligations on resource distribution, and the recent history of prior attention by the Governing Bodies to the distribution of financial resources among Member Countries. The second step was to analyze the current budget allocation of the Organization and to determine whether any variables appeared from that analysis to explain the current distribution of budget resources among countries. The third subject investigated was how other international agencies distribute budget resources among their member countries and particularly among those within the Region. The fourth activity was to consider other factors which might be relevant for an international health organization in the allocation of resources among member countries. Each of these areas is considered in this report in a separate section, with a final section providing conclusions and recommendations.

#### 1. Juridical and Historical Factors

The constitutional purposes of the Pan American Health Organization set forth in Article 1 underline its broad responsibility "to promote and coordinate efforts of the countries of the Western Hemisphere to combat disease, lengthen life, and promote the physical and mental health of the people."

The Constitution confers on the Conference and the Directing Council the responsibility for reviewing and approving the budget of the Organization and on the Executive Committee the responsibility for submitting the budget prepared by the Director to the Council or Conference with its recommendations. The actual responsibility for preparation of the budget lies with the Director. The functions to be carried out through the actions of the Bureau are to be those contained within the Pan American Sanitary Code or those subsequently added through the actions of the Council or Conference in pursuit of the purposes described in Article 1 of the Constitution.

The Pan American Sanitary Bureau as specified in Chapter IX of the Pan American Sanitary Code is directed to perform such administrative functions and duties as determined by the Conference, to perform as the central coordinating sanitary agency and the general collection and distribution center of sanitary information for the member republics, and to perform additional specific functions. Those specific functions include supplying sanitary authorities of signatory governments "through its publications or in other appropriate manner all available information" relative to the status of communicable diseases, progress in controlling those diseases, new methods of control, morbidity and mortality statistics, public health organization and administration

progress in any of the branches of preventive medicine and other pertinent information. The Bureau also is directed to "advise and consult" the health authorities of signatory governments on "public health problems" and the manner of "interpreting and applying the Code."

Nothing contained in the Constitution or the Pan American Sanitary Code or in the review of resolutions adopted by the Directing Council or the Conference in recent years prescribes any minimum or maximum allocation of resources to any Member Country or determines such distribution by legal mechanisms. The Constitution and the Pan American Sanitary Code both call for the provision of information, consultation, scientific and technical exchange, advice and meetings and conferences and other forms of cooperation as instruments for carrying out its functions.

In reviewing the last five years of action by the PAHO Governing Bodies, it was found that 190 resolutions were adopted in support of the technical cooperation activities of the Organization. Some 70 of those resolutions require the utilization of the Organization's human and financial resources in order to provide information, to undertake studies or to initiate actions required by those resolutions. Virtually none contain mandatory assignation of budget funds, with the exception of Resolution XIV adopted by the XXI Pan American Sanitary Conference in September 1982, which called for no less than 35 per cent of the regular budget to be directed to country programs. Virtually none specifically call for the expenditure of any stated amount or proportion of budget resources to a particular technical cooperation program or to a particular country; nevertheless their policy guidance has affected the overall distribution of Organization budget resources among country, area and regional programs and administration. Indirectly, those resolutions also may affect a portion of budget distribution among countries to the extent that countries request new programs of technical cooperation to carry out those resolutions.

In the discussion and debate within the Pan American Sanitary Conference, the complexity of determining adequate indicators of need and equity for the distribution of resources has been acknowledged. That difficulty, when comparing countries with enormously divergent physical characteristics of population size, area, and geographic features, becomes even more pronounced when incorporating the concept of need, which contemplates consideration of health conditions, institutional development, potential for utilization of resources, availability of internal resource allocation to health and other "characteristic needs" of Member Countries.

In July 1975 the PAHO Executive Committee requested a similar study of "indicators to assist (the Director) in establishing provisional allocations of budgetary amounts for each country..." (Resolution XXXIX of the 74th Meeting of the Executive Committee). A Working Group

was formed and issued its report in July 1976. (See Annex II: Document CD24/8, Formulation of the Program and Budget of the Pan American Health Organization, Report of the Working Group, September/October 1976).

The Working Group report examined previous allocation criteria and described several shifts in the priorities of the Organization over time. The report noted that, initially, attention under the Pan American Sanitary Code was on the "prevention of the international spread of communicable infections, the corresponding need for standardization of the collection of morbidity and mortality statistics, and the interchange of information between signatory governments." At the formative stage of the creation of the World Health Organization, emphasis within the Region moved beyond communicable diseases to include "demonstration of local integrated health projects, and the provision of fellowships." As countries developed their own health infrastructures and their own capacities, interests shifted to broader concerns and the response of the Organization reflected those concerns, adding diversity in the skills and technical specialization of its staff and programs.

The Working Group found that there remained "little or no pressure for reorientation or any demand for new projects" encouraging "a system of marginal budgeting which allowed planning targets for the following year to be established on the basis of current year allocations plus an allowance for cost increases."

The Working Group also found that the amount budgeted for the country programs averaged approximately 33.5 per cent, although the amount expended averaged approximately 35 per cent during the 1970-1974 period. The Group concluded that "it is necessary to review the criteria or indicators used for such allocation, particularly in terms of technical cooperation with Member Countries." (See Annex II, pp. 3-6.)

In its report, the Working Group examined a series of potential indicators of health status and because of the availability of data decided to use mortality of children under age 5 as the best indicator of health needs. That factor was considered in relation to the factors of population and GNP per capita (used as criteria by the UNDP) and compared with the distribution among Member Countries of the 1975 regular budget. Sharp divergences were found from that examination (See Annex II, p. 6 and the table on p. 14). The Working Group cited "the rigidity and implied accuracy inherent in mathematically derived indicators, especially as they relate to their potential application to the health field" and stated, "it seems difficult to envisage a truly objective index--one that would be free from all suspicion, individual biases or arbitrary decisions." It added that much of the data is based on information which is 2-3 years old and "if used in the health field, such mathematical formulae would tend to lock the health planner into a procedure that

would be perpetually at least 3-4 years out of step with the dynamic, constantly changing health conditions, both within and without countries" (Annex II, p. 8).

The Working Group recommendations (See Annex II, pp. 9-10) argue for a more subjective set of indicators which could be considered in establishing prospective allocations among countries. They include Member Country requests with reference to demonstrated needs and relevance to country priorities, priorities established at the regional level such as the Ten-Year Health Plan for the Americas, available information concerning the WHO selection and rejection criteria for project support and mathematical indicators based on other variables. The Working Group then concluded that further discussion was needed.

At the XXIV Meeting of the Directing Council in September 1976, the Working Group study and recommendations were discussed and Resolution XX adopted which took note of the report, requested that its guidance be taken into account and that the study be pursued. (See Annex II, final page). No further indication exists of formal activity related to that subject until the resolutions of the 88th Meeting of the Executive Committee.

It appears from examination of the past record that quantitative indicators have never been formally adopted or utilized by the Organization in the provisional allocation of country programming. The discussions in the prior budget presentations also indicate more attention has been placed on country requests, on the adequacy of programming, on the country and regional priorities, on the likelihood of success and on the capacity for execution on the part of countries in determining provisional allocations.

## 2. Current Factors Explaining Country Distribution

In attempting to secure an understanding of the distribution pattern of budget resources, a statistical inquiry was undertaken which asked the following question: What variables explain the actual distribution among recipient countries of the country program budget? Using the 1980-1981 budget as a base, and concentrating on the distribution of country program resources, a series of linear regression analyses were performed for a diverse set of variables, in several combinations. These variables were population; general development or income using GDP per capita as an indicator; health needs using infant mortality per 1,000 live births as an indicator; and a country's absorptive capacity using doctors per 10,000 population and hospital beds per 1,000 population as the indicators. The rationale for the specific indicators is found on pages 1-3 of Annex III.

The entire study is presented in Annex III because it is a unique and informative research document. The intent was to understand what may have been implicit assumptions of those engaged in developing the



provisional budget allocations among countries. It also was undertaken with the hope of aiding the process of allocation for the 1984-1985 budget. The analysis of the 1980-1981 country program allocation found that population was the most significant variable explaining the distribution among countries of the country program budget, as would be anticipated in a region where Brazil has 700 times the population of Belize. Population alone explained 83 per cent of the distribution among countries. When population is set aside, the only other variable which was statistically significant as an explanation of the distribution among countries was infant mortality. It explained an additional 2 per cent of the distribution among countries. Setting aside population, infant mortality explains 13.5 per cent of the remaining difference in distribution among countries. It was the only statistically significant variable other than population in explaining the pattern of budget distribution (Annex III, p. 4).

The analysis showed that for every 10-point increase in infant mortality--a change of one percentage point--the country's budget tended to rise by 1.3 per cent, holding population constant. To obtain the same increase in budget required an 11 per cent increase in population.

The analysis then explored where countries fall in terms of their individual budgets when viewed in comparison to the average relationship of population and infant mortality of all countries. As the chart in Table 5 of Annex III shows, countries ranged in varying degrees on both sides of the average.

This knowledge--that certain countries' budget shares fell below the value expected from the average relation based on the combination of population and infant mortality--was available to the PAHO Secretariat during consideration of the proposed allocations of marginal available funds within the proposed 1984-1985 budget. Although not the sole criterion, this factor was taken into account. The reassignment of a significant portion of Area funds to the former host countries obviously was a more significant factor. Nevertheless, the end result as shown in the final column of Table 5 (Annex III) is that the 1984-1985 adjustments have the effect of moving all countries previously below the average closer to that average.

The analysis of the 1984-1985 proposed allocation of country program resources now shows that infant mortality is a larger factor in explaining the distribution among countries than in the 1980-1981 budget. A 10-point increase in mortality raises a country's budget not by 1.3 per cent but by nearly two per cent. The combination of population and infant mortality also now explain some 89 per cent of the total distribution among countries rather than the 85 per cent in the 1980-1981 budget. Virtually all of that increase has resulted from the greater impact of infant mortality.

It is important to emphasize that the examination of the distribution both of the 1980-1981 budget and of the 1984-1985 provisional allocations was done on an after-the-fact basis through statistical analysis. The results show which of the variables considered could be viewed as of greater relevance in explaining the distribution, but they do not mean that these variables were the actual basis for decisions on how the allocation should occur. The individual country budgets of 1984-1985 and earlier were developed on the basis of country requests, considering health needs and national resources after joint consultation between the health ministry and PAHO Country Representative and the Secretariat, in light of the mission of the Organization and of the priorities of the Plan of Action.

### 3. Resource Allocation Criteria by Other International Institutions

The study obtained a report of the current country resource allocation criteria at UNDP, UNFPA, UNICEF and the World Bank/IDA. That report (see Annex IV) began with consideration of the previously mentioned Working Group report of 1976 which had examined the UNDP allocation criteria at that time. The report was based on interviews with UN officials and a review of agency documents as well as interviews with World Bank officials.

The report notes that the pursuit of an equitable system for the allocation of resources among recipient countries has been a continuing but elusive goal for the UN system. A general mandate from the General Assembly is to recognize and provide the greatest share of available resources to the "Least Developed Countries."

The differing purpose and character of the different institutions has an inevitable impact on the factors viewed as relevant to a determination of the appropriate allocation criteria. The responsibility of the Pan American Health Organization to pursue improvement in health conditions, as opposed to overall economic development, is an important and significant consideration to recall as one undertakes an examination of the resource allocation of other agencies which have other constitutional mandates. This Organization remains the only organization with the responsibility, above all else, to cooperate with countries in raising the level of health of the peoples of the Americas.

#### 3.1 UNDP

The UNDP, as noted in the Working Group report of 1976 (see Annex IV, p. 4) based 92.5 per cent of its resource allocation on a formula which considers only population and per capita GNP. Per capita GNP was chosen as the most adequate single factor to define overall economic development. The UNDP Council has maintained a continuing review of the allocation criteria. Following the United Nations General Assembly action advocating greater resource concentration on Least

Developed Countries (those with a per capita income of less than \$500 and meeting other conditions of underdevelopment) the UNDP Council formalized its allocation procedures.

Currently, as cited in Annex IV, pages 5-9, UNDP allocates 80 per cent of its country program resources on a formula combining population and GNP per capita. A rigid mathematical equation weights the two factors, with greater weights assigned to countries as population increases and greater weights assigned as GNP per head decreases. In its 1977-1981 allocation, those designated as Least Developed Countries received 66 per cent of the total UNDP resource allocations to country programs.

In its allocation procedure for 1982-1986, UNDP determined that 80 per cent of its resources should go to countries with a GNP of \$500 per head or lower. In addition, in determining the distribution of those resources, the UNDP Council decided to use these two basic criteria (population and GDP) to determine 90 per cent of what a country received with 10 per cent based on supplementary criteria. Supplementary criteria included the following: a) special needs of Least Developed Countries and "front-line" countries (those contiguous to Rhodesia before Zimbabwe independence and those now contiguous to South Africa) which do not meet other supplementary criteria; b) newly independent countries; c) land-locked countries; d) countries suffering from acute ecological problems; e) island developing countries; f) magnitude of a country's development program and commitment to promotion of social justice; and g) a country's cumulative debt, current balance of payments and changes in terms of trade (see Annex IV, p. 7).

However, because the overall level of UNDP funding fell short of the anticipated target, UNDP added to all of the above floors and ceilings so that countries below \$3,000 per capita GNP would receive no less than the resources allocated during the previous 5-year planning cycle, and countries above that GNP level no less than 80 per cent of the resources previously allocated. That provided the floor for country funding. The ceiling was established by insuring that countries above \$1,500 should receive no more than was previously allocated during the prior 5-year period (Annex IV, p. 8). The effect of the floors and ceilings was virtually to eliminate any impact of the supplementary criteria on the distribution among countries.

It should be noted that Latin America and the Caribbean, in 1979 and 1980, received 13.6 per cent and in 1981, 12.8 per cent, of the overall country program funds of UNDP. Of all developing countries, Latin America and the Caribbean represent 15.5 per cent of total population, with an average GNP per capita approximately twice the average for developing countries.<sup>1</sup>

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<sup>1</sup> United Nations General Assembly Document A/36/478, "Operational Activities for Development of the United Nations System Note by the Secretary-General", pp. 49-55.

United Nations General Assembly Document A/37/445, "Operational Activities for Development of the United Nations System Note by the Secretary-General," pp. 82-84.

### 3.2 UNFPA

The particular nature of the UNFPA responsibility for population policy and family planning, with its own sensitivity in the international development field, affects the nature of the distribution of resources. The UNFPA, until the mid-1970's, responded to country requests without the application of prior resource allocation criteria. However, the UNFPA Governing Council, at its 22nd session, determined to concentrate resources on priority countries in response to requests from the Economic and Social Council and the United Nations General Assembly (Annex IV, p. 10).

The UNFPA Council subsequently reviewed a series of possible criteria and concluded to accept as eligibility criteria for priority countries the following: 1) annual increment of population of 100,000 or more; 2) gross reproduction rate of 2.5 or more; 3) infant mortality rate of 160 or more per 1,000 live births; 4) density of agricultural population on arable land of 2.0 persons or more per hectare. In addition to these demographic indicators, an upper limit of \$500 per capita GNP was established as a threshold for designation as a priority country. In 1981, at its 27th session, the UNFPA Governing Council determined that two thirds of country program resources would be allocated to these priority countries, comprised of 54 countries, including 6 from Latin America and the Caribbean.

In determining the distribution among those countries and among other countries with regard to the remaining one third of the UNFPA funds, additional subjective criteria were to be considered. These included policies and programs of the government, commitment by government to stated population policy, absorptive capacity, development assistance from other sources, level of support for population activities from other sources, and actual and projected implementation rates (Annex IV, p. 12).

In 1981, Latin America and the Caribbean received 14.76 per cent of UNFPA country program funds.

### 3.3 UNICEF

The UNICEF resource allocation procedures are less oriented toward quantitative factors, although the agency has adopted criteria which operate as a tentative planning framework for determining a particular country's budget allocation. The process of determining the final allocation rests more on the joint UNICEF and country programming negotiations, and relates to the nature of the programs desired and UNICEF's views of program priorities.

UNICEF has adopted per capita GNP and the size of a country's child population (1-15 years) as its basic resource allocation factors. Countries are then divided into three main groupings: lowest income with per capita GNP of \$400 or less, middle income with per capita GNP of \$400-\$1,500, and highest income with per capita GNP of \$1,500 and above.

The next step is to multiply a "per child" factor to those three groups. Lower income countries as well as those with child populations under .5 million, countries in temporary economic difficulty and countries designated "as if" they were "Least Developed" receive 45 cents per child; middle income countries receive 15 cents per child; and higher income countries receive 2 cents per child.

In bilateral negotiations with recipient countries, there can be up to a 20 per cent increase or decrease in the funding level to which countries otherwise would be entitled based on the resource allocation criteria.

UNICEF is considering adding infant mortality as a supplemental criterion in addition to GNP per capita and size of a country's child population. It has adjusted its current groupings on that basis (Annex IV, Table 1). However, the UNICEF Governing Council has not yet adopted this proposal.

In 1981, 6.06 per cent of UNICEF funds were allocated to Latin America and the Caribbean.

### 3.4 World Bank/IDA

A brief examination was made of the World Bank/International Development Association country allocation process (Annex IV, p. 17). Again, the nature of the institution, a multilateral financial agency of the World Bank Group providing concessional loans for economic and social development, affects the criteria for country allocation. The basic objective is that of supporting the global thrust toward channeling resources to the poorest countries. The primary criterion is that of per capita income, with 90 per cent of IDA funds going to countries with per capita GNP below \$400 and the remainder almost entirely to those between \$400 and \$795. However, lack of creditworthiness is a supplementary criterion. Its use also permits countries which may "graduate" over the \$795 ceiling to continue to participate in the lending of the IDA facility if economic setbacks produce a situation where the country is considered by other lenders to lack creditworthiness. Although few Latin American and Caribbean meet the baseline requirement, current economic conditions may produce greater flexibility from the IDA managers.

A comparison of the percentage distribution to Latin American and Caribbean countries in rank order of actual expenditures in 1981 from UNDP, UNFPA and UNICEF is shown in Annex V.

#### 4. Other Potentially Relevant Factors

In considering criteria which would permit a more objective allocation of PAHO budget resources among the Member Countries, it was felt that at least three categories should be explored in light of Resolution XIV of the XXI Pan American Sanitary Conference, Resolution XVI of the XXVIII Meeting of the Directing Council, and Resolution XVII of the 88th Meeting of the Executive Committee.

- The potential for creating a quantitative scale measuring need, which would reflect the nature of the Organization as a technical cooperation agency in the field of health.
- A mechanism for assuring that the regional priorities of the Strategies and Plan of Action form part of the allocation procedure.
- A mechanism for responding to governmental capacity to absorb and utilize effectively additional resources.

The exploration of potential factors included consideration of those used by other agencies listed in Annex IV, as well as the findings of the 1976 Working Group.

It should be noted that once a quantitative scale has been selected it can be used in a variety of ways. It can be applied rigorously. It can be used to establish floors and ceilings so that countries below a certain level are assured no less than their previous allocation and those above a determined point receive no more than in the prior budget period. It also can serve as a tool for distribution of marginal additional funds, "new monies," such that countries would start by receiving the same allocation as in previous years, and funds beyond those amounts would be distributed according to the quantitative scale. In all instances, it is assumed that the use of the scale is for establishing "planning" figures and that actual allocation of the budget would depend on consideration of the other factors previously noted, such as whether proposed programs meet national and regional priorities, and on the even more subjective but crucial judgment of whether funds can be used effectively.

Among the potential factors considered for determining through quantitative means the measure of needs was the Physical Quality of Life Index (PQLI). It is a composite index which utilizes adult literacy rate (among persons over 15 years), infant mortality rate (deaths per 1,000 live births) and life expectancy at age one. It was developed by the Overseas Development Council over a period of several years in an attempt to find those factors most useful in differentiating the state of well-being or social development among countries. After examining the

vast range of potential factors, these were the three which most effectively differentiated among the various countries in the world. Each of the component factors is scaled on an index from 0 to 100 with 0 equal to the worst condition in the world for that sector in 1950 and 100 the optimal condition expected by the year 2000. The consequence of using the PQLI is to focus on countries at a low level of social development and therefore a high level of need. In Annex VI, the PQLI for Member Countries is converted to a percentage (those with lowest PQLI receiving the largest share) of the total available resources which each country would received if the PQLI alone were used as the allocation criterion. However, since PQLI does not reflect population, a separate index was prepared which combined those two factors. Again, Annex VI converts those factors into percentage terms for easy comparison.

Other factors, including direct measurements of economic development, such as GNP per capita, also were examined, in combination with indicators of health conditions. A scale representing GNP per capita, PQLI and population and distributed by percentage shares also is shown in Annex VI. Finally, a scale is included in Annex VI considering infant mortality, life expectancy and GDP per capita.

As noted earlier, the scale utilized also depends somewhat on the purpose. If all country program funds were to be distributed according to any particular formula, then population would be an essential component. If only marginal additional funds are to be considered, then one could argue that it is not necessary to include population, given its already significant weight, as shown in Annex III, in the current distribution of the PAHO/WHO budget, but rather to concentrate on an indicator or indicators of health conditions alone.

The final two scales in Annex VI reflect a combination of population and infant mortality. The first weights infant mortality 75 per cent and population 25 per cent. The second applies the average relation of population and infant mortality in the proposed 1984-1985 budget allocation.

All of the scales are then compared to the actual percentage distribution of the proposed 1984-1985 budget.

In determining allocations among countries, more subjective criteria would be needed to assure consideration of the regional priorities of the Strategies and Plan of Action as well as to consider governmental capacity to effectively absorb and utilize additional resources.

Four possible categories were explored in this regard:

1. Absorptive Capacity

- The existence of multiple agencies with multiple projects
- the Ministry of Health designated as the chief determinant of policy for the health sector
- Availability of national counterpart personnel
- Plans and projects already in the process of execution with additional requests for supplemental cooperation

2. Governmental Commitment

- Existence of a favorable political situation
- Existence of formulated national health policies
- Existence of formulated plans and programs
- Programs and projects underway with assigned and approved resources

3. Regional Priorities

- Tangible expression at the national level
- Small countries
- National projects with significant regional importance
- Unusually large area of programmed coverage for rural and/or urban areas

4. Special Situations

- Progressive deterioration of the installed capacity and in its functioning
- Severe economic crisis
- National emergency.

