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A PRIMER IN DEVELOPMENT PLANNING TYPOLOGY

by

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## I. INTRODUCTION

At the end of World War II it was obvious that a gigantic rebuilding job lay ahead in Europe. Commencing with the Marshall Plan, programs and techniques were evolved by which Americans were able to play a substantial role in assisting the European countries in re-establishing going societies. Simultaneously, it became apparent that colonialism was doomed, and new nations began emerging by the dozens.

Flushed with the rapid progress made in Europe, the developed countries tried to transfer the same techniques and programs to the problem of development over the entire world. These aid programs, and the plans to co-ordinate national development within the LDC's (less developed countries), now have accumulated several years experience. It would be invidious to suggest that no one is aware of the differences between the European and LDC problems. Nevertheless these differences frequently seem to be forgotten in practice. It is as if a group of young people, emerging from late adolescence towards responsible roles as world citizens, were being treated by techniques designed to give emergency treatment to war time casualties.

It might be useful to take a hard look at the entire operation - the problems of the patients, the training and experience of the doctors and the relationship between the two. No explicit comparison will be made between the European post-war experience and the existing activities in the LDC development planning field. Attention will be concentrated almost entirely on the latter area. The "developed country" syndrome will be represented more by the American citizenship and training of the author, and the assumption that most readers are also Western trained.

Thus the analytical framework is Western and the viewpoint is that of a Westerner looking at a non-Western society, like a city dweller in a tall building looking out at the surrounding countryside. He may have visited the rural environs, but he never really has lived there and he is trying to understand farm life with city-based knowledge.

In trying to make sense out of a mass of information it is necessary to introduce some sort of order. This is done by dividing the bits of information into groups or classes - a process of classification. Ideally if cardinal numbers (and fractions) can be assigned to some of these classes, the bits of information constitute measurements. Powerful mathematical tools can then be brought into use. But that is getting ahead of the story.

The task of classification is essentially a matter of dividing a given set of items into meaningful groups or classes. This is usually carried out in stages, each major class being further subdivided into component sub-classes. The process can be repeated through several stages to produce any desired degree of differentiation. Some suggested principles to follow in this disaggregation process are:

1. Disaggregation should be into a finite number of groups or classes, each of approximately equal size and importance.
2. The number of groups or classes at a given level should be small, preferably two to five - ideally only two.
3. Items within a class should be relatively homogenous. The differences between items in the same class should be less important than the differences between typical items from two different classes.

4. Each item in the original group should belong to one and only one class or sub-group. This makes arbitrariness unavoidable in setting boundaries. However, once set they should be strictly followed. This is a troublesome requirement in the social sciences, given the nature and degree of interdependence within organizations.
5. Usually one group or class must be residual. It will include miscellaneous items, both those with unknown characteristics and others which are not elsewhere classified. Since this class includes such a wide diversity of items it should be the smallest class, either in number of items, or in overall importance in some meaningful sense.

The general concept of classification, as well as the narrower concept of measurement, assumes that it has already been determined which attributes are the significant ones. All items have several attributes and hence different classification schemes derive from different emphases. Implicitly the definition of the set of items to be investigated assumed certain attributes can be ignored, either because they are unimportant or because on these characteristics all items are the same.

The major assumption behind this paper is that development planners have concentrated so intently on measuring the characteristics of the development problem that they frequently concentrate on the wrong (less important) characteristics. In solving the European re-building problem, many dimensions could be ignored because they were either the same throughout Western societies, or they could be compensated for easily.

In looking at development planning situations in the LDC's, three different attributes will be investigated. The next section is devoted to the questions of why societies have plans and what the role of the planner is. The third section deals with some methodological issues

on how planning is carried out and how it should be carried out. The final section discusses the nature of the less developed world, its heterogeneity, and the problem of classifying its members in a most generally useful way.

## II. WHY PLAN? VARIETIES OF VIEWPOINTS

Modern societies are made up of individuals and groups with a wide divergence of viewpoints and competence. Each individual plays several different roles, a different role for each of several groups of which he is a member. These groups may or may not be formal organizations.