Although arbitrary quantitative values could be assigned to the individual categories, it was considered, during the course of the study, more useful merely to note these as possible subjects to be considered in developing country budget planning figures in the future.

The use of these supplementary criteria might be to adjust provisional planning ceilings produced through the use of quantitative measurements of need, or to provide for these supplementary criteria to be applied to a specific portion of budget resources.

It should be noted that while various indicators can be designed for each of these categories, in very few instances are they likely to be more revealing than the combined determination of professionals based on experience and comparative analysis.



5. Conclusion and Recommendation

In reviewing the various sources of information on this subject, it is apparent that radical shifts in resources from one biennium to the next are unlikely to be possible or desirable. Similarly, it is believed that the analysis of the recent budgets and the currently proposed 1984-1985 budget emphasize the two most relevant factors for an international health agency, namely population and infant mortality.

The practices of other agencies offer an appropriate context for reviewing PAHO's own practice. In general, it can be stated that the other agencies studied use quantitative formula more rigidly in determining budgetary planning levels than does PAHO. Also, the criteria which they apply reflect their own purposes to a considerable extent, purposes which while similar are not identical to those of an international health agency. Also, the overwhelming weight given to gross national product per capita reflects the concentration of resources at a global level which does not take into account the flaws in using national income averages for identifying the numbers of persons living in poverty. National averages may, particularly in large countries, mask substantial numbers of poor persons.

In considering the various possible indicators for need, no conclusive judgment is possible as to a particular indicator which reflects non-arbitrary considerations. However, it is the judgment of the Director that in considering factors to be used by this Organization in assigning budgetary planning ceilings for countries, there is a rationale in the Organization's Constitution and justification in terms of the Organization's overall policy goals to consider the rate of infant mortality as being relevant to a judgment of need. Infant mortality as an indicator also has added value in that numerous studies show it to be more related to the actual distribution of poverty and wealth within countries than indicators such as GNP per capita, which hide socioeconomic differences. Infant mortality thus is shown to be a better indicator of socioeconomic inequities within countries than virtually any global measure.<sup>1</sup>

It is also the view of the Director that if any decision is to be made to use quantitative factors to determine a significant portion of the Organization's budget allocations to countries, infant mortality or whatever other health indicator chosen should be employed together with

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<sup>1</sup> Proceedings, Conference on Social Factors in Mortality. Colegio de México, Mexico, 1980.

population. If only marginal amounts are to be allocated through a quantitative measure, then the health indicators alone can serve to determine the distribution.

It is recommended that in determining the planning ceilings for countries for the 1986-1987 budget that funding beyond that provided in 1984-1985 be allocated on the basis of combined indicators weighting relative levels of infant mortality 75 per cent and population 25 per cent.

It is emphasized that this can only be an initial step in the process of developing budgetary planning ceilings for each country. A second step must be involved in which there is consideration of the other factors noted earlier, including absorptive capacity, governmental commitment and special circumstances.

Finally, the decision as to the level of each country's actual budget allocation, as opposed to the initial planning ceilings, must depend on the adequacy of the proposed programs and the assurance that those proposed programs reflect national and regional priorities and, based on past evaluation, appear likely to result in progress toward the goals of health for all.

Annexes

ANNEX I



PAN AMERICAN  
HEALTH  
ORGANIZATION

XXVIII Meeting



WORLD  
HEALTH  
ORGANIZATION

XXXIII Meeting

CE90/17 (Eng.)  
ANNEX I(A)

RESOLUTION XVI

PROVISIONAL DRAFT OF THE PROPOSED PROGRAM AND BUDGET OF THE PAN AMERICAN  
HEALTH ORGANIZATION FOR THE BIENNIUM 1984-1985

THE DIRECTING COUNCIL,

Having examined Official Document 169, submitted by the Director of the Pan American Sanitary Bureau, containing the provisional draft that is to constitute the basis for preparation of the proposed program and budget of the Pan American Health Organization for 1984-1985 amounting to \$106,680,000;

Noting that the provisional draft of the proposed program and budget is not structured in accordance with the components of the Plan of Action for the Implementation of Regional Strategies of Health for All by the Year 2000 adopted by the XXVIII Meeting of the Directing Council; and

Acknowledging that 1982-1983 is a transitional period,

RESOLVES:

1. To request the Director to formulate the draft program and budget for 1984-1985 so that it:
  - a) Conforms to the structure established in the Regional Plan of Action as well as to the Program Classification System to be established by WHO under the Seventh General Program of Work;
  - b) Takes into account the comments and concerns expressed by Member Governments at the XXVIII Meeting of the Directing Council with respect to inflationary costs;
  - c) Ensures that priority is given to the regional baseline target areas established in Chapter 6 of Part II of Official Document 173;
  - d) Develops, within the context of global, regional and national strategies of health for all by the year 2000, a rational foundation for the allocation of resources among country programs in a manner that reflects:
    - i) the relative health needs among countries; and
    - ii) the relative capacities of countries to implement global and regional priority programs within their national health systems;

./...

- e) Gives priority to the allocation of resources for the delivery of programs and services to countries relative to area program, and minimizes the cost of administration and program support costs;
- f) Incorporates the results of further consultations with national authorities in the reformulation of country programs and budgets in accordance with (d) above.

2. To direct the Executive Committee to review and revise, as necessary, the draft program and budget for 1984-1985 in accordance with the above guidelines.

3. To express its concern over the number of Member Countries that are delinquent in the payment of their quota contributions to the PAHO regular budget, and to request that Member Countries bring their contributions up to date at the earliest opportunity.

(Approved at the twelfth plenary session,  
29 September 1981)

## XXI PAN AMERICAN SANITARY CONFERENCE

## XXXIV REGIONAL COMMITTEE MEETING

WASHINGTON, D.C.

SEPTEMBER 1982

RESOLUTION XIV

CE90/17 (Eng.)  
ANNEX I(B)CRITERIA AND GUIDELINES FOR THE PROPOSED PROGRAM AND BUDGET OF THE  
PAN AMERICAN HEALTH ORGANIZATION FOR THE BIENNIUM 1984-1985

THE XXI PAN AMERICAN SANITARY CONFERENCE,

Having considered Document CSP21/24, which contains a PAHO Classified List of Programs based on the Program Classification System established by WHO under the Seventh General Program of Work (Annex C), and a tentative percentage distribution for 1984-1985 of PAHO/WHO Regular resources by the new program classification system and by location (Annex D);

Bearing in mind Resolution XVI of the XXVIII Meeting of the Directing Council which requests the Director to formulate the draft program and budget for 1984-1985 using certain guidelines provided; and

Noting the recommendations made by the 88th Meeting of the Executive Committee,

## RESOLVES:

1. To accept the PAHO Classified List of Programs set forth in Annex C of Document CSP21/24, with the addition of Classification 2.6, Disaster Preparedness, and with modifications in some of the classification descriptions to take into account recommendations of the Subcommittee on Long-Term Planning and Programming, as the structure to be used in the 1984-1985 program and budget document, while requesting the Director to continue to work with WHO to develop appropriate adjustments in either the WHO or PAHO classification systems to ensure that they are as identical as possible, and present the results of these discussions to the Executive Committee for its approval.

2. To request the Director:

- a) To increase the proportion of funds allocated to country programs to at least 35 per cent of the PAHO/WHO Regular budget, taking into account the proposed programs and budgets to be submitted by the Member Countries, in formulating the draft program and budget for 1984-1985;

- b) To make appropriate reductions in other budgetary locations, taking into account the regional baseline target areas established in Chapter 6 of Part II of Official Document 173, and the ongoing studies related to the PAHO Centers and the Area Offices;
  
- c) To make a study of the matter with a view to establishing a more equitable form of distributing PAHO resources, endeavoring to pay due attention to the most characteristic needs of the countries, and to report thereon to the 90th Meeting of the Executive Committee.

(Approved at the eighth plenary session,  
23 September 1982)



EXECUTIVE COMMITTEE OF  
THE DIRECTING COUNCIL

PAN AMERICAN  
HEALTH  
ORGANIZATION

88th Meeting

WORKING PARTY OF  
THE REGIONAL COMMITTEE

WORLD  
HEALTH  
ORGANIZATION

88th Meeting



CE90/11 (Eng.)  
ANNEX I(C)

RESOLUTION XVII

CRITERIA AND GUIDELINES FOR THE PROPOSED PROGRAM AND BUDGET OF THE  
PAN AMERICAN HEALTH ORGANIZATION FOR THE BIENNIUM 1984-1985

THE EXECUTIVE COMMITTEE,

Having considered Document CE88/19, which contains a PAHO Classified List of Programs based on the Program Classification System established by WHO under the Seventh General Program of Work (Annex C), and a tentative percentage distribution for 1984-1985 of PAHO/WHO Regular resources by the new program classification system and by location (Annex D); and

Bearing in mind Resolution XVI of the XXVIII Meeting of the Directing Council which requests the Director to use new guidelines in formulating the draft program and budget for 1984-1985,

RESOLVES:

To recommend to the XXI Pan American Sanitary Conference, XXXIV Meeting of the Regional Committee of the World Health Organization for the Americas, that it adopt the following resolution:

THE XXI PAN AMERICAN SANITARY CONFERENCE,

Having considered Document CE88/19, which contains a PAHO Classified List of Programs based on the Program Classification System established by WHO under the Seventh General Program of Work (Annex C), and a tentative percentage distribution for 1984-1985 of PAHO/WHO Regular resources by the new program classification system and by location (Annex D);

Bearing in mind Resolution XVI of the XXVIII Meeting of the Directing Council which requests the Director to formulate the draft program and budget for 1984-1985 using certain guidelines provided; and

Noting the recommendations made by the 88th Meeting of the Executive Committee,

RESOLVES:

1. To approve the PAHO Classified List of Programs set forth in Annex C of Document CE88/19, with the addition of Classification 2.6, Disaster Preparedness, and with modifications in some of the classification descriptions to take into account

./...



recommendations of the Subcommittee on Long-Term Planning and Programming, as the structure to be used in the 1984-1985 program and budget document.

2. To request the Director:

- a) To increase the proportion of funds allocated to country programs to at least 35 per cent of the PAHO/WHO Regular budget, taking into account the proposed programs and budgets to be submitted by the Member Countries, in formulating the draft program and budget for 1984-1985;
- b) To make appropriate reductions in other budgetary locations, taking into account the regional baseline target areas established in Chapter 6 of Part II of Official Document 173, and the ongoing studies related to the PAHO Centers and the Area Offices;
- c) To continue studying the question of the most equitable distribution of PAHO/WHO resources among the Member Governments, and to report on this subject to the 90th Meeting of the Executive Committee in 1983.

(Approved at the eighth plenary session,  
28 June 1982)

ANNEX II



*directing council*

PAN AMERICAN  
HEALTH  
ORGANIZATION

XXIV Meeting

*regional committee* CE90/17 (Eng.)  
ANNEX II(A)

WORLD  
HEALTH  
ORGANIZATION



XXVIII Meeting

Mexico, D.F.  
September - October 1976

Provisional Agenda Item 31

CD24/8 (Eng.)  
2 August 1976  
ORIGINAL: ENGLISH

FORMULATION OF THE PROGRAM AND BUDGET OF THE PAN AMERICAN HEALTH ORGANIZATION

The Interim Report of the Working Group (Document CE76/7) was presented to the 76th Meeting of the Executive Committee in June 1976. Following discussion of the Report, the Committee passed Resolution XXII, which transmitted the report to the Directing Council at its XXIV Meeting, together with the summary records of the discussion of the item by the Executive Committee. The Executive Committee urged the Director to take into account the recommendations of the report in the preparation of future programs and budgets of the Organization. The report, revised by the Working Group since the Meeting of the Executive Committee, is attached as Annex I. The summary records of the discussion of the item at the Executive Committee are attached as Annex II.

Annexes

FORMULATION OF THE PROGRAM AND BUDGET OF  
THE PAN AMERICAN HEALTH ORGANIZATION

Report of the Working Group

The need for close cooperation between national health authorities and the Pan American Health Organization (PAHO) in the preparation of the program and budget of the Organization was emphasized in the discussions of the Executive Committee at its 74th Meeting held in Washington, D.C., in July 1975. Resolution XXXIX adopted by the Committee asked, in operative paragraph 3 ". . . the Director to appoint a committee for the purpose of recommending indicators to assist him in establishing provisional allocations of budgetary amounts for each country which will be commensurate with the technical assistance requirements for the projects requested by the Governments according to their own priorities and those established by the Organization."

In compliance with this resolution, the Director appointed a Working Group comprised of Dr. Alfredo Arreaza Guzmán, former Assistant Director of PASB, and Dr. A. J. de Villiers, Director General of International Health Services of the Department of National Health and Welfare, Canada.

1. Method of Work of the Working Group

The Working Group reviewed the constitutional basis for PAHO's functions and activities, particularly with regard to the provision of technical assistance as part of the overall activities of the Organization, which in present day usage is better termed "technical cooperation," as discussed in OD-141, pages 1-5, and WHO OR-231, Appendix 1.

In addition, the Working Group reviewed all available documents relating to the allocation of resources to Member Countries under the various programs of technical cooperation; interviewed the officers involved in the preparation of the program and budget; examined the procedures followed by the Organization in the establishment of budget allocations for country programs, and studied the criteria or indicators used in the distribution of PAHO resources in accordance with the health needs and the available resources of individual Member Countries.

As part of its basic approach to the study of the allocation of the Organization's resources, the Working Group, from the outset, considered that:

- (a) It is essential that the greatest efforts involving technical cooperation be directed towards the Member Countries in greatest need. The extent, in monetary

terms, to which this guideline could be applied is subject only to the need to maintain central technical services, support and administrative services, and the priority program needs of groups of countries of the Region as a whole.

- (b) It is important to preserve the concept of the unity of the Organization's technical cooperation programs with Member Countries regardless of whether the component parts are at Headquarters, Area or Country level.

2. The Development of the PAHO Program and the Current Status of Budget Allocations to Member Countries

The bases for the development of the program of the Organization have always been the provisions under the Pan American Sanitary Code and later the Constitution of the Pan American Health Organization, as well as the decisions taken by the Pan American Sanitary Conference, the Directing Council, and the Executive Committee with regard to the various programs of work and the priorities established therein, such as those in the Ten-Year Health Plan for the Americas.

The program itself has gone through a number of important changes in relation to budgetary allocations. The early program emphasis under the Pan American Sanitary Code was on the prevention of the international spread of communicable infections, the corresponding need for standardization of the collection of morbidity and mortality statistics, and the interchange of information between signatory governments.

Significant extension into technical cooperation occurred during and following the formative years of the World Health Organization (WHO). The Organization's program again focused mainly on certain regional priorities such as the communicable diseases (malaria, tuberculosis, yaws, venereal diseases), a few demonstration or local integrated health projects, and the provision of fellowships. Environmental sanitation projects were difficult to implement because of the almost complete lack of appropriate personnel in most countries. With a serious lack of the required health infrastructure at the national level, little was possible. Under these circumstances, it would appear that the choice of projects--and hence allocation of resources--was strongly influenced by the initiative of the Bureau staff.

The gradual strengthening of the economic status of some Member Countries, the increasing availability of local resources, and the greater demand by local populations for health services, brought about a better organization of country health services and the provision of a wider variety of special services. A growing interest, willingness and ability of some countries to utilize the services offered by the Organization accompanied this development. In consequence, the Organization increasingly required

and acquired a wider range of skills in order to serve Member Countries. Growth was essential, but it was difficult to change the projects that had been established initially. It appears that until recently--with little or no pressure for reorientation or any demand for new projects--there was a tendency for certain projects to continue without evaluation and/or change. This encouraged a system of marginal budgeting which allowed planning targets for the following year to be established on the basis of current year allocations plus an allowance for cost increases. New projects at country level were budgeted on the same basis, taking into consideration the (unwritten) general principle that total country allocations should not be reduced at any time. Thus, real growth in the Organization's program depended upon increases in the total budget, with priorities for growth areas being established jointly by the ministries of health and PAHO Area and Country staff.

The data provided in Table 1 pertain to the percentages of PAHO/WHO regular funds budgeted for various types of projects for the years 1970 to 1974, inclusive, and clearly show that allocations for country projects remained at approximately the same level throughout. It is interesting to note in Table 2 that the amount expended on country projects was generally higher than the amount budgeted by an average of 1.5 per cent for the years under discussion.

Another development of note is the increasing difficulty experienced by the Organization in attempting to meet the rising expectations and the increasing demands for services by Member Countries with the currently available resources. Inflationary cost increases have virtually wiped out increases for program expansion. In response, the Organization has increased its efforts to obtain extrabudgetary resources\* as well as to promote and to emphasize the need for country health programming with its inherent requirements for a clear definition of country priorities--in the realization that such programming is an essential prerequisite for the optimal use of the scarce resources available.\*\*

It would therefore appear reasonable to conclude that a better rationalization of the use and allocation of already scarce resources is timely--as recognized by the Executive Committee--and that it is necessary to review the criteria or indicators used for such allocation, particularly in terms of technical cooperation with Member Countries.

### 3. The Development of Guidelines and Criteria for Program and Budget Allocations

General guidance for program and budget development is provided by the decisions of the Pan American Sanitary Conference, the Directing Council,

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\* Organizational study on: "The Planning for and Impact of Extrabudgetary Resources on WHO's Programme and Policy," OD-229, pp. 66-95, Annex 8.

\*\* Working Guidelines for Country Health Programming. WHO CHP/DT, 5 July 1974.

and the Executive Committee with regard to the priorities for the Region (e.g., the Ten-Year Health Plan, the Sixth General Programme of Work of WHO) and by the priorities established at country level following on the introduction of country health programming.

No clearly expressed rules or criteria to be used in the selection of project activities or in the resultant establishment of budget allocations to individual countries could be found in the PAHO documentation examined by the Working Group. Nevertheless, the overall evidence suggested--as will become clearer later--that some general principles must have been followed at least for the initial establishment of budgetary targets under the marginal budgeting procedure mentioned above, as well as for the (re)allocation of funds for new projects within those targets. It was necessary, therefore, to attempt to trace and identify such guidelines and to place them into better perspective for use in the future.

The First General Programme of Work for a Specific Period developed by WHO for the years 1952-1955 (WHO OR.32, Annex 10, pp. 57-58) discussed in some detail a number of criteria for the selection or rejection of activities. Although these criteria were developed primarily for application at the global level, they also provide a sound basis for the selection of projects or activities at the regional and intercountry levels, and even at the country level. A brief outline of these criteria, as summarized by the Working Group, follows:

- (a) Regional or intercountry feasibility and acceptability, with the emphasis on intercountry acceptability; availability of techniques considered to be sound; and active participation in the activities by Member Countries, except under emergency conditions.
- (b) Possibility of demonstrating results and of the project being successful within a specified period of time.
- (c) Scope of the proposed field of action with emphasis on activities that are likely to benefit either directly or indirectly the largest possible number of people.
- (d) Availability of qualified personnel to carry out the work.
- (e) Prerequisites to action, including: the necessary preliminary studies and preparation; full account of work already carried out in a particular field by other agencies; the possibilities of action or financing by other sources; whether PAHO is the agency best suited to initiate or undertake proposed action; and the possibility of integrating the proposed action with other projects related in type.

- (f) The maintenance and development of activities which can be performed only through an international health organization and which can be related to, and comprehensively defined as, international information, standardization and coordination.
- (g) Financial feasibility.

To these criteria could be added a number of other WHO criteria that pertain more particularly to the country level, namely:

- (a) Relative importance and urgency of the health problem.
- (b) Desire of a country to obtain technical services.
- (c) Capacity of a country to benefit from technical cooperation projects with particular reference to their ability to carry on activities themselves at the termination of a PAHO project.

These last three criteria, together with the availability of the technical knowledge to solve problems, appear to be those which were used most consistently in responding to the requests for technical cooperation received from Member Countries. In the past, on occasion, cognizance had to be taken of political realities and pressures. Most countries, however, tailored their requests according to their needs, which were determined arbitrarily at times but now, in collaboration with PAHO, increasingly identified by health sector analysis or country health programming. More advanced countries obviously should require less assistance.

The criteria outlined above, although qualitative, are nevertheless all still valid in today's context, and when used in conjunction with the priorities emanating from country health programming or at the intercountry and regional levels, according to the discussions by the Governing Bodies, such as the program criteria referred to in the Sixth General Programme of Work of WHO, should provide a realistic basis for the development of the totality of the Organization's program and budget. An essential and integral part of this process is the active participation of both the Member Countries and the Organization itself.

The rationalization of the application of the principle of "most for the most in need" and the determination of the proportion of the overall PAHO/WHO regular budget to be allocated to technical cooperation at the country level also need to be considered. While the principle of "most for the most in need" may be universally acceptable, it implies a ranking of



countries according to need. However, it may be difficult to identify totally acceptable criteria for the equitable allocation of the PAHO/WHO regular budget for activities at the country level.

4. Examination of a Mathematical Formula for Use as a Possible Indicator

The discussions which took place during the 74th Meeting of the Executive Committee, leading to the approval of Resolution XXXIX, focused attention on the possible establishment of mathematical criteria or a formula for such use. Mathematical formulae are most commonly used by agencies charged with responsibility to redistribute economic resources. As an example of such formulae the Working Group studied the formula used by the United Nations Development Program (UNDP), and developed several modifications in an attempt to make it more appropriate for possible use in relation to the health conditions operative within Member Countries. The UNDP developed its formula to calculate targets--Indicative Planning Figures (IPF)--for the distribution of available economic resources among recipient countries. The major portion of the formula (92.5 per cent) is based on two factors, namely population and per capita GNP. A small portion is based on certain supplementary social criteria.

Having examined the UNDP formula, the Working Group felt that, being based largely on population and per capita GNP, it did not adequately reflect the health conditions and the health needs of the Member Countries and therefore searched for suitable health indicators which could be used to weight or modify the basic UNDP equation. Among the indicators considered were:

- life expectancy at birth
- infant mortality
- proportion of deaths in children under five years of age
- per capita calorie consumption
- per capita protein intake

Life expectancy at birth was thought to be the single most useful indicator to reflect the health status of a population, but reliable data are not available for most countries. Similarly, the data are not complete enough for most of the other indicators listed. The most reliable information available relates to the proportion of deaths for children under five years of age, as compared with the general death rate. Since deaths in this age group would markedly influence life expectancy in any case, and because such deaths would largely reflect an aggregate of adverse health factors, such as poor sanitary conditions, unsafe water supply, the prevalence of communicable diseases, and poor nutrition status, it was considered to be an appropriate "health needs" indicator, and was selected for further examination.

The UNDP method was re-examined and modified on the basis of a population of at least 2 million, a per capita GNP of \$700, and the inclusion of the "health needs" factor. Several calculations were made for which the relative importance of the basic elements was varied for purposes of illustration. The most recent data available, mostly for 1973 (comparable to those published in Table 12 of "Health Conditions in the Americas, 1969-1972," were utilized for the illustrative calculations.

The countries were arranged in ascending order of the proportion of under-five years mortality (see Figure 1), and divided into four groups. The groups, in ascending order, are as follows:

Group 1

Barbados  
Uruguay  
Trinidad and Tobago  
Guyana\*  
Cuba  
Argentina  
Bahamas  
Jamaica

Group 2

Chile  
Surinam  
Paraguay  
Costa Rica  
Panama

Group 3

Belize  
Nicaragua  
Venezuela  
Colombia  
Mexico  
Honduras  
Bolivia\*  
Brazil\*

Group 4

Dominican Republic  
El Salvador  
Peru  
Guatemala  
Ecuador  
Haiti\*

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\* estimated

In distributing the points to be assigned to each country on the basis of this index of health needs, weights were assigned as follows:

Each country in Group 1	1
Each country in Group 2	2
Each country in Group 3	3
Each country in Group 4	4

The percentage distribution, calculated on the basis of the 1975 PAHO/WHO regular budget allocations to country projects, is given in Table 3 for the adapted UNDP criteria and two combinations of the UNDP and "health needs" indicators. It can be observed that a certain general comparability and conformity exists with regard to country allocations as represented by the planning figures for 1975 expressed in percentages in column 6. However, when applying the desired percentages, e.g., from column 5 to the total amount allocated to country projects for 1976, as shown in Table 4, a number of significant differences become apparent. The most important of these relate to the drastically lowered amounts--in real budgetary terms--for countries such as Costa Rica, Jamaica, and Trinidad and Tobago.

The data outlined above illustrate clearly some of the difficulties, and particularly the rigidity and implied accuracy, inherent in mathematically derived indicators, especially as they relate to their potential application to the health field. Questions can be raised with regard to whether it is indeed practically possible to arrive at the appropriate units in a manner equitable or acceptable to all countries. In other words, while the mathematical accuracy of the equation and the calculations based on it can always be verified, it seems difficult to envisage a truly objective index--one that would be free from all suspicion, individual biases or arbitrary decisions.

Health status indices are of course fundamental to arriving at a true understanding of the health needs of a country. The best available data are, however, still largely unreliable. It is also the totality of all the health indices, used in conjunction with the totality of the socio-political and economic indices, that can best interpret the true health status of a people or the potential for its improvement.

Furthermore, the UNDP type of mathematical formula (developed for purposes of redistributing economic resources) is based in essence on information which is at best already 2-3 years old and is applied prospectively to 2-5 years ahead. If used in the health field, such mathematical formulae would tend to lock the health planner into a procedure that would be perpetually at least 3-4 years out of step with the dynamic, constantly changing health conditions, both within and between countries. This would be

unfortunate for a health organization that must retain sufficient flexibility to respond to the demands created by rapidly changing conditions, and that must at all times be prepared to meet the challenges of the future.

Having in mind the various factors that must be considered, including the basic unreliability of the data, mathematical formulae would appear to be unsuitable to the types of problems the Organization has to solve and the kinds of programs it has to develop. Their usefulness in the allocation of PAHO's resources would, at best, be limited. They could perhaps provide general guidance if applied to that portion of the Organization's technical cooperation program and budget relating to technical assistance, such as fellowships, training-educational materials, and supplies and equipment used for demonstration purposes. However, PAHO's main concern must be with health promotion based on technical cooperation and not on the redistribution of resources.

Whatever the program/budget allocations arrived at for individual Member Countries, the rationale used for determining the figures involved should be clearly understood and should not be open to the interpretation that amounts allocated belong to them, or that unexpended portions could be redirected by countries individually for purposes other than the agreed program.

Technical cooperation programs should be clearly formulated in relation to the demonstrated health needs of a country--defined on the basis of country health programming--and should always aim at national self reliance. In this direction the Organization should strive also to improve the ability of countries to benefit from programs of technical cooperation. Essential to the latter would be the development of an adequate infrastructure and the most efficient use possible of allocated resources.

#### Tentative Recommendations

Based on the above considerations and the discussions at the 76th Executive Committee Meeting of Resolution XXXIX of the 74th Meeting of the Executive Committee, the Working Group suggests that consideration be given to the following groups of indicators, in the belief that these could best assist the Director in establishing provisional allocations of program/budgetary amounts for technical cooperation with Member Countries:

1. Requests from Member Countries with particular reference to demonstrated needs and their relevance to the priorities established at country level by accepted country programming procedures, and the magnitude and type of their resource implications.

2. The priorities established by the decisions of the Pan American Sanitary Conference, Directing Council, and Executive Committee in keeping with the constitutional role of the Organization (including the Ten-Year Health Plan for the Americas, at the regional level, and the General Programme of Work for a Specific Period and other relevant decisions adopted by WHO).

3. Available information relating to the criteria used by WHO for the selection or rejection of specific activities, with particular emphasis on:

- (a) The relative importance of a specific health problem;
- (b) The demonstrated "absorption capacity" of a country to benefit from and to continue selected activities;
- (c) Regional, intercountry and country feasibility and acceptability of an activity;
- (d) The likelihood that a specific activity will be successful; and
- (e) Financial feasibility, etc.

4. Indicators established as part of the Organization's long-term planning and evaluation procedures.

In concluding, the Working Group emphasizes that this initial report does not constitute an exhaustive study of the problem, but hopes that it will provide an adequate basis for continuing further discussions.

The Working Group is also convinced that both the Executive Committee and the Directing Council could make real contributions in further assisting the Director with the rationalization and development of the program and budget of the Organization.

FIGURE 1

PERCENTAGE OF DEATHS UNDER FIVE YEARS OF AGE

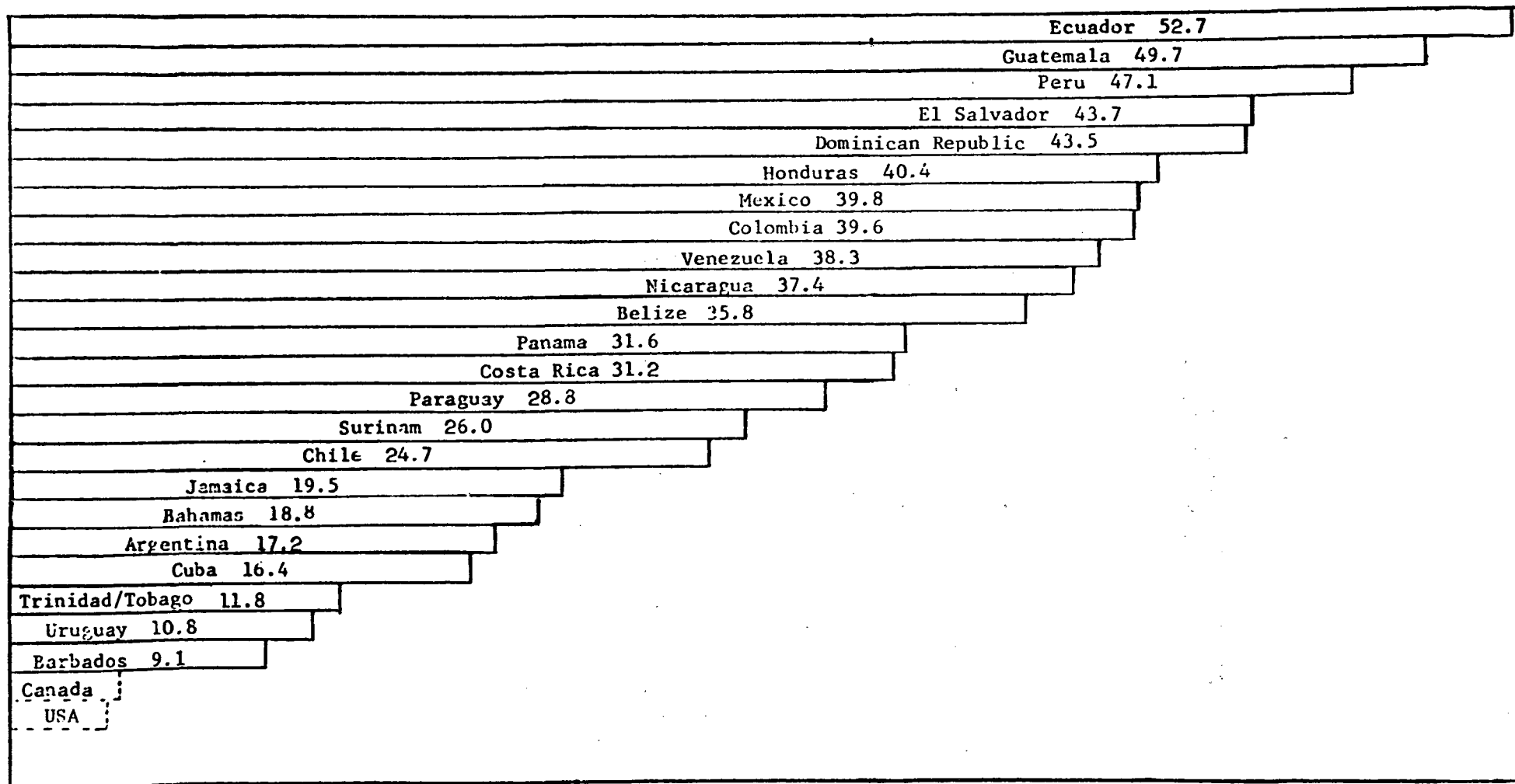








TABLE 3

## TARGET FIGURES BASED ON POPULATION/GNP AND HEALTH

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>UNDP criteria only*</u>	<u>UNDP 75%, health 25% using ratios</u>	<u>using increments</u>	<u>UNDP 67%, health 33% using ratios</u>	<u>using increments</u>	<u>Distribution of 1975 PR &amp; WR budget</u>
Argentina	3.7	3.1	3.1	2.9	3.0	4.4
Bahamas	.2	.2	.6	.2	.7	0.4
Barbados	.4	.4	.7	.4	.8	1.2
Belize	.5	.5	1.5	.5	1.9	.9
Bolivia	4.7	4.8	4.7	4.8	4.7	3.3
Brazil	26.0	26.1	20.7	26.2	19.0	21.8
Chile	2.7	2.5	2.8	2.4	2.8	4.1
Colombia	13.1	13.2	11.0	13.2	10.3	5.3
Costa Rica	.5	.5	1.2	.5	1.4	2.8
Cuba	3.1	2.6	2.7	2.5	2.6	2.6
Dominican Republic	2.0	2.2	3.0	2.3	3.4	2.9
Ecuador	4.4	4.7	4.8	4.9	4.9	3.8
El Salvador	2.8	3.0	3.6	3.1	3.9	5.1
Guatemala	2.7	2.9	3.5	3.0	3.8	3.8
Guyana	1.2	1.0	1.3	1.0	1.3	1.6
Haiti	5.3	5.8	5.5	6.0	5.6	3.9
Honduras	2.1	2.1	2.7	2.1	2.9	2.8
Jamaica	.5	.4	.7	.4	.8	3.1
Mexico	13.2	13.2	11.0	13.2	10.3	6.7
Nicaragua	.8	.8	1.8	.8	2.1	1.7
Panama	.5	.4	1.1	.4	1.3	2.4
Paraguay	1.6	1.5	2.0	1.4	2.1	2.6
Peru	4.6	5.0	5.0	5.2	5.1	3.4
Surinam	.5	.5	1.1	.4	1.3	1.6
Trinidad & Tobago	.4	.3	.7	.3	.8	1.5
Uruguay	.7	.6	.9	.6	1.0	2.0
Venezuela	1.5	1.5	2.3	1.5	2.5	4.3

\* With slight adjustment described in text

TABLE 4

PLANNING FIGURES BASED ON POPULATION/GNP AND A HEALTH FACTOR  
COMPARED WITH WR AND PR FIGURES FOR 1976

Country	WR-PR Allocation 1976*	Allocation of WR-PR 1976 using % given in Table 3, Col. 5
Argentina	\$ 557,145	\$ 366,029
Bahamas	58,561	85,407
Barbados	139,670	97,608
Belize	108,588	231,819
Bolivia	403,303	573,446
Brazil	2,409,236	2,318,185
Chile	431,480	341,627
Colombia	635,267	1,256,700
Costa Rica	364,299	170,814
Cuba	329,230	317,225
Dominican Republic	360,147	414,833
Ecuador	516,611	597,848
El Salvador	531,951	475,838
Guatemala	521,671	463,637
Guyana	232,113	158,613
Haiti	604,429	683,255
Honduras	334,966	353,828
Jamaica	313,725	97,608
Mexico	762,335	1,256,700
Nicaragua	235,143	256,220
Panama	306,306	158,613
Paraguay	276,208	256,220
Peru	529,945	622,250
Surinam	175,594	158,613
Trinidad and Tobago	247,291	97,608
Uruguay	274,308	122,010
Venezuela	541,452	305,024
TOTAL	\$12,200,974	\$12,237,578

\*From OD 134

SUMMARY RECORDS OF THE DISCUSSION AT THE 76TH MEETING OF  
THE EXECUTIVE COMMITTEE ON THE FORMULATION OF THE PROGRAM  
AND BUDGET OF THE PAN AMERICAN HEALTH ORGANIZATION

Eleventh Plenary Session

The CHAIRMAN recalled that the Executive Committee at its 74th Meeting had asked the Director to appoint a committee for the purpose of recommending indicators to assist him in establishing provisional allocations of budgetary amounts for each country. The Director had appointed as a two-man committee Dr. Arreaza Guzman, former Assistant Director of PASB, and Dr. de Villiers, Director-General, International Health Services, Department of National Health and Welfare, Canada.

Dr. DE VILLIERS (Special Working Group) said that the interim report was based on the discussions Dr. Arreaza and he had had over the past year. In preparing it, they had taken note of the constitutional role of the Organization, especially its coordinating role for and on behalf of the Region as a whole. Some of the newer concepts dealt with were country health programming, the importance of extrabudgetary resources and a concept of technical cooperation. It gave a brief historical development of the program and budget, reviewed the WHO criteria used for guiding the selection of program activities, including the relative importance or urgency of the health problem, the desire of a country to obtain technical services and the "absorptive capacity" to implement those programs, and examined the usefulness of the UNDP-type of mathematical formula for arriving at country allocations. It suggested that it was difficult to incorporate the health need factor in a manner likely to be acceptable to all and that, in general, such formulae would probably be unsuitable, or at best were limited to providing general guidance. It also contained some tentative recommendations.

Unfortunately, the report also showed that it had been prepared under severe time constraints which did not allow for a final revision or editing; nor had Dr. Arreaza had the opportunity to see it. Thus, a number of editorial errors had crept in. For any such deficiencies he alone was responsible, and he hoped that the next version, which would be presented to the next Directing Council, would not only contain Member's comments but would embody any corrections required. He emphasized once again that this report was not definitive, and did not represent an exhaustive study of the subject. Rather it constituted a discussion paper which he hoped would be useful in guiding the discussions at the current meeting.

Dr. DE CAIRES (United States of America) said that the thoughtful report submitted focused on questions of great concern. Dr. de Villiers had pointed out that the greatest good should go to those with the greatest need. While that principle was acceptable to all, it raised problems such as the ability of those with the greatest need to absorb effectively the assistance given,

whatever the source. It was important, therefore, that PAHO resources be used by the country involved to develop a program which would attract extrabudgetary funds; PAHO was not in a financial position to operate on its own.

Another point brought out in the report concerned the UNDP formula based on population and per capita GNP plus the health factor. In most cases there was no accurate up-to-date information on which to base the formula. Yet the report did not spell despair, but indicated broad guidelines which the Director might follow in distributing PAHO resources on an equitable basis to Member Countries. The problem was of a long-term nature, since what was timely one year might not be applicable the next.

Ms. McDONALD (Bahamas) termed the report valuable and provocative. She was critical of WHO's mathematical formula for distributing resources for being too rigid and failing to take account of constantly changing conditions. She was also doubtful about the UNDP formula, which was largely based upon population and per capita GNP. From personal experience within her own country, she felt that per capita income represented a misleading picture.

She pointed out that the mortality table on page 7 of the report neglected to cite the Bahamas which, according to the available figures, would come between Surinam and Paraguay.

Dr. ACUÑA (Director) (translated from Spanish) said that the document presented by Dr. de Villiers and Dr. Arreaza did not claim to provide a definitive solution to the problem of allocating WHO and PAHO resources to each of the countries of the Region. Nor was the problem a new one, since it had frequently been raised at meetings of the WHO and PAHO Governing Bodies. It sometimes happened that Governments requested technical cooperation programs that exceeded the budgetary appropriations. In some cases, those requirements could be met with general savings or funds for intercountry or regional projects, but the Organization was often forced to reply that it was currently unable to increase its cooperation. However, another important factor had also to be taken into account, namely the actual priorities of the Governments, as reflected in their national health policies and the projects under way. It was not unusual, when a request for an increased allocation was made, for no account to be taken of the fact that a technical cooperation program, whose effectiveness had not been evaluated, was under way in the country concerned. It would seem that the time had come for the countries to evaluate the impact of the technical cooperation provided by the Organization on the priority areas they had designated. He was pleased to note that one country, Peru, had already seriously addressed this issue, and had submitted an official request for evaluation with a view to shifting the emphasis of PAHO investments and programs to its priority health programs. Partial evaluations had also been made of technical cooperation programs in other countries, which indicated that the true significance of the assistance was recognized and that the resource allocation criteria used by international agencies were understood. As Dr. de Villiers had said, the document presented

did not claim to provide an exact formula for establishing those allocations: it was only intended to encourage the countries to find resource allocation formulae that would be not only more equitable but also, and especially, more efficient in promoting the countries' own programs. It was a matter of regret that the Chairman of the Executive Committee was not present; he was one of the instigators of the study being examined, since he had formally proposed it at the meeting of the Executive Committee in 1975.

Dr. ALFARO (Costa Rica) (translated from Spanish) praised the document prepared by the Working Group because, among its other merits, it showed how difficult it was to distribute the funds available in a logical and equitable way, a problem that all administrators of health services were well aware of. He agreed with Dr. de Caires that whatever the formula adopted it could benefit some countries and harm others. For example, as the Representative of the Bahamas had pointed out, the use of the criterion based on the child mortality rate could affect countries that had succeeded in rapidly lowering that rate since it did not necessarily mean a general improvement in public health conditions in the countries. No less objectionable were other criteria such as population, which would prejudice the underpopulated countries, or per capita income, perhaps the most controversial, since it was well-known that the gross income of the countries was not equitably distributed among their inhabitants. More important than the amount of the assistance was the capacity of the recipient country to make use of the funds it was allocated. Therefore the Executive Committee should leave the Bureau free to assign the resources, bearing in mind that the amount of the technical assistance provided would depend on the applications of the countries. PAHO could influence the political level by informing the authorities of the need to prepare national health programs. The principle according to which most of the resources should be allocated to the most needy was just, but it should be borne in mind that money was not everything and that, to handle it efficiently, the recipient country had to have a sound administrative structure. Otherwise, it would not solve its problems, and that assistance might even have a demoralizing effect if the country found it was incapable of making use of it.

Dr. DE CAIRES (United States of America) thought that, in subsequent work on the report, some mention should be made of the ability of a country to utilize effectively any aid obtained from PAHO. He also emphasized the importance of technical cooperation, with PAHO helping to attract outside funds.

He reminded the Committee that the Sixth Programme of Work of WHO listed the following five criteria, which might well be applied to PAHO: (1) identification of the problem arising in the program area; (2) status as a major underlying problem of public health; (3) a demonstrable potential for progress towards a solution; (4) a strong rationale for WHO involvement; and (5) the need for international collaboration.

He believed that it might be helpful to draw on the above criteria as well as the criteria outlined in PAHO's Ten-Year Health Plan in further work on the report under discussion.

Dr. DE VILLIERS (Special Working Group) expressed appreciation for the comments made, which would be properly reflected in the next draft. He also acknowledged the considerable assistance given to his committee by the PAHO staff, especially in the preparation of tabulations.

The CHAIRMAN thanked Dr. de Villiers for his report on a very difficult subject. Clearly the report would be a continuing one. He asked the Rapporteur to draft a resolution reflecting the opinion of the Executive Committee.

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### Thirteenth Plenary Session

The RAPPORTEUR read out the following draft resolution:

THE EXECUTIVE COMMITTEE,

Having examined the report on the formulation of the program and budget of the Pan American Health Organization submitted by the Director (Document CE76/7),

#### RESOLVES:

1. To note the report on the formulation of the program and budget of the Pan American Health Organization (Document CE76/7).
2. To thank both the Director and the Working Group for the report.
3. To transmit the report on the formulation of the program and budget (Document CE76/7) to the Directing Council at its XXIV Meeting, together with the précis minutes of the discussion of the item at the 76th Meeting of the Executive Committee, for information and for whatever action the Council may deem appropriate.
4. To urge the Director to take into account the recommendations of the report in the preparation of future programs and budgets of the Organization.