Within society, individuals and groups of individuals frequently play roles which are not precisely the same as the role players would like them to be. In fact, they might not conform to the idealization of the role as perceived by any of the members of the group or by the society at large. In addition to fooling themselves, many people project their own idealized viewpoints to others, on the assumption that their own viewpoints are universal. This is a variety of ideological ethnocentrism which has partially replaced the earlier types based on race and nationality. The main focus of this chapter is the wide variety of viewpoints towards development plans which occur, even among persons, for example, who strongly favor development planning.

### A. Professional Planners Viewpoint

The role described here might be characterized as the one which the professional planner thinks he should play. It also obviously conforms to the author's predilections. The professional planner, to the degree he is a professional, should be primarily concerned

with being sure that his plans are both possible and reliable. They should also conform to some standard of desirability or relevance so as not to be frivolous. Conceptually this viewpoint should embrace all planning, both the quantifiable economic variety and that done by the other specialists using non-quantifying techniques.

The primary role of the planner is to prevent the use of valuable resources on things which will not work.<sup>1/</sup> At a minimum, planning should also be efficiency conscious. This is a weak requirement aimed at avoiding alternative plans, programs and actions which are demonstrably inferior to existing alternatives. This puts the planner in the strongest position when passing on the possibility and reliability of plans.

Finally, in this view, a plan should conform to the correct standards of desirability and relevance. To some extent, but not entirely, these questions are influenced by the planner's personal preferences. In terms of what is desirable for the society, the planner needs a guide as to who speaks authoritatively, or, more likely, guidance on how a wide variety of opinions and preferences should be weighted.

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<sup>1/</sup> If we draw a house plan and then realize the kitchen is too small, we throw the plan away. This is much cheaper than building the house and throwing it away. Likewise we can draw plans for five houses, choose the best and throw the other four plans away. We can hardly afford to build all five houses and discard four of them. The destruction of the four less desirable plans is based on the assumption that a house can be built according to the remaining plan. If all houses could be built step by step without ever making a mistake, then the resources used on preliminary planning would be wasted. It is the inevitability of errors which justify planning.

In short, the professional planners viewpoint is dominated by adherence to sound professional principles. Detailed discussion of the nature of the principles belongs in section three on methodological questions.

B. Political Viewpoint

If the preceding professional viewpoint appears normal, it is well to remember that other, perhaps larger, elements of society tend to see things quite differently. Politics is basically a question of power and power struggles. If the professional planner sees the question of desirability as a technical question difficult to solve on objective grounds, to the true politician it is easily simplified in terms of what it does for him in the existing power struggle. A good plan is one which furthers his interests. This may mean that it gives a major emphasis to those things which he wants accomplished in the society. Or it may mean a strong voice for his ministry or sectors under his control in setting national priorities. This is very likely to result in an expansion of the size and importance of his ministry.

Some of the ministries, or private sectors, are likely to have a very short-run viewpoint. In that case they will judge the plan, for example, in terms of what it does to their share of next year's governmental revenues, or, in the case of the private sector, whether it involves an increase or decrease in their taxes. More commonly, the perception of desirability by an individual sector will be a mixture of long and short run viewpoints, combining narrow self-interest with views of what should be imposed on the society for its own good.

Some of the clearest examples of this type of conflict in recent history have taken place in the relationship between the formal plan organizations and ministries of finance. Where one is effectively subordinated to the other, the planning may go relatively smoothly, at least in the early stages. Where this is not the case, open political conflict frequently breaks out between the two, with one or the other eventually triumphing. A variation finds the planning bureau subordinated to some other ministry or powerful group in the government cabinet which uses the plan organization as an instrument in its political battles with the ministry of finance.

Another variety of political action springs from professional loyalties. Some professional public administration experts seem more interested in governmental development than they are in national development. This can be construed to mean either an increase in the efficiency with which the formal governmental organizations carry out their role within the national society, or it can mean the expansion of the power of the government both absolutely and/or in relation to the other component organizations within the nation. Other things being equal, (the economist's usual hedge) increased efficiency in government is sure to make a positive contribution to national development, and an expansion of governmental power frequently may do so also. However, it is unacceptable to identify the single component as equivalent to the whole of national development. This, of course, seldom is done explicitly, but the assumptions that government power can be expanded at zero cost seems necessarily implied if some proposed courses of action are to be rationalized.