Dr. DE CAIRES (United States of America) felt that draft resolution PR/16 did not attribute sufficient importance to the subject, nor did it pay adequate tribute to the Director and to the Working Group he had appointed. Dr. de Villiers had stressed that he was presenting an interim report and that the process was continuous. In line with the Committee's discussion, the preamble might read as follows: "Bearing in mind the presentation to the Committee by a member of the Working Group appointed by the Director and recognizing that the study will be an ongoing process.."; and operative paragraph 2 might be changed to read "thank the Director and the Working Group for the excellent indepth preliminary report."

The CHAIRMAN (translated from Spanish) agreed that the efforts of the Director and of the Working Group should be recognized, as should be the provisional nature of the document presented. He submitted the draft resolution, together with the proposed amendments, to the Committee for consideration.

Decision: The draft resolution as amended was unanimously approved.



DIRECTING COUNCIL

PAN AMERICAN  
HEALTH  
ORGANIZATION

XXIV Meeting

REGIONAL COMMITTEE

WORLD  
HEALTH  
ORGANIZATION



XXVIII Meeting

CE90/17 (Eng.)  
ANNEX II(B)

RESOLUTION XX

**Formulation of the Program and Budget of the  
Pan American Health Organization**

*The Directing Council,*

Considering the presentation by the working group appointed by the Director to study the formulation of the program and budget of the Pan American Health Organization and the discussions held during the Meeting of the Council;

Bearing in mind the interim report of the working group and the summary record of the discussion on the subject by the Executive Committee at its 76th Meeting (Document CD24/8) including Resolution XXII<sup>12</sup> adopted by the Committee at that Meeting; and

Recognizing that the study will be ongoing in character,

*Resolves:*

1. To note the report on the formulation of the program and budget of the Pan American Health Organization (Document CD24/8).
2. To thank the Director and the working group for the excellent in-depth preliminary report and the Executive Committee for its careful review of this topic.
3. To urge the Director to take into account the guidelines provided by the recommendations of the interim report in the preparation of future programs and budgets of the Organization.
4. To request the Director to ensure that the study is continued and to report to the Executive Committee at its 78th Meeting.

*(Approved at the twelfth plenary session,  
5 October 1976)*



ANNEX III

THE ALLOCATION AMONG COUNTRIES OF THE PAHO/WHO REGULAR  
COUNTRY BUDGET ANALYSIS FOR 1980-1981 AND 1984-1985  
OF THE EFFECTS OF COUNTRY SIZE, INCOME, INFANT  
MORTALITY AND INDICATORS OF THE AVAILABILITY OF  
MEDICAL SERVICES (HOSPITAL BEDS AND DOCTORS)

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## 1. INTRODUCTION: OBJECTIVES AND SELECTION OF DATA FOR ANALYSIS

The analysis which follows is intended to be complementary to current discussions of how PAHO should allocate its technical assistance funds among the Member Countries. Its objective is to describe how those funds currently are allocated, by identifying those features of countries which appear systematically to affect their budgets. PAHO funds are not now allocated according to any precise formula, but it is possible that in fact the distribution of the budget reflects certain implicit judgements by the Members about the relative importance of different factors. If this is the case, it should be valuable to make those judgements and the relations they imply, explicit. This is particularly important if some features which are widely believed to be important do not actually influence the budget, or if variables which are expected to matter have relative weights or influences which upon examination seem to be inequitable or undesirable. The present analysis must of course start with some expectations about which variables are likely to be important, but it does not include any assumptions about the relative importance of different features. In this respect, it differs crucially from some previous exercises in understanding the PAHO budget, which have built up indexes in which the weights were assigned a priori, and then tried to see how well the results actually corresponded to countries' allocations.

The selection of a body of data for analysis involves four choices, as follows: (1) the portion of the total PAHO budget to be examined, (2) the time interval to study, (3) the countries to include, and, (4) the explanatory variables to consider (and to discard, if they do not in fact show a statistically significant influence). The first choice is essentially predetermined by the fact that the only funds which can be assigned with certainty to particular countries, are those for country projects; the area and regional funds in PAHO go for projects which benefit more than one country, and there is no way to assign them to the individual countries except arbitrarily--as for example, in proportion to the country funds. Thus, the analysis is limited to the approximately one-third of the Organization's budget represented by the country budgets. The second choice could take a relatively long interval, since data are available on a comparable basis, for essentially the same set of countries, from the 1970-71 biennium through the current one (1982-83). In principle, a complete matrix of all countries in all years might seem to be the appropriate data base. However, this is the case only if the variation through time for a given country is substantial (compared to the variation among countries), and if the same factors account for changes in time as well as among countries. In fact, neither of these conditions is met: the allocation among countries is remarkably stable, in the sense that their shares of the budget change only gradually, and what is more important, those changes do not seem to be due to health, demographic or economic factors. Country budgets change sharply from one year to another for reasons such as reclassification of funds, political changes in the country, or unusual events such as epidemics or hurricanes which require

one-time emergency interventions. While the last of these reasons is health-related, it is by definition something which cannot be foreseen and used for planning. It therefore seems appropriate to use data from just one recent biennium, as representing PAHO's current allocation; and this analysis is based on 1980-81, the most recent completed budget and the one coinciding in time with the most recent available values for several of the explanatory variables. The statistical analysis of the 1980-81 country budget occupies Section 2, below. Then in Part 3, the same analysis is applied to the (provisional) 1984-85 allocation among countries. The budget for this biennium differs in two important respects from that of 1980-81: first, with the elimination of area offices and funds from PAHO's structure and operation, the budget formerly allotted to areas is reassigned to a substantial degree to countries; and second, in this marginal reallocation efforts were made to take explicitly into account the needs of the countries, so that the resulting budget might be expected to be more closely related to the explanatory variables used in this analysis.

The third choice, that of which countries to include, depends on what sort of explanatory relation is being sought. The 1980-81 budget assigned funds to 33 Member Countries, but this analysis is based on only 27 of them. The United States and Canada are excluded as high-income countries; the French Antilles and Guiana, the Netherlands Antilles, and the U.S. and U.K.-owned Virgin Islands are excluded because they maintain special ties to external donor countries; and finally, Grenada is excluded because its budget (\$57,600) is so much lower than that of the next lowest country (Belize, with \$332,200) that it is doubtful whether it can be explained by the same mechanism. When the analysis is repeated for the 1984-85 allocation, Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines, and Dominica are also excluded, for the same reason. The 27 countries which remain in the analysis account for all but a tiny fraction of the Member States' population (outside the United States and Canada) and for the bulk of the total regular country budget.

The fourth choice--that of explanatory variables--must begin with the countries' populations: it is to be expected that this must influence the amounts they receive in total, even if it has no effect on per capita allocations. It is also a feature which varies enormously among members, the population of Brazil being more than 700 times that of Belize. All other variables which might be thought likely to affect the budget in a stable manner can be classified into three types: measures of general development or income, indicators of needs for health assistance and indicators of a country's absorptive capacity or ability to make use of PAHO's technical help. GDP per capita is the best single measure of development, so it was included; but since PAHO is not an all-purpose development agency but is specifically devoted to health, no other variables of this type were considered.

Indicators of health needs can be sought among measures of health status, of which infant mortality is probably the best single measure, or among measures of health inputs available in the country, such as the number of doctors or of hospital beds per thousand population. There should of course be a connection between the two kinds of indicators, but it is not obvious in advance which kind, if either, is more closely related to the allocation of funds. Finally, it is virtually impossible to measure directly the capacity to absorb technical assistance, but it depends in some part on the country's existing health infrastructure; this means that such indicators as beds or doctors per thousand have a second interpretation besides that of need, which makes them ambiguous variables to use. One way to interpret this ambiguity is to consider that very low levels of these variables indicate great need but little capacity, so that assistance to the country will be low. As inputs rise relative to population, assistance should also rise, because while the need is less, it is still substantial, and there is more capacity. Eventually inputs reach such high levels that while more assistance could be used, it is not so much needed, and so the allocation to the country should diminish. This reasoning suggests that the relation between budget and either doctors or hospital beds per thousand should be quadratic, initially rising and then falling.

These choices led to the selection of the following variables, shown in Table 1 for the 27 countries studied: the PAHO budget (for both 1980-81 and 1984-85), the Population, GDP per head, Infant Mortality per thousand births, Hospital Beds per thousand and Doctors per thousand population, and the squares of the last two variables. Budget, Population and Income were converted to base-10 logarithms for analysis, partly to reduce the range of values, especially for population, and partly because it was expected that a power function would represent the relations among the variables better than a linear function. The Table also shows, for 1980-81, the country budget per capita, which varies from less than 3¢ in Mexico to more than \$2.00 in the Bahamas and Belize. (Budget per head is not shown for 1984-85, since there are no population data for those years and the total budget is not very different). All the variables are available for all countries, except for the GDP of Cuba; whenever income is used as an explanatory variable, therefore, the analysis is limited to the remaining 26 countries. In the Tables, data and results for 1984-85 are shown together with those for 1980-81, but the discussion of the results is separated, the earlier biennium in Section 2 and the latter in Section 3.

## 2. RELATIONS AMONG VARIABLES: ANALYSIS OF 1980-81

Since population is expected to influence budgets substantially, the first step is to compare these two variables. This is done in Figure 1, which shows that in both years there is in fact a pronounced

relation. The solid line through the figure shows the best fitted relation for 1980-81 (Equation 1 in Table 4, below), and the dashed line shows the best fitted function for 1984-85 (Equation 9 in Table 4). In the earlier biennium, the elasticity--the percentage change in the budget for a country, given a one percent change in population--is 0.312; this means that when a country doubles in size, its allocation rises by 31.2 percent. Larger countries receive larger total budgets but much smaller budgets per capita. The solid graph also shows which countries lie far from the line and therefore require some other factor(s) to explain their allocations, population alone explaining little: Brazil and Haiti have unusually large budgets, while allocations to Belize, Chile, and Mexico are notably low.

This result suggests that population belongs in any explanation of budgets, and that any other variables used should be in per capita terms; if they are totals (total income, for example, or total number of doctors) the high correlation with population will make it impossible to distinguish their effects. This is why all the other variables in Table 1 are per head or per thousand. It does not indicate, however, whether the health-related variables will be more associated with total budget or with budget per head. Table 2 reports three tests of independence between budget per head and infant mortality and the two measures of medical services or resources. The density of doctors turns out to be unrelated to budget per person, while hospital beds are positively related and infant mortality is negatively related: that is, PAHO allocations per head are smaller where infant mortality is higher, which would certainly be inequitable if mortality were independent of all the other variables explaining the allocation. As Table 3 shows, however, mortality is positively correlated with population (as well as being associated negatively with income, hospital beds and doctors per head). The Table also shows the strong positive correlation between budget and population, and the weaker but still substantial positive correlation between budget and infant mortality. The pattern of correlations is very similar in the two periods, and the allocations of 1980-81 are highly correlated with those of 1984-85.

The core of the analysis is a set of linear regressions, using the logarithm of budget as the dependent variable and various combinations of independent variables. The results for 1980-81 are reported in Table 4: in Part I, for all 27 countries (five regressions, none of which uses income as an explanatory variable, and in Part II for the 26 countries, excluding Cuba, for which income data are also available (three regressions). The findings are summarized in Table 4, for each equation, and the principal results are these: Infant mortality is the only variable other than population which is statistically significant, and then only if it is not included in an equation together with income; the two variables are too highly correlated for their effects to be distinguished. That being so, it might be expected that if income is included in an equation without infant mortality, it also should be

significant, but this does not occur. The reason probably is that the income variable used is an average, which says nothing about distribution within the country, whereas infant mortality is more associated with poverty and therefore carries some distributional information. Increases in income near a poverty line can materially affect health, but thereafter, increases in income may have little or no effect on health and therefore should, and apparently do, have little effect on how PAHO allocates money among countries. The other result of interest is that the set of measures of medical service availability do not contribute to explaining the budget; whatever indication of need is important is adequately represented by infant mortality, and either capacity to absorb help is not important or it is not well represented by these variables.

It is evident from Figure 1 that if Brazil were excluded from the analysis, country budgets would level off at about two million dollars, there being very little population effect beyond a size of ten million people. A quadratic function in the logarithm of population would then provide a better fit: but with Brazil included, the relation is definitely linear and not quadratic (Equation 2, Table 4), which incidentally means that the use of logarithms for budget and population is appropriate. Other regression tests (not reported here) involved using the variables BEDS and DOCS but not their squares, but in these cases also the medical services indicators were not significant.

In summary, the best explanation of how the Member Countries of PAHO allocate the budget among themselves is provided by population and infant mortality. According to Equation 3, Table 4, a country's total budget rises by 29 percent when its population doubles (slightly less than the 31 percent indicated when no account is taken of mortality). This rather low responsiveness to population has an obvious political explanation--under a regime of one country, one vote independent of size, budgets will tend to be roughly equal among countries--but it may also reflect the kind of assistance PAHO provides. Since it is not an agency for making large material transfers, it relies on the Member Countries to provide most of the resources necessary to reach their own populations with medical services; and the technical assistance given therefore is related to country size only so far as larger countries have more varied health problems or show sufficient internal variation that studies and programs have to expand enough to be representative of the entire country. The coefficient of infant mortality in the same equation is 0.0013; since this relates the logarithm of budget to the number of infant deaths per thousand live births, its interpretation is as follows. For every ten-point increase in mortality--which is a change of one percentage point--the country's budget tends to rise by 1.3 percent, for a given population. To get the same budget increase from greater population requires an 11 percent difference in size: that is, two countries will have equal budgets, according to the equation, if one country has 11 percent more people but ten fewer infant deaths per thousand.

### 3. REALLOCATION: ANALYSIS OF THE 1984-85 BUDGET

Only four regressions were estimated for the 1984-85 allocation, corresponding to Equations 1, 3, 4 and 5 in Table 4; these appear in Part III of the Table. Since income was clearly not significant in 1980-81, it was omitted, and the test for curvature in the budget/population relation (the inclusion of a quadratic term) was not repeated. The principal results are the same as for the earlier biennium: population is significant alone or together with infant mortality; mortality is significant; and the medical service variables are insignificant statistically either as a group or individually. To this extent, the analysis shows that the determinants of the PAHO budget allocation have not changed in the reallocation of the former area funds--essentially the same mechanism is at work in both periods.

There are nonetheless several differences between the results for 1980-81 and those for 1984-85, which deserve to be emphasized. First, infant mortality has a greater impact on the allocation of funds; its coefficient rises from 0.0013 to 0.0019, a 45 percent increase. This means that a ten-point increase in mortality raises a country's budget not by 1.3 percent, but by nearly two percent. Second, largely because mortality is more important, its statistical significance is higher--it can be distinguished at the 95-percent confidence level rather than only at the 90-percent level. In fact, infant mortality is almost significant at the 90-percent level in Equation 12, where its effect is confused by the presence of the medical services variables. Third, the overall explanation of the budget is better: the share of the variation among countries which is explained by population and mortality rises from 85 percent (Equation 3, 1980-81) to 89 percent (Equation 10, 1984-85). Since so much can be explained in the earlier biennium, there is not much room for improvement in the goodness of fit, but roughly one-third of the previously unexplained variation is now attributed to the two explanatory variables. In other words, the reallocation has in fact given more weight to infant mortality, or equivalently, the influence of other factors has been reduced. The coefficient of population is essentially unchanged.

It can be seen from Figure 1 which countries receive notably large or small budget allocations in relation to population, but that does not indicate which allocations are unusual when infant mortality is also taken into account; and while Table 4 shows how closely the two variables explain the budget in each biennium, the closeness of fit for individual countries is not indicated. This comparison is made in Table 5, which shows for each period the actual (or provisional) budget and the estimated allocation as a function of population and infant mortality alone--that is, with the influence of any other factor(s) removed. To take one example from 1980-81: on the basis of population alone, Haiti should have received 1.25 million dollars, against 2.025



million received; but when mortality is also taken into account, the country should have been allocated 1.5 million. Thus the difference between actual and "explained" or estimated budget is only 0.525 rather than 0.775 million.

This comparison can be pictured more readily in percentage terms, given the differences among countries in the size of the allocation. This is done in Figure 2, which shows the percentage by which the actual budget exceeds or falls short of the estimated budget, in each of the two periods. Points in the shaded area indicate countries for which the discrepancy was reduced between 1980-81 and 1984-85--that is, countries for which the budget is more strictly a function of population and mortality alone in the latter year. These are 13 of the 27 countries, ten of which received "too little" in both budgets. Among the other three, which received "too much" in both periods, there is a very large change for Brazil (from 74 to 21 percent excess over the estimated budget), a smaller change for Haiti, and essentially no change for Costa Rica. The remaining 14 countries divide into two groups: Jamaica, Trinidad and Tobago, Guatemala, Panama, the Bahamas, Ecuador, Bolivia, Barbados, Uruguay and Cuba moved farther away from an explanation in terms of population and mortality, while receiving either "too much" or "too little" in both periods; and four countries--Guyana, Venezuela, Peru and Paraguay--changed from too much to too little or vice versa. The figure shows therefore that while population and mortality explain the 1984-85 budget slightly better than in 1980-81, there is not a uniform convergence on the allocation determined by these two factors. As many countries move away from this pattern as move toward it, although, because of the exceptional case of Brazil, the movements away are on average slightly smaller than the movements toward a pure population-and-mortality-based allocation of funds. Other factors clearly continue to play a role, although there is no systematic effect of such variables as income or the availability of medical services: the ten to 15 percent of variation that remains to be explained must be due to specific influences not detectable in this analysis.

TABLE 1

BASIC DATA FOR ANALYSIS OF ALLOCATION OF PAHO/WHO REGULAR  
COUNTRY BUDGETS, 1980-81 AND PROVISIONAL 1984-85

Country	1980-81 Budget			Provisional 1984-85 Budget Population				GDP/head.		Infant MORTality per th.	Medical Services (hospital beds/th. and doctors/10,000)			
	Total th. \$	Log LBUD80	per capita	Total th. \$	Log LBUD84	Total th.	Log LOGN	\$	LOGY		BEDS	DOCS	BEDSQ	DOCSQ
Argentina	1635.5	6.214	0.060	2447.5	6.389	27064	4.432	1942	3.288	47.2	5.4	26.7	29.2	712.9
Bahamas	494.3	5.694	2.086	696.2	5.843	237	2.375	5920	3.772	26.0	3.9	8.8	15.2	77.4
Barbados	470.2	5.672	1.788	522.4	5.718	263	2.420	2587	3.413	27.0	8.7	8.0	75.7	64.0
Belize	332.2	5.521	2.052	483.8	5.685	162	2.210	800*	2.903	38.5	4.6	2.6	21.2	6.8
Bolivia	1515.7	6.181	0.271	2259.9	6.354	5600	3.748	569	2.755	138.2	1.8	4.7	3.2	22.1
Brazil	5830.3	6.766	0.049	6095.8	6.785	118614	5.074	1652	3.218	82.4	3.8	8.7	14.4	75.7
Chile	1068.5	6.029	0.096	1563.2	6.194	11104	4.045	1628	3.212	46.3	3.6	5.2	13.0	27.0
Colombia	1770.0	6.248	0.065	2715.4	6.434	27093	4.433	922	2.965	59.4	1.7	5.1	2.9	26.0
Costa Rica	1172.8	6.069	0.522	1590.0	6.201	2245	3.351	1538	3.187	29.3	3.5	6.6	12.3	43.6
Cuba	1113.6	6.047	0.113	1452.3	6.162	9833	3.993	NA	NA	22.5	4.0	14.8	16.0	219.0
Dom. Rep.	1121.1	6.050	0.206	1803.7	6.256	5431	3.735	1034	3.015	73.1	2.8	5.4	7.8	29.2
Ecuador	1478.4	6.170	0.177	2072.9	6.317	8354	3.922	1040	3.017	86.0	2.1	4.7	4.4	22.1
El Salvador	1076.6	6.032	0.227	1609.2	6.207	4748	3.677	688	2.838	84.8	1.8	2.9	3.2	8.4
Guatemala	1545.3	6.189	0.213	2871.4	6.458	7262	3.861	1205	3.081	79.0	2.0	1.2	4.0	1.4
Guyana	757.2	5.879	0.852	943.5	5.975	883	2.946	786	2.895	47.9	4.5	1.0	20.3	1.0
Haiti	2025.0	6.306	0.404	2835.1	6.453	5009	3.700	274	2.438	120.9	0.8	1.2	0.6	1.4
Honduras	1188.3	6.075	0.322	1815.2	6.259	3691	3.567	634	2.802	95.4	1.3	3.2	1.7	10.2
Jamaica	1235.5	6.092	0.569	1733.4	6.239	2172	3.337	1447	3.160	30.1	3.8	3.5	14.4	12.3
Mexico	2108.1	6.324	0.029	3132.7	6.496	71911	4.857	1869	3.272	59.8	1.2	8.0	1.4	64.0
Nicaragua	902.2	5.955	0.330	1407.3	6.148	2732	3.436	916	2.962	96.5	2.2	3.6	4.8	13.0
Panama	932.5	5.970	0.508	1403.5	6.147	1837	3.264	1958	3.292	36.2	3.9	8.5	15.2	72.3
Paraguay	908.4	5.958	0.287	1595.3	6.203	3168	3.501	1146	3.059	48.6	1.5	5.7	2.3	32.5
Peru	1532.1	6.185	0.086	3059.0	6.486	17780	4.250	1271	3.104	93.5	2.0	6.8	4.0	46.2
Suriname	521.4	5.717	1.344	754.3	5.878	388	2.589	2000*	3.301	39.2	5.4	5.9	29.2	34.8
Trinidad	889.4	5.949	0.761	1443.8	6.160	1168	3.067	2766	3.442	34.6	3.3	6.9	10.9	47.6
Uruguay	750.7	5.875	0.347	1010.4	6.004	2164	3.335	2183	3.339	41.7	5.7	18.8	32.5	353.4
Venezuela	1497.0	6.175	0.108	2780.5	6.444	13913	4.143	2658	3.425	44.8	3.4	11.4	11.6	130.0

\*Estimated from data for prior years. NA not available.