Planners also inevitably function as protagonists - advocates of a point of view within the society. The economic planner can be expected to push for the use of conscious, rather rigorous, logical methods in settling social problems. His proposals will frequently take a mathematical form. He is likely to form alliances with his cousins, the accountants, and maintains a competitive but symbiotic relationship with the neighboring tribe of engineers. The economist, the accountant, and the engineer are all likely to be over-impressed with the relevance of a measure of material wealth as an index of national development. Confident of the value of their professional insights, planners feel the need to manipulate the rest of society into so modifying its behavior that it conforms to the plan. The point is that these feelings are primarily part of their general roles as members of society other than their professional roles. Like all "enlightened" groups they have problems of inducing conformity and/or consent, using the standard tools; carrots, sticks, education, brain-washing, and bribery, for example. However, it does not seem that planners are particularly qualified in this area, compared to the qualifications of those in other professions. There are many general problems of efficient administrative organization. These are largely independent of whether a plan is used or not and are remarkably similar to the political problems outlined above. The main problem here is that of control of the central authority over the subordinate bureaucracy.

### C. The Plan and Charisma

Besides treating the plan from a professional viewpoint and as an instrument of political power in furthering the advantage of a

particular group in the society, there is a third possibility. If some politicians are willing to sacrifice an official plan for political gain, others are willing to corrupt it (from a professional viewpoint) in that they never intend the plan to be a guide to action!

An interesting question arises in the following hypothetical situation. Suppose the past plans had always been 80% fulfilled, never more and never less. The question then is: Should the plans be set unrealistically high as if to require 125% of maximum capacity? A second but related question concerns whether or not non-deliverable benefits for the workers should be included in the plan specifications if, in fact, this will increase the effective motivation of the workers. To make the problem more difficult assume it is possible to continue such a course of action for a considerable period of time, the workers being either optimists or naive. Regardless of how this question is answered, do the same rules apply in terms of inputs to units and sectors, when the inputs are too costly from the central administration's viewpoint, but highly desired by the leadership in various sectors? Finally, what are the relative values of large short-run tangible results on the one hand compared to modest permanent contributions to the degree of confidence the society places in official statistics and plans for the future? All of these questions will appear familiar to some readers; they point to the well-recognized possibility for giving plans a charismatic quality to obscure what is to be really accomplished.

In addition to the above "brain-washing" approach to plans, there is a second psychological aspect from which this sub-section takes

its title. Many of the people in the emerging countries are anxious for international prestige and status as part of a developing pride in their country. This frequently has led to a tendency to uncritical acceptance and adaptation of ideas which have originated in the industrialized nations. Just as their forefathers were led to accept glass beads from merchants and education from missionaries, so now they have been led to desire a plan organization, a census bureau, and a military establishment as normal accouterments of a modern state. This is neither because of nor in spite of any objective functional utility which these institutions may have. In such a situation a plan which is really just a profession of ideal goals or a shopping list of desirable projects may be a contribution to national welfare, although it is not very useful as a guide to action.

If the above concept of planning seems simple and naive, the final one reviewed here is complicated and sophisticated. There is no objective reason why a government or a society should not regard the plan as an item which it can export in payment for foreign aid received. Ideally in such a case the government would produce a different plan which could be sold to each potential foreign aid giver. Like other merchandise these should be manufactured at a minimum cost (i.e., in terms of disruption of society, interference with basic social goals and commitment of scarce material resources). They should also be designed to try to produce maximum revenue (i.e., aid). Since such a course of action would imply that the aid giving country derive the maximum satisfaction from receiving such a plan, it would be simply an example of manufacturers attempting to gain a maximum profit by

engineering the specifications of their product to conform with the expressed consumer desires.

D. Professional Attitudes Towards Non-Professional Uses of the Plans

Professional economic planners seem to have been reluctant to recognize the implications of using plans and plan organizations as instruments of political power and for their charismatic effect. If recognized, they can be construed as free benefits which are obtained without any direct or indirect costs in terms of planning as an effective guide to action. To a considerable extent this is because many planners have failed to realize that a professional goal carries with it a self imposed set of ethics and a limit to professional competence. An economic planner, a professional, is bounded by two sets of constraints, one as an economist, the other as a planner. As a planner, there is obligation to ensure that plans are possible and reliable, and insofar as possible, that they conform to some standard of desirability and relevance. In other words his plans must be realistic. As an economist, the economic planner is largely restricted to those types of planning which are quantifiable. This gets him involved in measurement problems, usually of a cardinal nature. At a minimum he must be able to rank order various phenomenon on an ordinal scale.