TABLE 2

TESTS OF INDEPENDENCE BETWEEN PER CAPITA BUDGET AND  
MEASURES OF HEALTH COVERAGE OR HEALTH STATUS  
(1980-81)

Budget per capita:	<u>under 30¢ U. S.</u>	<u>over 30¢</u>	<u>Total</u>
<u>Doctors per ten thousand population</u>			
under 5.5: observed	7	6	13
expected	6.741	6.259	
over 5.5: observed	7	7	14
expected	7.259	6.741	
Total	14	13	27

$\chi^2 = 0.113$ , not significantly different from zero:  
budget per capita is independent of doctors per head.

<u>Hospital Beds per thousand population</u>			
under 3.45: observed	10	4	14
expected	7.259	6.741	
over 3.45: observed	4	9	13
expected	6.741	6.259	
Total	14	13	

$\chi^2 = 4.464$ , significantly different from zero at the  
95 percent confidence level; budget per capita is  
associated (positively) with beds per thousand.

<u>Infant mortality per thousand births</u>			
under 58: observed	5	10	15
expected	7.778	7.222	
over 58: observed	9	3	12
expected	6.222	5.778	
Total	14	13	27

$\chi^2 = 12.842$ , significantly different from zero at the  
95 percent confidence level; budget per capita is asso-  
ciated with infant mortality (negatively; budgets are  
higher where infant mortality is lower).

Note: the small number of observations makes it impossible  
to use more than four cells in the tables, so that it is  
impossible to test for non-monotonic relations (each cell  
should have five or more expected observations, in order  
for the distribution of the test statistic to be chi-squared).

TABLE 3

MEANS AND VARIANCES OF VARIABLES AND CORRELATIONS AMONG VARIABLES

Variable:	<u>LBUD84</u>	<u>LBUD80</u>	<u>LOGN</u>	<u>LOGY</u>	<u>MORT</u>	<u>BEDS</u>	<u>DOCS</u>	<u>BEDSQ</u>	<u>DOCSQ</u>
Mean	6.2117	6.0497	3.6025	3.1213	60.330	3.2852	7.0333	13.756	79.789
Standard Deviation	0.2504	0.2405	0.7031	0.2665	30.211	1.7208	5.5065	15.063	144.48
Variance	0.0627	0.0578	0.4944	0.0710	912.69	2.9613	30.321	226.88	20873

Correlation of Variable in Column with Variable indicated in Row

LBUD80 0.9569

LOGN 0.9203 0.9124

LOGY NA -0.2422 -0.1641

MORT 0.5531 0.4954 0.3910 -0.7367

BEDS -0.6080 -0.4980 -0.4796 0.5530 -0.6506

DOCS 0.0517 0.0785 0.2431 0.5282 -0.3697 0.4546

BEDSQ -0.5849 -0.4784 -0.4674 0.4494 -0.5285 0.9532 0.3774

DOCSQ 0.0697 0.0847 0.2322 0.3294 -0.2583 0.4024 0.9477 0.3334

Note: all statistics including LOGY are calculated excluding Cuba and including the other 26 countries

TABLE 4

## RESULTS OF REGRESSION ANALYSIS, USING PAHO COUNTRY BUDGET AS THE DEPENDENT VARIABLE

Regression Number	Regression Coefficient/Standard Error/t-Statistic of Significance for Explanatory Variables									Inclusion of Medical Services:					
	CONST	LOGN	LOGY	MORT	BEDS	DOCS	BEOSQ	DOCSQ	LOGSQ	Total Statistics: R-squared	F	Marginal-F Statistic			
I. Results for All 27 Countries, excluding LOGY as an explanatory variable															
1	4.9253 0.1028 47.918	0.3121 0.0280 11.146*	(Population significant)									0.8325	124.2*		
2	4.9880 0.3976 12.545	0.2756 0.2253 1.2233	(Population significant, but not quadratic)									0.8327	59.708*		
3	4.9256 0.0975 50.496	0.2902 0.0289 10.052*		0.0013 0.0007 1.9388**	(Population and Mortality significant)							0.8552	70.847*		
4	4.8562 0.1859 26.117	0.3404 0.0402 8.4663*			0.0173 0.0439 0.3947	-0.0130 0.0124 1.0501	-0.0009 0.0045 0.1914	0.0002 0.0004 0.4007		0.8572	25.215*	0.908 (Addition of Medical Services not significant)			
5	4.7150 0.2050 23.000	0.3257 0.0404 8.0645*		0.0015 0.0010 1.4683	0.0507 0.0484 1.0477	-0.0059 0.0130 0.4494	-0.0035 0.0047 0.7422	-0.0001 0.0005 0.1270		0.8711	22.528*	1.198 (Addition of Medical Services not significant; mortality not signif.)			
II. Results for 26 Countries, excluding Cuba, and including LOGY as an explanatory variable															
6	5.2055 0.2700 19.280	0.3106 0.0280 11.082*	-0.0865 0.0749 1.1552	(Population significant but not Income)									0.8515	65.953*	
7	4.9158 0.3876 12.683	0.2952 0.0032 9.3196*	0.0013 0.1128 0.0117	0.0011 0.0011 1.0401	(Population significant, but neither Income nor Mortality significant)							0.8585	44.486*		
8	4.5901 0.5457 8.4113	0.3269 0.0422 7.7398*	0.0417 0.1702 0.2452	0.0016 0.0013 1.2369	0.0486 0.0512 0.9490	-0.0075 0.0195 0.3871	-0.0034 0.0050 0.6836	-0.0000 0.0006 0.0010		0.8735	17.748*	0.661 (Addition of Medical Services not significant)			

\* Significant at the 95 percent confidence level; \*\* at the 90 percent confidence level

TABLE 4 (Cont'd)

Regression Number	Regression Coefficient/Standard Error/t-Statistic of Significance for Explanatory Variables								Total Statistics:		Inclusion of Medical Services:				
	CONST	LOGN	LOGY	MORT	BEDS	DOCS	BEDSQ	DOCSQ	LOGSQ	R-squared	F	Marginal-F Statistic			
III. Results for All 27 Countries, excluding LOGY as an explanatory variable (1984-85 provisional budget)															
9	5.0311 0.1023 49.188	0.3277 0.0279 11.760*	(Population significant)								0.8469	138.3*			
10	5.0315 0.0881 57.117	0.2959 0.0261 11.349*		0.0019 0.0006 3.1152*	(Population and Mortality significant)								0.8910	98.074*	
11	5.1997 0.1701 30.573	0.3131 0.0368 8.5149*			-0.0161 0.0402 0.4001	-0.0111 0.0114 0.9745	-0.0004 0.0041 0.1080	0.0003 0.0004 0.6520		0.8898	33.897*	2.433 (Addition of Medical Services not significant)			
12	5.0591 0.1856 27.253	0.2985 0.0366 8.1623*		0.0015 0.0009 1.6138	0.0172 0.0438 0.3916	-0.0039 0.0118 0.3322	-0.0031 0.0043 0.7197	0.0000 0.0004 0.0704		0.9025	30.840*	0.708 (Addition of Medical Services not significant; mortality not signif.)			

IV. Comparisons of Coefficients for Population and Mortality between equations 3 and 10

t-Statistic for coefficient of LOGN: 0.1464, difference not significant

t-Statistic for coefficient of MORT: 0.6399, difference not significant (but point estimate is 45 percent higher in 1984-85)

TABLE 5

ACTUAL COUNTRY BUDGET VS. BUDGET ESTIMATED AS  
 A FUNCTION OF POPULATION AND INFANT MORTALITY,  
 1980-81 AND 1984-85  
 (THOUSANDS OF DOLLARS)

Country	1980-81: Actual	Estimated*	1984-85: Proposed	Estimated*
Argentina	1635.5	1961.7	2462.3	2789.0
Bahamas	494.3	465.6	686.6	625.9
Barbados	470.2	481.3	522.4	648.3
Belize	332.2	432.9	513.8	590.5
Bolivia	1515.7	1631.9	2374.0	2600.3
Brazil	5830.3	3348.3	6096.8	5033.7
Chile	1068.5	1510.6	1580.8	2134.4
Colombia	1770.0	2036.2	2716.4	2942.1
Costa Rica	1172.8	902.8	1590.4	1235.1
Cuba	1113.6	1358.4	1513.2	1856.3
Dom. Republic	1121.1	1330.7	1854.1	1941.0
Ecuador	1478.4	1567.4	2113.5	2332.1
El Salvador	1076.6	1325.9	1609.6	1962.7
Guatemala	1545.3	1473.5	2673.6	2170.2
Guyana	757.2	728.2	993.9	1016.1
Haiti	2025.0	1500.4	2835.5	2333.4
Honduras	1188.3	1271.7	1815.6	1907.9
Jamaica	1235.5	896.5	1733.8	1227.3
Mexico	2108.1	2706.4	3137.0	3934.1
Nicaragua	902.2	1169.0	1437.1	1753.7
Panama	932.5	869.6	1252.5	1199.4
Paraguay	908.4	1057.4	1595.7	1487.4
Peru	1532.1	1995.9	3060.6	3012.9
Suriname	521.4	558.9	754.7	767.0
Trinidad	889.4	758.7	1444.2	1041.7
Uruguay	750.7	927.0	1010.8	1289.4
Venezuela	1497.0	1605.6	3088.0	2266.7

\*The budget estimated from population and mortality is based on Equation 3, Table 4, for 1980-81, and on Equation 10, for 1984-85. Since the sum of the logarithms does not equal the logarithm of the sum, a small adjustment is necessary in each period to keep the total estimated budget equal to the total actual budget. This adjustment means multiplying the estimated amounts by 1.045 in 1980-81, and by 1.031 in 1984-85. The 1984-85 amounts were based on slightly different figures in a preliminary version of the 1984-85 proposed budget.

FIGURE 1: COUNTRY BUDGET VS. POPULATION, 1980-81 AND 1984-85  
 (STRAIGHT LINES SHOW BEST FITTED RELATIONS FOR THE TWO PERIODS)

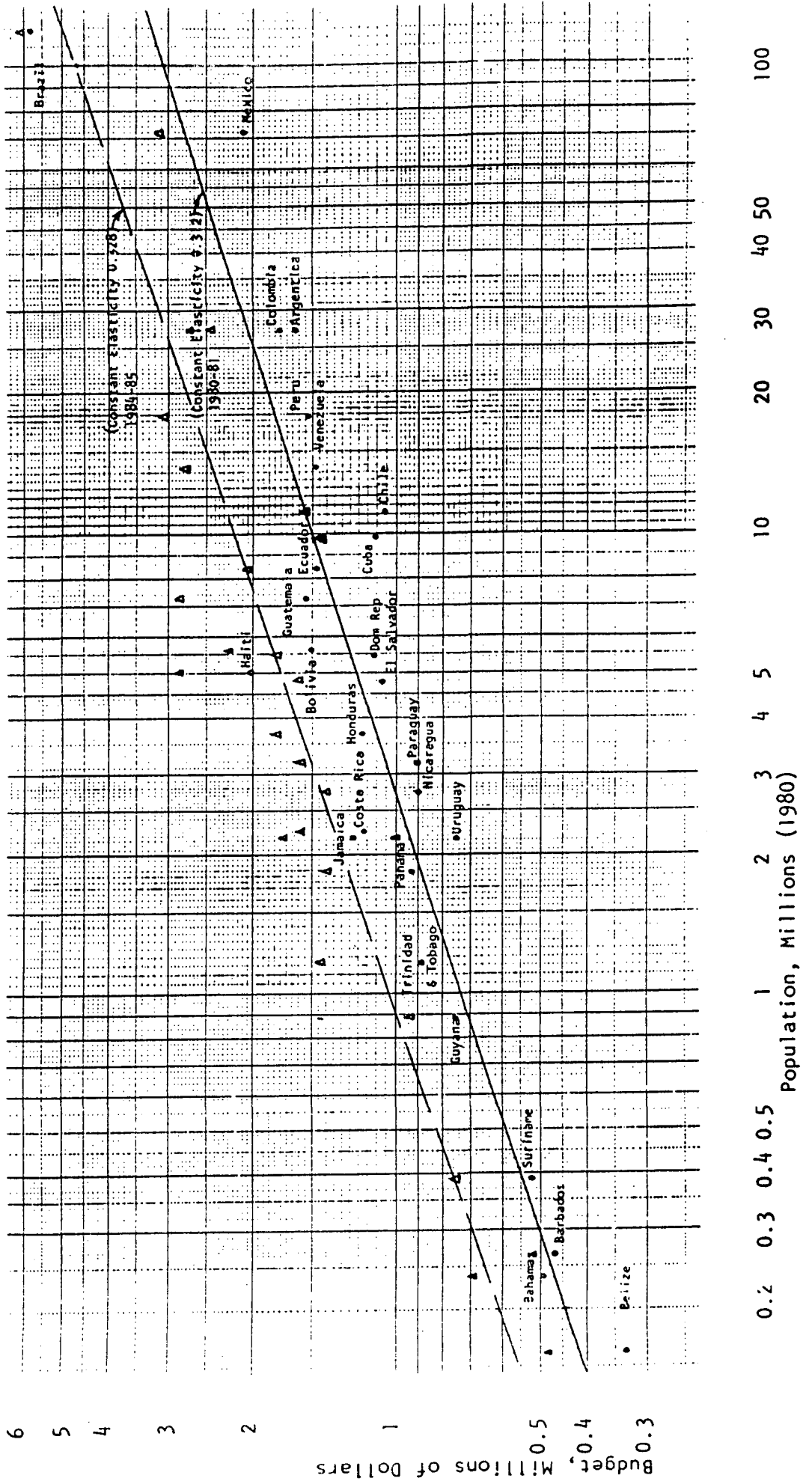
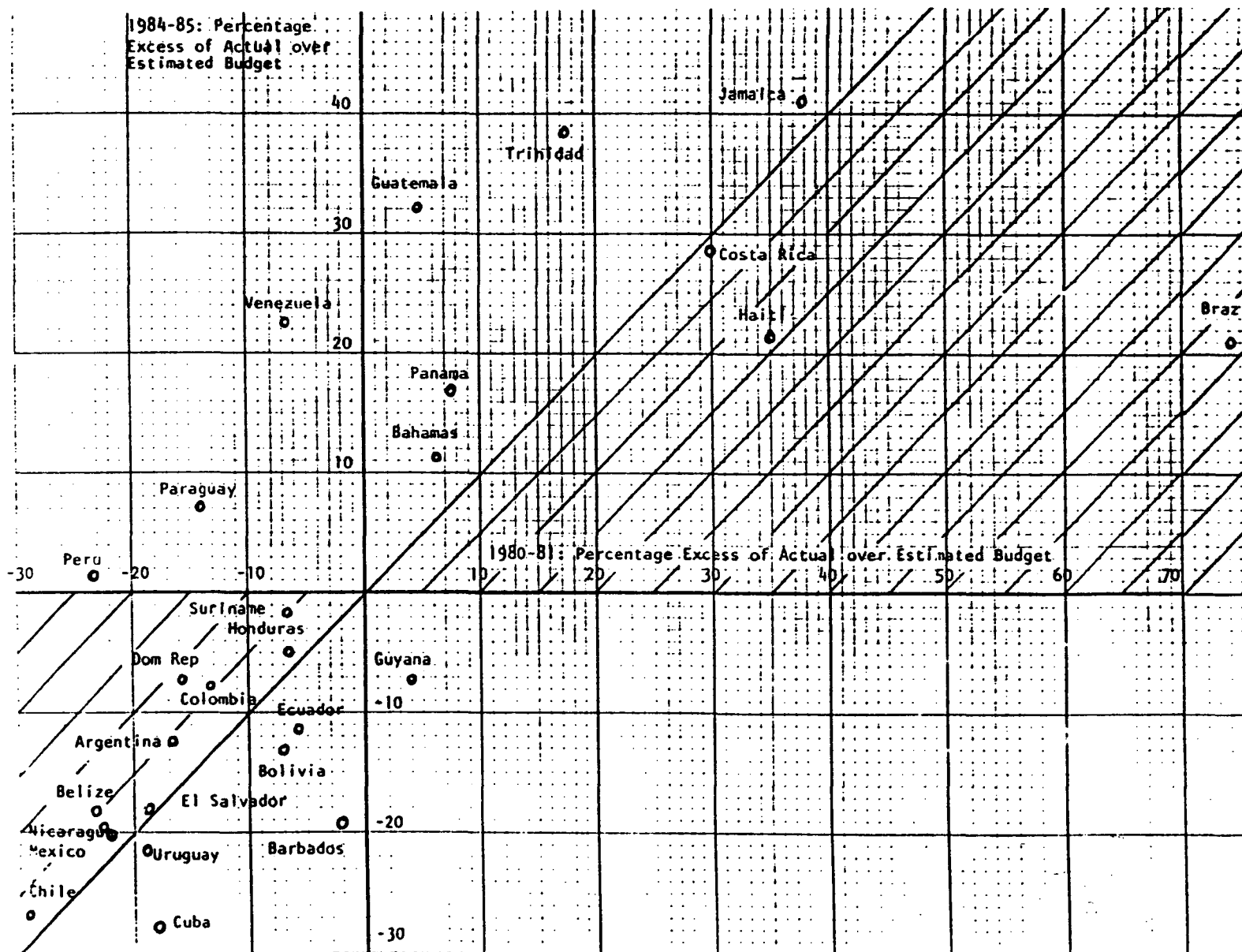




FIGURE 2: PERCENTAGE EXCESS OF ACTUAL BUDGET OVER BUDGET ESTIMATED AS A FUNCTION OF POPULATION AND INFANT MORTALITY, 1980-81, 1984-85



ANNEX IV

A REVIEW OF RESOURCE ALLOCATION CRITERIA  
AT THREE UNITED NATIONS AGENCIES AND THE WORLD BANK/IDA  
PREPARED FOR  
THE PAN AMERICAN HEALTH ORGANIZATION

10 February 1983

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## Background

During the Pan American Health Organization's (PAHO) 74th Meeting, in July 1975, Resolution XXXIX was adopted by the Executive Committee which authorized the Director to, "...appoint a committee for the purpose of recommending indicators to assist him in establishing provisional allocations of budgetary amounts for each country...commensurate with the technical assistance requirements for the projects requested..."<sup>1</sup> The result was the formation of a Working Group which undertook a review of PAHO's own history and policies concerning resource allocation among member countries, in addition to analyzing criteria for resource allocation decisions in use with a sister United Nations (UN) agency: the United Nations Development Program (UNDP).

The subsequent report and recommendations were presented as the "Interim Report of the Working Group" (Document CE76/7) to the 76th Meeting of the Executive Committee in June 1967. Though inconclusive, in that it did not produce a final set of recommendations on which to establish resource allocation criteria, the report did evaluate and suggest a number of criteria for consideration by the Executive Committee and analyzed how the UNDP system might be modified and adapted to meet PAHO's needs. World Health Organization (WHO) criteria were also reviewed.

This report provides an overview of resource allocation criteria at three UN agencies: UNDP, UNFPA, UNICEF and The World Bank/IDA. In a sense, this is an updating of the Working Group's report. It reviews the criteria in use at these three agencies, the problems involved in the use of objective and subjective criteria for resource allocations, and the adjustments necessary to make criteria responsive to the political and economic reality in which these agencies work.

The report was based on interviews with UN officials ( and agency documents) in New York during January of this year. Interviews were arranged with the valuable assistance of the WHO Liaison Office Director at the United Nations, Dr. Vera Kahm. Individuals who assisted in this report and in providing background material were:

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---

1 "Formulation of the Program and Budget of the Pan American Health Organization", CD24/8, 2 August 1976

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## Introduction

The development of an equitable system for the allocation of resources among recipient countries is the subject of continuing study and debate within the UN system. Fairness is a concept with which no one argues, though clearly definitions of fairness are subject to differing interpretations. The United Nations has evolved its own definition of fairness in the distribution of resources to recipient countries based on the concept that the Least Developed Countries of the world are the ones which deserve the greatest share of available resources. This concept, in fact, has become virtually transcendental in its influence on the criteria employed by individual UN agencies in resource allocation.

Current work on an equitable resource allocation system by UN agencies has also been in response to the international economic crisis and its impact on contributions by member countries, which have begun to fall far short of the amounts established to maintain program momentum and growth. The urgent nature of the problems besetting the world's poorest countries, coupled with this serious pattern of short-falls in contributions has given added impetus to the development of resource allocation criteria that are as equitable as possible in the face of these problems.

This report summarizes the current state of resource allocation systems within three UN agencies and The World Bank/IDA and, to the extent possible, discusses the problems faced in the implementation of the criteria, the relationship between criteria which can be objectively measured and criteria which requires subjective judgement on the part of the agency and the degree to which resource allocation criteria are reflected in the ultimate distribution of resources.

UNDP, UNICEF and UNFPA have all struggled with the need to move past criteria, in use by most agencies within the UN system, based on a country's per capita GNP and population size. Years of experience have made it clear that many other factors influence the success or failure of economic and social development, and that a truly equitable resource allocation system must find a way to incorporate this experience. Nevertheless, the introduction of subjective criteria remains at a very tentative stage among the UN agencies included in this report. Debate on the need for a broader range of criteria has been the subject of meetings of the respective Governing Councils of these agencies, but the consensus necessary to introduce more judgemental criteria into the resource allocation process has not yet been achieved. So, the status of a recipient country's "absorptive capacity" or its "institutional integrity" will, for the moment, remain outside of the decision making process that influences resource allocation. This is not to say that subjective judgements are not made by UN officials responsible for the allocation of resources, but there is no official record of these judgements nor the weight or influence they might have on the allocation of resources.

The most striking example of the reluctance of UN agencies to give subjective criteria a major role in resource allocation process, is that of the UNDP. In its "Interim Report" to the PAHO Executive Committee in June 1976, the Working

Group noted that, "The major portion of the (UNDP) formula (92.5) is based on two factors, namely population and per capita GNP. A small portion is based on certain supplementary social criteria."2 Today, seven years later, the UNDP continues to weight 90% of its resource allocation decisions on Basic Criteria (per capita GNP and population) and 10% on Supplementary Criteria.

The degree of political sensitivity is simply too great in the area of subjective criteria, and it is doubtful that the UN will ever be able to advance to the point where supplementary criteria will achieve some parity with per capita GNP and population size. There are, also, some very practical considerations that limit the utility of resource allocation criteria; UNICEF, for example, considers its ability to respond to emergency situations a high priority. Establishing norms for the allocation of resources is of importance to UNICEF, but the continuing need to provide emergency assistance clearly mitigates against the establishment of overriding criteria. The UNFPA has a different problem, one that stems from the sensitive and, at times, controversial nature of family planning activities. Here, resource allocation criteria must be balanced against the problems and opportunities present within a particular country. Recipient countries have a major role in setting the terms for the establishment of a UNFPA program, and allocation criteria may not be relevant in some cases. In addition to the way in which each agency's particular mission lends itself to a lesser or greater degree of objectivity in resource allocation, the generally accepted policy within the UN that the poorest countries should receive the major share of available resources is considered a binding criteria.

These are among the constraints within which UN agencies seek to work and to develop resource allocation criteria that is equitable for all recipient countries, yet, at the same time responsive to the mandates of the General Assembly.

However, the Governing Councils of the UN Agencies have approved, as a matter of policy, the use of subjective criteria, ranging from "the magnitude of a country's development program and its commitment to social justice " (UNDP) to "actual and projected (program) implementation rates" (UNFPA). While these criteria are given different weights by each agency, their impact on resource allocations can be off-set by constraints such as previous levels of funding (as in the case of UNDP).

For the present, a country's population and per capita GNP will continue to serve as the basis for the majority of resource allocation decisions within the UN system.



## THE UNITED NATIONS DEVELOPMENT PROGRAM (UNDP)

Beginning with the introduction of the five year planning cycle concept in 1972, the United Nations Development Program has invested considerable human and financial resources in its search for an equitable method of allocating resources among recipient countries. Because it is involved in comparatively large-scale allocations of funds, UNDP has evolved a fairly complex mathematical formula on which to base resource allocation decisions. The UNDP is now entering its third Five Year Planning Cycle which will cover the period 1982-86, and it is in this cycle that UNDP will employ its most refined set of allocation criteria. However, work on this formula began during the previous Planning Cycle in 1978, and the basis for the allocation system recommended for the Third Planning Cycle is explained in DP/377 (Part 1) dated 3 April 1979.

The objective was to develop a method that would unify in one formula both Basic and Supplementary Criteria and various constraints on the one hand, and on the other provide the fairest and most equitable system for resource allocation.

### The Development of Resource Allocation Criteria

Resource allocation criteria at UNDP has evolved to its present point of refinement in response to directives of both the UN General Assembly and its own governing Council. The UNDP Basic Criteria, developed for the First Planning Cycle (1972-76), was based on population size and per capita GNP of countries. Though some countries question the adequacy of such data, the UNDP believes that GNP remains the only universally acceptable, objectively determined and comprehensive standard for measuring relative economic status among countries.

Supplementary Criteria, however, has been developed in response to objections to the use of only the Basic Criteria in resource allocation, and in recognition of the special problems of certain UNDP recipient countries. During the preparation for the Second Planning Cycle, the UNDP Governing Council reviewed its criteria for resource allocation. It noted that, "population size and the level of per capita GNP provided a highly useful, but, nevertheless, inadequate measure of a developing county's needs for assistance through technical co-operation."<sup>1</sup> The Council first introduced a specific set of Supplementary Criteria during its sixteenth session. In addition, the General Assembly at its thirty-third session recognized "that trends in the world economy during the Second United Nations Development Decade which have adversely affected the situation of the developing countries have made all the more precarious the grave situation already facing the least developed among the developing countries, and that special energetic and effective measures must be taken to insure their development."<sup>2</sup>

As a result, the UNDP has gone from a system that allocated its aggregate resources about equally among the group of recipient countries above and below the \$500 per capita GNP level during the First Planning Cycle (1972-76), to one in which, as a matter of policy, the Least Developed Countries (LDC's)

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1. "Mid-term Review of the Second Planning Cycle, DP/337, 3 April 79. pg.1  
2. General Assembly resolution 33/193

(countries generally far below \$500 per capita GNP, and possessing definite measurable characteristics of under-development, and designated as LDC's by criteria of the General Assembly; also some countries have been designated as "as if" LDC, for various purposes by the General Assembly) - received an estimated 66% of total UNDP Second Cycle (1977-81) resource allocations.

In addition to dramatically shifting its resource allocations to those countries below \$500 GNP per capita including the LDC's, Supplementary Criteria for the Second Planning Cycle was developed. Part of the impetus for this decision was also a response to the concerns of the General Assembly expressed in resolution 3202 at its Sixth Special Session in which it called upon the international community to devote "particular attention to least developed, land-locked and island developing countries..."

### Balancing Interests

The resource allocation criteria approved for the Third Planning Cycle (1982-86)<sup>3</sup> represents an attempt to balance competing interests in the face of pressure to increase the below \$500 per capita GNP and LDC allocations, in order to give countries with specific problems special attention, while continuing to provide a reasonable level of allocations to countries above of the \$500 per capita GNP level.

In order to maintain the momentum of the Second Cycle, and to establish the basis for planning the program over the 5-year period of the Third Cycle, a minimum growth target of 14% was established.<sup>4</sup> Planning for the Third Cycle, then, was based on assumed total program resources of five billion dollars. Based on current contribution rates, however, actual contributions are estimated at some 2.6 billion. Although the allocations to individual countries would be determined essentially by Basic and Supplementary Criteria, plus certain constraints, the final allocations to each country would have to be modified on a flat percentage basis, because of the shortfall in contributions below the 14% annual growth rate.

The allocation formula currently in use is described later in this report. The next section reviews the various criteria and constraints which have been factored into the resource allocation process, and are the basis for funding during the Third Planning Cycle which began in 1982.

### Resource Allocation Criteria

The allocation process began with an assumed aggregate of resources available over the five-year period for The Third Cycle of about five billion dollars. This is a planning figure, and is called the indicative planning figure (IPF).

At this point two initial allocation decisions (see below) are required; the first is the division between country and intercountry programs; the second is the decision on what share of the country IPF to apply the Basic Criteria, and what share to apply the Supplementary Criteria. Here are the factors on which resource allocations are made based on the Governing Council's decision.<sup>5</sup>

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3. Decision 80/30, UNDP Governing Council Twenty-seventh session, Doc. E, 26 Jun 80
  4. DP/377, 3 April 79 "...Preparation for the Third Cycle...", pg. 5 and DP/496, 8 May 1980, "Program Planning", Tables 2 & 5
  5. Op cit, pg. 5

1. Macro-Economic Allocation of Resources by Program Categories:

- a. 81% of resources will be allocated to country IPF programs
- b. 18% of resources will be allocated to global, interregional and regional IPF programs.

2. Country IPF Resource Allocations:

- a. 80% of resources will be allocated to the group of countries with a \$500 per capita GNP or lower.
- b. 18% of resources will be allocated to countries with a \$500 per capita GNP and above. In effect, for a given population, the smaller the per capita GNP of a country the larger its allocation of resources (ie...the larger its IPF).
- c. 3% of resources will be retained as unallocated and for future participants.
- d. Once the programming allocation has been made, a determination<sup>6</sup> was then made by the Governing council to apply Basic Criteria to 90% and Supplementary Criteria to 10% of the country IPF's. In other words, Basic Criteria was given the dominant weight in allocation decisions.

3. Basic Resource Allocation Criteria

- a. Per Capita GNP
- b. Population size for each country, the 1978 figures were established as the standard, and taken from the World Bank Atlas of 1979 based on decision 80/30 by the Governing Council.

4. Supplementary Objective Resource Allocation Criteria

The Supplementary Criteria applying to 10% of aggregate country IPF, comprise 5 criteria which are more or less measurable, and therefore, have an objective character (see a-e below), and 2 which by their nature call for some judgement and therefore are perhaps subjective (see f & g below).

- a. The special needs of the Least Developed Countries and front-line countries that do not otherwise benefit from other Supplementary Criteria.
- b. Newly independent countries (in additon to regular program funds are awarded a .5 million independence "bonus")
- c. Land-locked countries

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6. Op cit, pg. 2

- d. Countries suffering from acute ecological problems
- e. Island developing countries
- f. Magnitude of a country's development program and commitment to promotion of social justice.
- g. A country's commulative debt, balance of payments and terms of trade

The Administrator noted that, "The practical application of these latter criteria (f & g above) to individual countries posed delicate technical and political issues...and proposed that the results of this calculation for the Third Cycle should be kept confidential."<sup>7</sup>

#### Resource Allocation Constraints

The UNDP was first required to adjust to the impact of a short-fall in contributions during the Second Cycle (1977-1981), when contributions were 3.5% under the targeted amount for the 5-year period. During the prior, and first, of the 5-year Planning Cycles, contributions exceeded the targeted amount by 10%. The UNDP developed a floor and ceiling concept in response to what might be called the era of short-falls. At the twenty-seventh session, the Governing Council established the following guidelines in decision 80/30:8

- Countries below per capita GNP \$3000 should receive no less than the resources allocated during the previous 5-year planning cycle. This establishes a "floor" for allocations.
- Countries above per capita GNP \$3000 should receive no less than 80% of the resources allocated during the previous 5-year planning cycle.
- Countries above per capita GNP \$1500 should receive no more than the resources allocated during the previous 5-year cycle. This represents a "ceiling" on resource allocations, and included some Latin American countries.

In addition to the criteria previously summarized, floor and ceiling allocation policies act as constraints on the way in which resources are allocated to recipient countries.

#### Resource Allocation Formula

In the previous summary, Basic and Supplementary Criteria, and floor and ceiling elements in combination create a set of factors which determine the allocation of resources for each particular country. The UNDP experimented by running an exhaustive array of simulations in order to discover a formula, i.e., a broken-line on a graph that would yield desired allocations.

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7. "Program Planning for the Third Programming Cycle", pg. 13, DP/496, 8 May 198  
8. Op cit, pg. 2

Thus, given the following constraints: 1) Floor values for certain countries, 2) ceiling values for other countries, 3) allocation of 10% of country program funds in accordance with Supplementary Criteria, 4) allocation of 90% of country program funds in accordance with Basic Criteria and 5) a previously established population function,<sup>9</sup> the objective was to find a unique curve which would blend population, per capita GNP, Supplementary Criteria and floor<sup>10</sup> and ceiling levels.

The result was a single curve which expresses all of the constraints and the results in a value for the allocation of resources for each country as well as the aggregate allocation for all UNDP recipient countries.

### Summary

Though the resource allocation process is relatively complicated in application at UNDP, once the decisions have been made and the criteria and constraints applied, the product is a set of values in which criteria have been uniformly and objectively applied. The system, thus, approaches a high degree of fairness in keeping with the Governing Council's definition.

Two tables help, but do not fully, illustrate the application of this resource allocation system. Tables 3 & 4 (attached) show the allocation of IPF resources to countries above and below the per capita GNP \$500. However, these tables as presented make evaluation difficult because countries are not ranked in order of GNP.

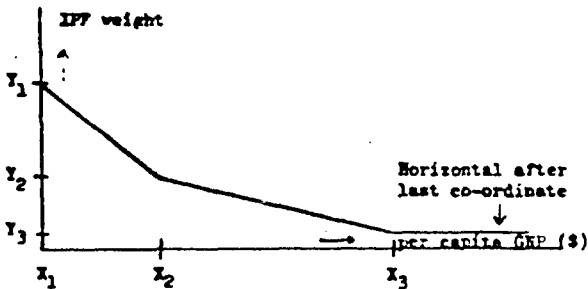
A very good approximation of the total allocation of IPF, from low to high income countries, is found in the shape of the per capita GNP curve (Table 2), that is, as per capita income in countries increases their resource allocations will be smaller. Tables 5 & 6 provide a quick review of IPF allocations to recipient countries, using the 14% growth target for the Third Planning Cycle, in terms of population and GNP. No similar tables are available indicating how the Supplementary Criteria (10% of total country IPF) influence resource allocation among recipient countries.

In spite of the extensive work to factor into the resource allocation process a number of considerations in addition to Basic Criteria, it is in fact per capita GNP and population size that remain the fundamental basis for deciding levels of resource allocation, and, within the Basic Criteria, it is the per capita GNP that prevails as the most significant aspect in determining the share of IPF a country will receive.

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9. Table 1 B describes this function (see attached)  
10. Table 2 illustrates this formula (see attached)

Description of the functional relationships used in this document for the calculation of basic IPFs  
(A, the relation of IPF weights and per capita GWP;  
B, the relation of IPF weights and population).

A. Description of the IPF weight and per capita GWP functions used in this document.



Function I, co-ordinates (see table 3, column I)

X <sub>1</sub> = 0	Y <sub>1</sub> = 9.31
X <sub>2</sub> = 250	Y <sub>2</sub> = 5.063
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.595
X <sub>4</sub> = 839	Y <sub>4</sub> = 0.25

Function II, co-ordinates (see table 3, column II)

X <sub>1</sub> = 0	Y <sub>1</sub> = 5.533
X <sub>2</sub> = 250	Y <sub>2</sub> = 2.712
X <sub>3</sub> = 500	Y <sub>3</sub> = 1.557
X <sub>4</sub> = 750	Y <sub>4</sub> = 1.162
X <sub>5</sub> = 1,500	Y <sub>5</sub> = 0.538

Functions III and IV, co-ordinates (see table 3, columns III and IV)

X <sub>1</sub> = 0	Y <sub>1</sub> = 3.156
X <sub>2</sub> = 250	Y <sub>2</sub> = 1.384
X <sub>3</sub> = 500	Y <sub>3</sub> = 0.944
X <sub>4</sub> = 750	Y <sub>4</sub> = 0.765
X <sub>5</sub> = 1,500	Y <sub>5</sub> = 0.463

Function V, co-ordinates (see table 3, column V)

X <sub>1</sub> = 0	Y <sub>1</sub> = 3.18
X <sub>2</sub> = 250	Y <sub>2</sub> = 1.237
X <sub>3</sub> = 500	Y <sub>3</sub> = 0.944
X <sub>4</sub> = 750	Y <sub>4</sub> = 0.87
X <sub>5</sub> = 1,500	Y <sub>5</sub> = 0.75

Function VI and X, co-ordinates (see table 3, columns VI and X)

X <sub>1</sub> = 0	Y <sub>1</sub> = 9.31
X <sub>2</sub> = 250	Y <sub>2</sub> = 5.063
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.595
X <sub>4</sub> = 1,464	Y <sub>4</sub> = 0.25

Function VII, co-ordinates (see table 3, column VII)

X <sub>1</sub> = 0	Y <sub>1</sub> = 9.31
X <sub>2</sub> = 250	Y <sub>2</sub> = 5.063
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.595
X <sub>4</sub> = 1,393.9	Y <sub>4</sub> = 0.25

Function VIII, co-ordinates (see table 3, column VIII)

X <sub>1</sub> = 0	Y <sub>1</sub> = 9.31
X <sub>2</sub> = 250	Y <sub>2</sub> = 5.063
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.595
X <sub>4</sub> = 1,638	Y <sub>4</sub> = 0.25

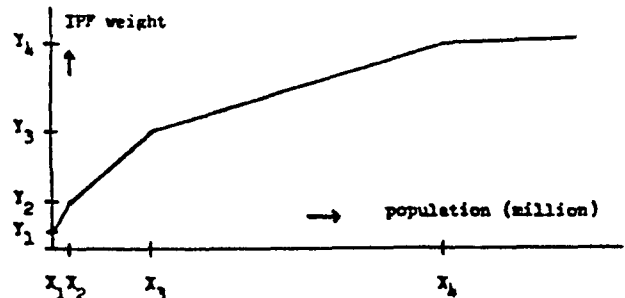
Function IX, co-ordinates (see table 3, column IX)

X <sub>1</sub> = 0	Y <sub>1</sub> = 9.31
X <sub>2</sub> = 250	Y <sub>2</sub> = 5.063
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.595
X <sub>4</sub> = 1,533	Y <sub>4</sub> = 0.25

Function XI, co-ordinates (see table 3, column XI)

X <sub>1</sub> = 0	Y <sub>1</sub> = 7.199
X <sub>2</sub> = 250	Y <sub>2</sub> = 4.371
X <sub>3</sub> = 500	Y <sub>3</sub> = 2.000
X <sub>4</sub> = 750	Y <sub>4</sub> = 0.811
X <sub>5</sub> = 1,500	Y <sub>5</sub> = 0.75

B. Description of the IPF weight and population function used in this document.



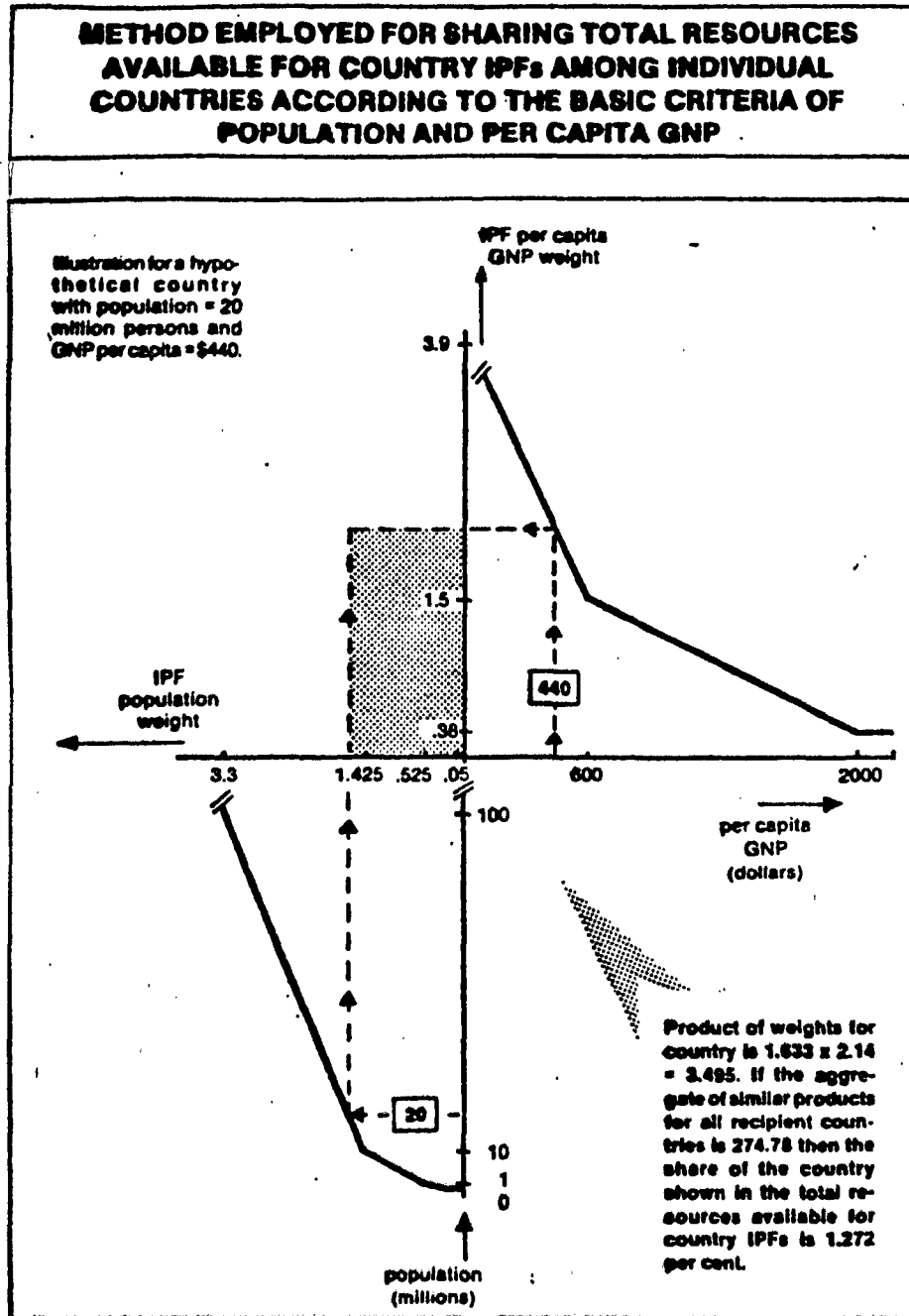
Function, co-ordinates

X <sub>1</sub> = 0	Y <sub>1</sub> = 0.050
X <sub>2</sub> = 1	Y <sub>2</sub> = 0.525
X <sub>3</sub> = 10	Y <sub>3</sub> = 1.425
X <sub>4</sub> = 100	Y <sub>4</sub> = 3.300

Beyond X<sub>4</sub>, the IPF weight increases by .0035 units per million persons.

Table 2

From: IP/577 (PART I)  
English  
Page 17



This graph summarizes the way in which per capita GNP and the population of a country act together to influence the allocation a country's share of available resources. The population curve, lower left-hand section of chart, the shape of which had previously been determined (see Chart 1) gives a weight whose influence becomes less than proportionate as a country's population increases. The per capita GNP curve, the upper-right-hand section, allocates a larger share of IPF the smaller the per capita GNP.

Table 3 (continued)

GNP: Calculation of individual country IFFs for 1982-1986 requested by the Special Meeting of the Council for countries with per capita GNP of less than \$500 in 1978; applicable equally to requests DP/L.934 (both alternatives); DP/L.935 (iii) (both alternatives); and DP/L.935 (viii)

	Per capita GNP	Population	1977-1981b/ IFFs	1982-1986 IFFs
	(dollars)	(millions)	(million dollars)	
Afghanistan	240	14.6	38	71.5
Angola	300	6.7	10.95	41.5
Bangladesh	90	83.6	65.5	801
Benin	230	3.3	16.25	33.5
Bhutan	100	1.3	12.25	36.5
Burma	150	32.2	41.5	102
Burundi	140	4.3	28.75	48.5
Cape Verde	160	0.32	4	11.25
Central African Republic	250	1.9	11.75	25.5
Chad	140	4.3	19	52
China	460	914.	15	142
Comoros	180	0.39	7.2	12
Democratic Yemen	420	1.7	14.5	17.25
Djibouti	450	0.32	0.905	5.25
Dominica	440	0.08	ε/	2.3
Egypt	400	38.7	31.5	56
Ethiopia	120	31.	42	112
Gambia	230	0.57	7	14.25
Ghana	390	11.	19	40
Guinea	210	5.1	21.75	44.5
Guinea-Bissau	200	0.76	6.12	19.5
Haiti	260	4.8	18.75	38
Honduras	480	3.4	9.25	16
India	180	644.	97	252
Indonesia	360	136.	69.5	106
Kenya	320	15.2	27.5	52
Lao People's Democratic Republic	90	3.3	17.75	52.5
Lesotho	280	1.3	13.25	22.25
Liberia	460	1.7	10	13.5
Madagascar	250	8.3	23.75	49
Malawi	180	5.8	19.75	53
Maldives	150	0.14	2.5	7
Mali	120	6.3	24	65
Mauritania	270	1.5	9.75	22.5
Mozambique	140	9.9	19	74



Table 4

 DP/496  
 From: 8 May 1980

UNDP: Calculations of individual country IFPs for 1982-1986 requested by the Special Meeting of the Council for countries with per capita GNP of greater than \$500 in 1978; separate calculations applicable to requests DP/L.334 (both alternatives); DP/L.335 (iii) (both alternatives); and DP/L.335 (viii)

	Per capita <sup>a/</sup> GNP	Population <sup>a/</sup> (millions)	1977-1981 <sup>b/</sup> IFPs	1982-1986 IFPs requested by:				
				DP/L.334		DP/L.335 (iii)		DP/L.335 (viii)
				alternatives		alternatives		
				I	VI	VII	VIII	IX
	(dollars)	(millions)		(million dollars)				
Albania	740	2.6	4.25	4.75	10.25	10	10.75	10.5
Algeria	1 260	17.7	20	20	16	18	17	16
Antigua	950	0.07	e/	1.1	1.1	1.1	1.2	1.1
Argentina	1 910	26.4	20	20	16	16	14	16
Bahamas	2 620	0.22	e/	2.4	1.9	1.9	1.7	1.9
Bahrain	4 100	0.37	2.5	2.5	2	1.8	1.4	2
Barbados	1 940	0.25	2.5	2.5	2	2	1.8	2
Belize	840	0.13	1	1	1.4	1.4	1.5	1.5
Bermuda	9 260	0.05	e/	0.7	0.55	0.5	0.4	0.55
Bolivia	510	5.3	15.5	19.25	19.5	19.5	19.5	19.5
Botswana	620	0.75	8.5	8.5	8.5	8.5	8.5	7.75
Brazil	1 570	119.	30	30	24	24	21	24
Brunei	10 640	0.17	e/	0.2	0.15	0.15	0.1	0.15
Bulgaria	3 200	8.9	7.5	7.5	6	5.25	4.25	6
Chile	1 410	10.7	20	20	16	18	17	16
Colombia	870	25.1	20	20	22	21.25	24.	23
Congo	540	1.5	7.5	10.25	11	11	11	11
Costa Rica	1 540	2.1	5	5	4	4	3.5	4
Cuba	810	9.7	13.5	13.5	20.5	20	21.75	21
Cyprus	2 110	0.65	5	5	4	4	3.5	4
Czechoslovakia	4 720	15.1	2.5	2.5	2	1.8	1.4	2
Democratic Peoples Republic of Korea	730	17.1	8.85	17.75	24.75	24.25	26	25
Dominican Republic	910	5.1	7.5	7.5	12	11.5	13	12.5
Ecuador	910	7.6	15	15	15	15	16	15.25
El Salvador	600	4.4	9.25	12.25	15.25	15	15.5	15.25
Fiji	1 440	0.60	5	5	4	4.5	4.25	4
Gabon	3 580	0.54	7.5	7.5	6	5.25	4.25	6
Greece	3 270	9.3	7.5	7.5	6	5.25	4.25	6
Grenada	530	0.11	e/	2	2.1	2.1	2.1	2.1
Guatemala	910	6.6	8	8	13	12.5	14.25	13.5

Table 4 (continued)

UNEP: Calculations of individual country IPFs for 1982-1986 requested by the Special Meeting of the Council for countries with per capita GNP of greater than \$500 in 1978; separate calculations applicable to requests DP/L.334 (both alternatives), DP/L.335 (III) (both alternatives), and DP/L.335 (VIII)

	Per capita/ GNP	Population/ (millions)	1977-1981/ IPF	1982-1986 IPFs requested by:							
				DP/L.334 alternatives		DP/L.335 (III) alternatives		DP/L.335 (VIII)		DP/L.335 (VIII)	
				I	VI	VII	VIII	IX	IX		
(million dollars)											
Oman	550	0.84	5	7.75	8.5	8.5	8.5	6.75	6.75	0.5	
Hong Kong	3 040	4.6	0.5	0.5	0.4	0.35	0.35	0.3	0.3	0.5	
Hungary	3 450	10.7	3.5	3.5	2.75	2.5	2.5	1.9	1.9	2.75	
Iraq	1 860	12.2	15	15	12	12	12	10.5	10.5	22	
Ivory Coast	840	7.8	15	15	16.5	16	16	17.75	17.75	37	
Jamaica	1 110	2.1	7.5	7.5	6	6.75	6.75	7	7	6.25	
Jordan	1 050	3	15	15	12	13.5	13.5	12.75	12.75	12	
Kiribati	690	0.06	1.14	1.1	1.3	1.2	1.2	1.3	1.3	1.3	
Libyan Arab Jamahiriya	6 910	2.7	5	5	4	3.5	3.5	2.75	2.75	4	
Malaysia	1 090	13.3	15	15	13.5	13.5	13.5	16	16	14.5	
Malta	2 160	0.34	2.5	2.5	2	2	2	1.8	1.8	2	
Mauritius	830	0.92	5.25	5.25	7	6.75	6.75	7.5	7.5	7.25	
Mexico	1 290	65.5	20	20	16	18	18	18.75	18.75	16	
Mongolia	940	1.6	10	10	10	10	10	10	10	8	
Morocco	670	18.9	20	20	27	27	27	28	28	27.5	
Namibia	1 080	0.95	7.75	7.75	6.25	7	7	6.5	6.5	6.25	
Netherlands Antilles	3 150	0.25	2	1.9	1.5	1.3	1.3	1	1	1.5	
New Hebrides	540	0.10	2	2	2	2	2	2	2	2	
Nicaragua	840	2.5	5.25	5.25	5.5	9.25	9.25	10.25	10.25	9.75	
Nigeria	560	80.	45.5	49	55	55	55	55.5	55.5	55.5	
Oman	2 570	0.84	4	4	3.25	3.25	3.25	2.75	2.75	3.25	
Papua	1 290	1.8	7.5	7.5	6	6.75	6.75	6.5	6.5	6	
Papua New Guinea	560	2.9	8.75	12.25	13.5	13.5	13.5	13.75	13.75	13.75	
Paraguay	850	2.9	7.5	7.5	9.75	9.25	9.25	10.25	10.25	10	
Peru	740	16.8	15	15	25	24.5	24.5	26.5	26.5	25.5	
Philippines	510	45.6	30.5	45	46	46	46	46	46	46	
Poland	3 660	35.1	7.5	7.5	6	5.25	5.25	4.25	4.25	6	
Portugal	2 080	9.7	4	4	3.25	3.25	3.25	2.75	2.75	3.25	
Republic of Korea	1 160	36.6	18	18	15.75	16.25	16.25	19.5	19.5	17.25	
Romania	1 750	21.9	7.5	7.5	6	6	6	5.25	5.25	6	

Table 5

DP/377 (Part I)  
Page 19  
From: 3 April 1979

UNDP: Relation of the population of recipient countries to their respective illustrative IPFs for 1982-1986, by size of population categories: (the 14 per cent model)

Item	Population size of recipient countries, estimated for 1978-1979						
	less than 1/2 million	1/2 million to 1 million	1 million to 5 million	5 million to 10 million	10 million to 20 million	greater than 20 million	total
Number of countries	39	13	34	23	18	23	150
Population (million)	5.5	9.9	96.6	168.9	255.9	2626.1	3162.9
Percentage distribution of population	0.17	0.31	3.06	5.34	8.09	83.03	100.00
Percentage distribution of population weights	3.10	3.65	16.46	18.20	18.59	40.01	100.00
Total IPF for 1982-1986 (million \$)	108.9	116.9	704.9	662.7	706.1	1527.7	3827.2
Percentage distribution of total IPF for 1982-1986	2.85	3.05	18.42	17.31	18.45	39.92	100.00
Total IPF for 1982-1986, per person (\$)	20.0	11.8	7.3	3.9	2.8	0.6	1.2

Table 5

Table 6

DP/373 (Part I)  
Page 20  
From: 3 April 1979

UNDP: Illustrative basic Indicative Planning Figures for individual countries, for 1982-1986, by income categories: the 14 per cent model

Per capita GNP category in 1978-1979 (US dollars)	Estimated population in 1978-1979 of countries in category (millions)	Basic IPFs for 1982-1986 (million US dollars)
250 and below <sup>a/</sup>	1 098	1 591
251 to 500 <sup>b/</sup>	1 298	958
501 to 1,000	174	390
1,001 to 2,500	439	304
2,501 and above	154	81
Total	3 163	3 324

<sup>a/</sup> Including India.

<sup>b/</sup> Including China and Indonesia.

## UNITED NATIONS FUND FOR POPULATION ACTIVITIES (UNFPA)

### Background

The unique nature of the UNFPA mission has had an important influence on its allocation policy. Family planning is a sensitive area of work in the international development field, and social, cultural, historic and political imperatives must be reckoned with. Like other UN agencies it is funded basically by voluntary contributions, the majority of which come from industrialized countries. Recipient countries on the other hand are primarily located among the Less Developed Countries. UNFPA must attempt to mediate the conflicting attitudes of its two principal constituencies: donor countries and recipient countries. Donor countries generally favor allocation of the bulk of UNFPA resources to family planning activities, while recipient countries generally oppose such direct action in this sector. This situation has hampered the development of widely accepted allocation criteria.

UNFPA also tries to respond to local sensibilities in each country, which at times has meant participating in census and data gathering programs which are far removed from population and family planning. UNFPA believes that it must accept an entry-level activity of possible lower priority with which the recipient country is comfortable, in order to build a relationship and gain the confidence necessary to expand programs. Application of resource allocation criteria, then, must continue to be responsive to these aspects of UNFPA's work.

### The Development of Criteria

Until the mid-1970's UNFPA allocations to recipient countries were primarily in response to requests for assistance from governments. Though consideration was given to the type of program and the availability of external resources prior to funding, no other criteria was applied. As demand for assistance exceeded the level of contributions, UNFPA began to consider alternative systems for resource allocation. After a review of allocation criteria in use within other UN agencies, UNFPA created its own concept based on a system of priority countries. The UNFPA Governing Council approved, in principle, this concept at its twenty-second session.<sup>1</sup> The priority country system was supported by directives of the Economic and Social Council<sup>2</sup> and the United Nations General Assembly,<sup>3</sup> which requested the Executive Director of the UNFPA to "apply criteria for the establishment of priorities."<sup>4</sup>

### The Basis for Criteria

UNFPA reviewed some thirteen criteria before choosing the four demographic indicators which would serve as criteria for identifying priority countries. The selection of the four indicators was based on the following policy, that: 1) the criteria should be objectively measurable; 2) the criteria should have a uniform meaning and definition; 3) data should generally be available for all developing countries from sources recognized internationally 4) all data should be recent and available for the same period.<sup>5</sup> The demographic indicators used in designating priority countries are:<sup>6</sup>

1. Governing Council decision 76/42
2. Economic and Social Council resolution 2025 (LXI)
3. General Assembly 31/170
4. Ibid
5. "Report on UNFPA Experience with system of priority countries" DP/1982/30/Add.1, pg.
6. Ibid

- Annual increment of population of 100,000 or more.
- Gross reproduction rate of 2.5 or more.
- Infant mortality rate of 160 or more per 1000 live births.
- Density of agricultural population on arable land of 2.0 persons or more per hectare.

In addition to the demographic indicators, an upper limit of \$500 per capita GNP was established. These then served as thresholds to aid in identifying priority countries.

The system of priority countries was endorsed by the Governing Council at its thirty-eighth meeting,<sup>7</sup> and 40 countries were selected by applying the demographic and GNP criteria. They are distributed as follows: 16 are in the sub-Saharan Africa region, 14 in the Asia and Pacific region, 6 in the Middle East and Mediterranean region and 4 in the Latin America and Caribbean region. In addition to these priority countries, a category of "borderline" countries was also established. This decision was based on the fact that, if a two per cent variation in the threshold levels (criteria) were allowed, 14 other countries would qualify as priority countries. The result is a group of 54 countries considered by UNFPA to require priority assistance and to receive the bulk (two-thirds) of country program resources.

#### Subjective Criteria

The priority country system provides the basis for objective judgements because each of the factors in the criteria is objectively verifiable. During the review of criteria for the selection of priority countries, consideration was given to a variety of more subjective factors. The General Council requested the Executive Director of UNFPA<sup>7</sup> to consider including two subjective criteria in evaluation of priority status, in addition to the objective criteria:

- policies and programs of governments
- commitment of government to stated population policy

The conclusion was that, lacking a generally acceptable basis for evaluating these factors, these two factors would be very difficult to weight in the decision making process. At this point there is no specific formula for the use of subjective criteria within the priority country system.

Nevertheless, the Governing Council<sup>8</sup> did request that the Executive Director take into account the following issues when making resource allocations:

- Magnitude of the population problem in relation to per capita gross national product
- Population size and the annual increase in absolute numbers

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7. Op cit, pg. 10

8. Governing Council decision 81/17, 27th session, June-July 81

- Policies and programs of the government
- Commitment by governments to stated population policy
- Absorptive capacity
- Level of support of development assistance per capita from other sources
- Level of support of development assistance per capita from other sources
- Level of support for population activities from other sources
- Actual and projected implementation rates.

The weighting of these factors in the resource allocation process remains vague, and of necessity, highly judgemental.

#### Program Priorities

Though UNFPA still operates on a policy that recognizes the need for flexibility in terms of recipient country relations, the introduction of the priority country system has had a salutary effect on program priorities. For example, there has been a major increase in family planning program funding since the advent of the priority country system and a corresponding decline in lower priority programs. Expenditures for family planning programs have increased from US 29.7 million dollars during the period 1969-1976 to US 82.4 million dollars during the period 1977-1980. <sup>9</sup> Family planning as a sector of UNFPA population program activity has increased from 57.8 per cent during 1969-1976 to 61.1 per cent during 1977-1980. Increase in family planning activities has been noted in the borderline country category as well as other countries above the \$500 per capita GNP level. (See table 1 which shows allocation data in relation to both program activity and country status.)

While UNFPA does not attempt to make a direct correlation between the institution of the priority country system and the increase in family planning program activity, there clearly appears to be a causal relationship.

#### Allocation Goals

In addition to the priority country system, UNFPA established a ceiling for resource allocation to priority countries as a group of up to two-thirds of total program resources.<sup>10</sup> The General Council also has limited allocations to intercountry activities to no more than 25 per cent of total program resources.<sup>11</sup> The introduction of these criteria into the UNFPA continues under the concept of both transition and flexibility.

UNFPA reports that progress has been made in the strategy of allocating resources to countries with the most urgent population problems. This system of resource allocation within the priority country system has increased the

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9. Op cit, pg. 11

10. Governing Council decision 77/5

11. Op cit, pg. 11

proportionate share of resources to these countries at a level very close to the two-thirds funding target. For the 1977-80 period, combined resource allocation to priority and borderline countries reached a level 59.7 per cent of total resource allocation by UNFPA for the period. (See table 2 which shows allocations by region and country status.) While this amount does not reach the two-thirds goal of 66.6 per cent, it indicates that UNFPA has been able to successfully comply with the mandates of the priority country system in resource allocation, while remaining responsive to the special nature of its work.

#### Addendum

UNFPA continues to work at modifying and improving its present criteria. In the Executive Director's report DP/1982/30, April 1982, the recommendation was made to eliminate the distinction between priority and borderline countries, because, "...the two per cent variation from the threshold levels for the various criteria is too small to make any meaningful distinction between the two groups."<sup>12</sup> The recommendation was endorsed by the Governing Council in decision 82/20.<sup>13</sup>

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12.. Ibid

13.. General Council thirty-eight meeting, 18 June 82



Period expenditure by work plan category and  
priority status of countries, 1969-1976 and 1977-1980

Work plan category	Priority Status											
	Priority countries				Borderline countries				Other countries			
	1969-1976 (thousand US\$)	Per cent	1977-1980 (thousand US\$)	Per cent	1969-1976 (thousand US\$)	Per cent	1977-1980 (thousand US\$)	Per cent	1969-1976 (thousand US\$)	Per cent	1977-1980 (thousand US\$)	Per cent
Basic data collection	\$ 14 506	28.3	23 530	17.5	\$ 3 822	26.2	7 330	25.7	\$ 10 875	16.3	17 687	16.2
Population dynamics	578	1.2	5 678	4.2	572	3.9	1 648	5.9	1 462	2.2	8 849	8.0
Formulation and evaluation of population policies and programmes	1 066	2.1	1 809	1.3	362	2.5	384	1.4	1 838	2.8	2 458	2.2
Implementation of policies	-	-	3 419	2.5	-	-	31	0.1	-	-	343	0.3
Family planning programmes	29 666	57.8	82 416	61.1	9 550	64.3	14 085	50.1	45 756	69.0	65 687	59.8
Communication and education	3 203	6.2	7 040	5.2	53	0.4	2 667	9.5	2 770	4.0	5 970	5.5
Special programmes	154	0.3	432	0.3	58	0.4	468	1.6	65	0.1	1 429	1.3
Multisector activities	2 110	4.1	10 490	7.9	342	2.3	1 562	5.7	3 648	5.5	7 165	6.5
<b>Total</b>	<b>51 283</b>	<b>100.0</b>	<b>134 814</b>	<b>100.0</b>	<b>14 759</b>	<b>100.0</b>	<b>28 175</b>	<b>100.0</b>	<b>66 414</b>	<b>100.0</b>	<b>109 788</b>	<b>100.0</b>

Note: A dash indicates no expenditure.

Table 1

Distribution of expenditure by priority  
status of countries and region, 1969-1977 and 1978-1980  
(per cent)

Region	Priority status						All countries	
	Priority countries		Borderline countries		Other countries			
	1969-1976	1977-1980	1969-1976	1977-1980	1969-1976	1977-1980	1969-1976	1977-1980
Sub-Saharan Africa	51.5	46.5	23.1	20.7	25.4	32.8	100.0	100.0
Asia and the Pacific	55.3	69.7	15.3	9.0	29.4	21.3	100.0	100.0
Latin America and the Caribbean	11.1	15.1	3.2	8.1	85.7	76.8	100.0	100.0
Middle East and Mediterranean	27.1	30.2	2.9	7.2	69.9	62.6	100.0	100.0
All regions	38.7	49.4	11.0	10.3	50.3	40.3	100.0	100.0

Table 2

## UNITED NATIONS CHILDREN'S FUND (UNICEF)

UNICEF use of resource allocation criteria differs substantively from the way in which criteria is used by UNDP and UNFPA. Both UNDP and UNFPA are what might be described as "legislative" agencies, while UNICEF considers itself a pragmatic agency. This means that in the case of the "legislative" agencies, rules governing resource allocation are, comparatively speaking, more precise and limit options for resource allocation decisions. UNICEF, on the other hand, maintains -- as a matter of policy -- a high degree of flexibility, and the application of its resource allocation criteria is much more selective and subject to a number of special circumstances. Also, as a matter of policy, UNICEF commits very little to writing for general distribution, hence there is no readily available record of the agency's internal deliberations concerning the development of resource allocation criteria or extensive analysis of the resource allocation process. Most of the information in this report, therefore, is based on interviews with UNICEF officials rather than from UNICEF documentation.

### The UNICEF Budget

The first application of a form of criteria begins with the way in which the UNICEF budget is divided into three categories:

- 30% of the budget is "noted", or already committed. (Other UN agencies have only 2-3% of their budgets "noted")
- 10% is retained for use in emergency situations
- 60% is available for allocation to recipient countries in support of UNICEF programs

Though UNICEF uses a 5-year planning cycle, cycles vary from country to country, as each country's cycle begins when it becomes a UNICEF recipient.

### Resource Allocation Criteria

UNICEF uses two measurements as its basic resource allocation criteria:

- Per Capita GNP
- Size of a country's child population (1-15 years)

Countries are divided into three main categories, based on GNP and child population:

- Lowest income category: per capita GNP of \$400 and below
- Middle income category: per capita GNP of \$400- \$1500
- Highest income category: per capita GNP of \$1500 and above

Within these three categories UNICEF has averagely allocated funds which are expressed on the basis of cents per child, as follows:

- Lower income countries, countries with small child population, i.e., under .5 million, countries in temporary economic difficulty and countries designated "as if" they were a Least Developed Country in accordance with the United Nations General Assembly Criteria: 45¢ per child
- Middle income countries: 15¢ per child
- Higher income countries: 2¢ per child

UNICEF officials are quick to point out that the cents-per-child data is used as a planning figure during initial program negotiations with recipient countries. There are so many variables in resource allocations decisions, that it would be impossible to obtain cents-per-child figures that would correspond to these planning figures from an analysis of one year's UNICEF allocations per country divided by child populations per country.

Another factor that contributes to the lack of a uniform allocation system is the fact that some countries remain in GNP categories after they have graduated. Countries are left in their original GNP after graduation because UNICEF maintains that changes in status are politically sensitive.

#### Applying Criteria

UNICEF designs its operating policies to provide it with maximum flexibility. Its attitude towards recipient countries varies from that of other UN agencies. UNICEF does not consider its resources to be the property of recipient countries, but rather a pool of resources which UNICEF and a recipient country can discuss as part of the program development process.

The crucial decisions on resource allocations are made primarily during bilateral program negotiations between UNICEF and recipient countries. UNICEF has a high degree of discretion in these negotiations, and, if circumstances warrant, can increase or subtract up to 20% of the funding level a country might otherwise receive on the basis of its per capita GNP and the size of its child population.

UNICEF uses resource allocation criteria essentially as a set of general guidelines that help in setting the terms for bilateral negotiations. Final allocations are influenced by such a wide range of factors, that only the parties to the negotiations, according to UNICEF, can intelligently make the final decision.

#### A New Criterion

UNICEF is presently involved in completing a proposal to its Executive Committee recommending that infant mortality rates (IMR) be added to per capita GNP and child population as a supplementary resource allocation

criteria. Adding this criteria would make the allocation criteria more "socially oriented" according to one UNICEF official. It is unlikely that IMR will share equal weight with the present criteria, because too many high income countries have relatively high IMR's, and UNICEF would be reluctant to change its present country categories and general allocation guidelines solely on the basis of IMR. Also, IMR data is less reliable than GNP figures.

If IMR were to be approved by the UNICEF Executive Committee, it would only be used as a supplementary criteria in connection with new programs and resource allocations above the level of current allocations. The attached table was prepared to demonstrate the effect IMR data would have in ranking countries. The precise way in which IMR criteria would be applied will only be determined after the Executive Committee approves the recommendation and directs UNICEF to develop specific proposals for its use in resource allocation decisions. The proposal document will not be available until after it has been presented to the Executive Committee in late February.

#### UNICEF Documents

UNICEF officials were unable to provide documents containing Executive Committee authorization for the current resource allocation criteria. Officials did say that this criteria has been in use at UNICEF for at least the past decade. (The writer will continue to work to obtain copies of authorizing documents and a UNICEF ranking of countries according to per capita GNP and child population.) Two documents are attached, though they provide little specific information on the resource allocation process: 1) the "round-up document" containing recommendations for new commitment and proposals, XE/ICEP/P/L.2099, 5 April 1982, and 2) the 1982 UNICEF "Annual Report".

**Table 1**  
Countries by GNP per capita and IMR combined

IMR 1975-84	GNP Per Capita US \$ 1981	Very low income countries (0 - 250)	Low income countries (251 - 410)	Middle income countries (411 - 1000)	Higher income countries (1001 - 2000)	High income countries (Over 2000)
Very high IMR countries (150 and over)		Afghanistan	Benin	Angola		
		Bhutan	Central A.R.	Liberia		
		Chad	Gambia	Senegal		
		Ethiopia	Guinea	Yemen Arab		
		Guinea Bissau	Niger	Yemen Dem.		
		Kampuchea	Sierra Leone			
		Malawi	Somalia			
		Mali				
		Nepal				
		Upper Volta				
	(10)	(7)	(5)			
High IMR countries (100 - 149)		Bangladesh	Ghana	Bolivia	Congo	Algeria
		Burma	Haiti	Cameroon	Ivory Coast	Gabon
		Burundi	India	Egypt	Tunisia	Iran
		Equatorial Guinea	Pakistan	Lesotho	Turkey	Libya
		Laos	Sudan	Mauritania		Oman
		Mozambique	Tanzania	Morocco		Saudi Arabia
		Rwanda	Togo	Nigeria		
		Vietnam	Uganda	Papua N.G.		
		Zaire		Swaziland		
		(9)	(8)	(10)	(4)	(6)
Middle IMR countries (50 - 99)			Cape Verde	Botswana	Colombia	Bahrain
			Comoros	El Salvador	Dom. Rep.	Brazil
			Madagascar	Honduras	Ecuador	Iraq
				Indonesia	Guatemala	Mexico
				Kenya	Jordan	Qatar
				Mongolia	Peru	U.A.E.
				Nicaragua	Syria	
				Philippines		
				Thailand		
				Zimbabwe		
		(3)	(10)	(7)	(6)	
Low IMR countries (Less than 50)			China	Guyana	Costa Rica	Argentina
			Sri Lanka	Samoa	Cuba	Barbados
					Fiji	Chile
					Jamaica	Cyprus
					Korea	Hong Kong
					Lebanon	Kuwait
					Malaysia	Singapore
					Mauritius	Suriname
					Panama	Trinidad
					Paraguay	Uruguay
		(2)	(2)	(10)	(11)	Venezuela

Sources: GNP per capita - World Bank  
 IMR - UN Population Division

**Note:**

a) The IMR groups are the breakdowns used by the UN Population Division in their recent study on Infant Mortality Rates. The goal of the International Development Strategy for the United Nations Development Decade for the year 2000 is a maximum rate of 50.

b) The GNP groups follow the breakdowns used by the World Bank in its annual Development Report. The figure of \$410 was taken by the World Bank as the breakpoint between low and middle income countries. The countries either side of this breakpoint have been divided into appropriate groups.

Source: UNICEF

## INTERNATIONAL DEVELOPMENT ASSOCIATION (IDA)

A summary review of the IDA policy and use of resource allocation criteria is useful in relation to the general trends noted within the agencies of the UN. There is a definite correlation to be found in the main criteria in use within IDA and that used by UN agencies, though the missions of the agencies differ.

Though IDA functions as a multilateral lending agency, it is concerned with the quality and performance of the development programs for which funds are lent. IDA was created by the World Bank to make concessional long-term loans to the world's poorest countries. This establishes an upward limit for IDA in terms of the countries with which it deals, as those country's that do not qualify for World Bank and commercial loans, per force, are among the world's poorest countries.

IDA has periodically reviewed its criteria for eligibility of member countries to receive IDA funds, on the one hand, and the criteria used in the allocation of those funds, on the other hand. The IDA Executive Directors have approved the eligibility and allocation criterial, but have also emphasized the importance of applying the criteria in a flexible manner to take account of changing circumstances. IDA takes the position that, "...there is no precise formula which can be mechanically applied for deriving from the criteria used the amounts which are actually allocated."2 Criteria, then, is considered a "useful framework"3, but only when applied with considerable judgement.

### Eligibility Criteria

Here IDA follows a policy, in one aspect of its criteria, similar to the UN's attitude toward the poorest countries. The first criteria for establishing eligibility is: per capita income. The basis for this criteria comes from IDA's Articles, which state that financing is to provide for, "...development in the less developed world..."4, and in this case "less developed" has come to mean the poorer countries in terms of their per capita GNP. However, IDA applies this criteria in a relative manner. Though the absolute ceiling is per capita GNP of \$795, some 90% of IDA funds go to countries with per capita GNP of \$400 or below (see Table 1) all but a small portion of the balance going to countries in the per capita GNP \$400 to \$730 range. Though per capita GNP is important, a country must meet the next criteria as well.

The second criteria is: lack of creditworthiness. This criteria is more subject to judgement than the application of objective measurement, according to IDA. Determining creditworthiness is the basis of a judgement that is made on a longer-term assessment of a country's ability to service debt on commercial and International Bank for Reconstruction and Development (IBRD) loans than on short-term issues. For example, IDA will readmit countries which have "graduated" from IDA on the basis of creditworthiness in the event of a severe economic set-back due to reduction in prices for primary exports that will prevent a country from raising funds from other sources.

1. "Bank/IDA Lending Programs - Allocations Among Income Groups..", IDA/R81-16, 12 February 1981
2. Section from internal World Bank/IDA memo, no title or date visible

### Allocation Criteria

In addition to the criteria used in determining eligibility, the following additional criteria are used to make a final determination on allocations for member countries. The first allocation criteria is described as relative poverty. The pattern and assumptions here follow closely those in use within the UN. First, IDA assumes "...that the lower the GNP per capita of any particular country below the eligibility ceiling, the greater is that country's need for IDA assistance."<sup>5</sup> IDA considers the per capita GNP factor to be of even greater importance (weight) due to the increasing gap between IDA resources and the needs of the poorest countries. The IDA allocation pattern to countries in the per capita GNP of \$400 category and below reflects its increasing commitment to aiding the least developed countries:

#### Allocations<sup>6</sup> From IDA to Countries With Per Capita GNP \$400 and Below

<u>Years</u>	<u>% of Total Allocations</u>
1961-77	71%
1977-82	83%

This trend continues as the world economic environment worsens and resources are insufficient to meet the demand from eligible countries. Only 8% of IDA resources were allocated to countries above the per capita GNP of \$400 ceiling during the 1982 fiscal year.

The second of the three allocation criteria: population. Population size has always been an important factor, though as the number of countries eligible for IDA resources grew, an adjustment was made to reduce the influence of the absolute size of a country's population, as in the case of India and Pakistan, on resource allocation decisions. For example, India's allocations from IDA were reduced from 53% of total IDA allocations in 1967 to 40%<sup>7</sup> during subsequent years. Though the exact weighting is not available, IDA reports that there is a bias built-in on the population scale for small countries.

The final criteria is of special importance to IDA, and also the most subjective in nature: economic performance. This element in resource allocation criteria has grown in relative importance over the years. It involves a whole range of judgements including how effectively a country has used IDA resources. IDA sees this criterion as a means of encouraging recipient countries to pursue effective development policies. IDA considers that the use of this criterion involves, perhaps, the greatest amount of judgement of any other in the resource allocation process, because it involves such sensitive issues as: implementation capacity and performance in improving the distribution of income.<sup>8</sup> IDA does not divulge the relative weight of this criterion, but, in extreme cases, when this criterion has not been met, IDA has stopped lending. An option a banking institution can exercise that is not available to most UN agencies. Performance ratings are confidential, and the rating is an internal process based on World Bank norms.

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3. Ibid
  4. Article V, Section 1, (a)
  5. Op cit, pg. 17
  6. Ibid
  7. Op cit, pg. 16
  8. Ibid



Though much of IDA's resource allocation process is subject to a high degree of confidentiality, the trend, especially in following its per capita GNP criteria, is clear from the attached table. There is a high correlation of criteria to resource allocation over the period covered in the table.

Table 1

Net Disbursements of IDA and Bilateral Official Development Assistance by per Capita Income of Recipient:

<i>Per capita income of recipient<sup>a</sup></i>	<i>IDA<sup>b</sup></i>			<i>DAC bilateral aid</i>			<i>OPEC bilateral aid</i>	
	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1975</i>	<i>1980</i>
\$410 or less	72	71	80	41	41	34	24	20
\$411-730	14	22	18	18	20	28	47	10
\$731-1,275	5	2	1	12	11	8	2	11
\$1,276-2,200	9	5	1	20	12	11	21	54
Over \$2,200	—	—	—	9	16	19	6	5
Total (percentage)	100	100	100	100	100	100	100	100
Total (billions of dollars)	0.2	1.1	1.5	5.1	8.8	16.0	4.8	5.8

a. GNP per capita in 1980.  
b. Fiscal years.

Source: "IDA in Retrospect", pg. 16, 1982

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1. Governing Council, 38th meeting, decision 82/20, 18 June 1982
2. Governing Council, twenty-ninth session, "Report of the Executive Director..." DP/1982/28, 21 April 1982
3. Governing Council, twenty-ninth session, "Report of the Executive Director...", DP/1982/30, 14 April 1982
4. Governing Council, twenty-ninth session, "Report of the Executive Director..."DP/1982/30, 8 April 1982
5. Governing Council, twenty-eighth session, Decision 81/7

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1. United Nations Children's Fund, Programme Committee, 1982 session, "Summary of Program Assistance..." E/ICEF/P/L.2099, 5 April 1982
2. "UNICEF Annual Report - 1982"

WORLD BANK/IDA

1. Section from internal memo on IDA resource allocation criteria (no date)
2. "IDA in Retrospect - The First Two Decades.." 1982

ANNEX V

Percentage Distribution of Expenditures by Rank Order of  
UNDP, UNFPA and UNICEF to Latin America and the Caribbean 1981\*

<u>Countries</u>	<u>UNDP</u>	<u>Countries</u>	<u>UNFPA</u>	<u>Countries</u>	<u>UNICEF</u>
Brasil	9.88	Mexico	16.2	Colombia	16.6
Haiti	7.04	Peru	9.81	Peru	13.21
Argentina	7.02	Haiti	7.48	Brazil	9.14
Colombia	6.74	Paraguay	6.63	Nicaragua	7.69
Chile	6.68	Dom. Republic	5.85	Haiti	6.95
Mexico	6.38	Honduras	5.21	Ecuador	6.78
Ecuador	5.14	Panama	5.21	Mexico	5.96
Nicaragua	4.66	Brasil	5.12	Guatemala	5.86
Bolivia	4.64	Ecuador	5.04	Bolivia	4.03
Peru	4.45	Guatemala	4.95	Paraguay	4.01
Uruguay	3.36	El Salvador	4.65	Dom. Republic	3.97
Honduras	2.94	Cuba	4.32	Honduras	2.26
Venezuela	2.87	Bolivia	4.10	El Salvador	2.26
El Salvador	2.84	Colombia	3.14	Guyana	1.95
Jamaica	2.81	Barbados	2.71	Cuba	1.36
Guatemala	2.66	Jamaica	2.23	Jamaica	1.26
Dom. Republic	2.58	Nicaragua	1.70	Chile	1.25
Cuba	2.48	Uruguay	1.17	Panama	1.21
Panama	2.16	St. Lucia	0.76	St. Lucia	0.98
Paraguay	2.12	St. Vincent/Grenadines	0.74	St. Vincent/Grenadines	0.92
Guyana	1.40	Suriname	0.63	Costa Rica	0.58
Suriname	1.11	Dominica	0.58	Dominica	0.50
St. Lucia	1.00	Costa Rica	0.56	Antigua/Barbuda	0.44
Grenada	0.98	Chile	0.45	Grenada	0.29
St. Vincent/Grenadines	0.96	Antigua/Barbuda	0.39	Belize	0.25
Bahamas	0.95	Grenada	0.27	Barbados	0.18
Costa Rica	0.92	Argentina	0.05	Suriname	0.04
Dominica	0.86	Bahamas	---	Argentina	---
Antigua/Barbuda	0.78	Belize	---	Bahamas	---
Trinidad & Tobago	0.60	Guyana	---	Trinidad & Tobago	---
Barbados	0.56	Trinidad & Tobago	---	Uruguay	---
Belize	0.45	Venezuela	---	Venezuela	---

\* United Nations General Assembly Document A/37/445, 28 September 1982, "Operational activities for development of the United Nations System Note by the Secretary-General", pp. 82-84

ANNEX VI

PERCENTAGE DISTRIBUTION BY RANK ORDER BY COUNTRY\*

Physical Quality of Life (PQLI) <sup>1</sup>	PQLI and Population <sup>2</sup>		Infant Mortality Life Expectancy		Infant Mortality (75%) + Population (25%) <sup>4</sup>		Average Relation of Population and Infant Mortality in Proposed 1984-85 Budget <sup>5</sup>		1980-81 Actual Budget <sup>6</sup>	1982-83 Actual Budget <sup>6</sup>	1984-85 Proposed Budget <sup>6</sup>				
			Age 1	Age 1											
Haiti	7.912	Brazil	6.4	Bolivia	5.5%	Brazil	12.13	Brazil	9.66	Brazil	16.25%	Brazil	14.1	Brazil	11.62
Bolivia	6.615	Haiti	5.7	Haiti	5.3	Mexico	7.62	Mexico	7.55	Mexico	5.88	Mexico	5.90	Mexico	5.98
Guatemala	5.318	Mexico	5.1	Nicaragua	4.6	Bolivia	6.87	Peru	5.78	Haiti	5.65	Colombia	5.4	Venezuela	5.89
Honduras	5.188	Bolivia	5.0	Honduras	4.4	Haiti	5.99	Colombia	5.65	Colombia	4.93	Haiti	5.3	Peru	5.83
Dom. Republic	4.410	Peru	4.4	Peru	4.3	Peru	5.52	Argentina	5.35	Argentina	4.56	Argentina	4.9	Haiti	5.40
Nicaragua	4.410	Guatemala	4.4	Guatemala	3.9	Colombia	4.76	Bolivia	4.99	Guatemala	4.31	Bolivia	4.9	Colombia	5.18
Peru	4.280	Colombia	4.3	Ecuador	3.8	Ecuador	4.62	Ecuador	4.48	Peru	4.27	Ecuador	4.4	Guatemala	5.10
Belize	4.280	Honduras	4.1	Dom. Rep.	3.7	Nicaragua	4.59	Haiti	4.48	Bolivia	4.23	Peru	4.1	Argentina	4.69
El Salvador	3.761	Dom. Rep.	3.8	El Salvador	3.7	Honduras	4.51	Venezuela	4.35	Venezuela	4.17	Guatemala	4.0	Bolivia	4.52
Ecuador	3.761	Nicaragua	3.5	Dominica	3.7	Argentina	4.18	Guatemala	4.17	Ecuador	4.12	Honduras	3.7	Ecuador	4.03
Brazil	3.372	Ecuador	3.5	Colombia	3.4	El Salvador	4.04	Chile	4.10	Jamaica	3.44	Costa Rica	3.4	Dom. Rep.	3.53
Colombia	3.372	El Salvador	3.4	Brazil	3.2	Guatemala	4.04	El Salvador	3.77	Honduras	3.31	El Salvador	3.3	Honduras	3.46
Mexico	2.853	Venezuela	3.3	St. Vincent	3.1	Dom. Rep.	3.69	Dom. Rep.	3.73	Costa Rica	3.27	Chile	3.3	Jamaica	3.30
Paraguay	2.853	Argentina	3.3	Antigua/Barb.	3.1	Venezuela	3.00	Honduras	3.66	Dom. Rep.	3.13	Jamaica	3.3	El Salvador	3.07
St. Vincent	2.594	Belize	3.0	Paraguay	3.1	Chile	2.86	Cuba	3.56	Cuba	3.10	Venezuela	3.3	Paraguay	3.06
Dominica	2.594	Chile	2.8	Guyana	2.9	Paraguay	2.57	Nicaragua	3.37	El Salvador	3.00	Dom. Rep.	3.2	Costa Rica	3.03
Venezuela	2.464	Paraguay	2.7	Saint Lucia	2.9	Guyana	2.17	Paraguay	2.85	Chile	2.98	Paraguay	3.2	Chile	3.01
Antigua/Barb.	2.335	Panama	2.3	Mexico	2.7	Uruguay	2.16	Uruguay	2.47	Cuba	2.60	Cuba	2.9	Cuba	2.88
Panama	2.205	Cuba	2.1	Belize	2.7	Uruguay	2.02	Costa Rica	2.37	Paraguay	2.53	Trin.&Tob.	2.6	Trin.&Tob.	2.75
Neth. Ant.	2.205	St. Vincent	2.1	Grenada	2.6	Panama	1.83	Jamaica	2.36	Nicaragua	2.52	Nicaragua	2.5	Nicaragua	2.74
Suriname	2.075	Uruguay	2.0	Jamaica	2.5	Suriname	1.79	Panama	2.30	Trin.&Tob.	2.48	Guyana	2.0	Panama	2.39
St. Lucia	2.075	Dominica	2.0	Chile	2.5	Trinidad	1.74	Trinidad	2.00	Guyana	2.11	Panama	2.0	Uruguay	1.93
Chile	2.075	Neth. Ant.	2.0	Panama	2.3	Trinidad	1.64	Guyana	1.95	Uruguay	2.09	Uruguay	2.0	Guyana	1.89
Grenada	1.816	Suriname	1.9	Costa Rica	2.2	Jamaica	1.52	Suriname	1.47	Suriname	1.45	Suriname	1.6	Suriname	1.44
Guyana	1.816	Costa Rica	1.8	Argentina	2.2	Costa Rica	1.49	Barbados	1.24	Bahamas	1.38	Bahamas	1.4	Bahamas	1.31
Jamaica	1.556	Jamaica	1.8	Cuba	2.1	Bahamas	1.37	Bahamas	1.20	Barbados	1.31	Barbados	1.1	Barbados	1.00
Argentina	1.556	Guyana	1.8	Suriname	2.1	Barbados	1.35	Belize	1.13	Belize	0.93	Belize	1.0	Belize	0.98
Bahamas	1.556	St. Lucia	1.8	Venezuela	1.9										
F. Ant./Gul.	1.556	Antigua	1.8	Uruguay	1.9										
Uruguay	1.427	Grenada	1.7	Neth. Ant.	1.8										
Costa Rica	1.427	F. Ant.	1.7	Bahamas	1.7										
Trin.&Tob.	1.297	Bahamas	1.6	Barbados	1.6										
Barbados	1.038	Trin.&Tob.	1.6	Trin.&Tob.	1.2										
Cuba	.908	Barbados	1.3	F. Ant.	1.2										
Canada	.519														
U.S.A.	.519														

\*Population statistics drawn from UN Population and Vital Statistics report, July 1982. Infant Mortality statistics drawn from UN Population Division.

1 Physical Quality of Life (PQLI) is a composite index including infant mortality, life expectancy at age 1 and adult literacy. (U.S. Foreign Policy and the Third World, Agenda 1982, Overseas Development Council, 1982, pp. 172-73). The PQLI distribution is arrived at by taking the complement to the PQLI and calculating the sum for all countries and the shares for each country.

2 Complement of PQLI added to the scaled square root transformation of each country's population in thousands and the average taken and then divided by the sum of all countries' averages.

3 The index was reached by taking the sum of all countries' infant mortality rates and determining each country's percentage/share of that total; the sum of the inverse of all countries' life expectancy rates and determining each country's share of that total; and the sum of the inverse of all countries' GNP's per capita and determining each country's share of that total; and then averaging those three results and placing countries in rank order.

4 The index was reached by calculating the sum of all countries' infant mortality rates and each country's percentage share of that total and multiplying it by .75 and then calculating the sum of all countries' populations and each country's percentage share of that sum, multiplying that amount by .25 and adding the two results together and then placing the countries in rank order.

5 The index was created by taking the sum of the estimated country allocations based on the average relation of population and infant mortality as obtained in the Annex 3 analysis of the proposed 1984-85 budget (See Annex 3, table 5).

6 Budget figures include only country program funds and do not include Netherlands Antilles, Saint Lucia, Antigua and Barbuda, Dominica, St. Vincent and Grenada.