The difficulty with the political and charismatic aspects of planning is that effective implementation of them is completely outside the economic planner's competence. It is an unpleasant truth that under conditions of full knowledge these aspects may be the major contribution which economic planning can make in furthering national goals. If this is the case, final control of the plan belongs in the hands of other

professionals (perhaps the public relations types) or directly in the hands of the political leaders. The economic planner should be careful not to be subverted by his professional interests into overselling the competence of his profession. He should always be aware that he may be in the position of the doctor with an incurable patient, or the lawyer with a guilty client. In all of these instances the professional is expected to do the best he can within the limits of his professional ethics and competence. In such a case it is no disgrace to lose the patient for reasons beyond his control. It could be argued that the analogy between the economic planner and the doctor or lawyer is not a good one. Both of the latter serve individuals (or corporations) and if they lose a case can find new clients to replace the ones which have been lost. But what happens to the economic planner who by refusing to bend to political necessity completely loses his role within the plan organization?<sup>1/</sup> Planners, like everyone else, play multiple individual roles within society. The most that can be expected is an awareness of the distinctions between professional roles, internal political roles, and duties arising from nationalistic loyalties.

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<sup>1/</sup> Two partial answers are available in recent experience. The first is that economic planning is not restricted to official organizations in the central government but is carried on in all ministries and extensively in the emerging private sector. Many former planners have apparently made the latter adjustment successfully.

The second answer is provided by an acquaintance with the personnel of many of the divisions in the U. N., the World Bank, and other international agencies. Here it seems that a requirement for employment of trained economic planning technicians native to under-developed countries is, or should be, that they have fought the good fight and lost and become persona non grata at home.

### III. HOW TO PLAN VARIETIES OF PROFESSIONAL ORIENTATION

In the last section it was shown that there are many different reasons individuals give support to development planning programs, of which the professional planners viewpoint is only one. In this section a closer look is taken at some professional viewpoints and, as expected, internal diversity is also found. A semantic framework is useful for organizing the discussion which must necessarily range over both abstract theories and attempts to use the theories in practice.

In defining a word, the difference between alternative definitions is likely to be rather small. Any reasonable candidate will include most of the concepts and ideas which are generally agreed to be within the scope of the meaning of the word. Only marginal cases will turn out to be proper uses of the word under one definition but excluded as improper uses or figures of speech by an alternative definition.

The original attempt to divide the broad study of human behavior into component parts was originally conceived to be a division according to subject matter studied. As the disciplines developed, however, they have become more closely identified with particular ways of looking at things than with the particular things being studied. In many respects, the various social science concepts are becoming implicitly defined in terms of techniques used, rather than subject matter covered. It is suggested that this evolution should be explicitly recognized in the formal definitions. Defining disciplines on the basis of methodology will be increasingly useful as the social sciences continue to spread from their original base in Western societies to the more uncharted frontiers in the emerging countries.

### A. Planning Principles

Planning could be trivially defined in terms of the techniques and procedures used for producing one or more plans. A plan always implies a mental formulation and usually a graphic or symbolic representation. Planning (the production of plans) can be either frivolous or serious, but the latter will be of primary interest here. First, a serious plan should provide a set of specific symbolic guides which are useful in choosing between alternative courses of action in the present and foreseeable future. Secondly, a serious plan is one that can be carried out if the decision is reached that it would be desirable. Overlooking these relatively obvious and simple conditions is a major factor in producing many of the frivolous plans extant, and some elaboration is warranted.

If the actions prescribed in the plan are not feasible the plan can be characterized as impossible. Such a condition can arise from a variety of causes. The estimates of available resources might be badly in error. The theoretical foundations of the plan may involve unrealistic ceteris paribus assumptions with respect to highly interdependent relationships. Finally the feasibility of the plan may depend on unrealistic expectations of idealistic behavior by the decision makers -- projections of selflessness, honesty, rationality and patience.

In addition to the question of whether the plan is possible (in the sense of whether or not the initiating actions can be carried out) there is a question of whether the plan is based on stable functions. All actions and groups of actions eventually lead to some results. The significant question is whether the actions prescribed in the plan will

lead to the results which are predicted in the plan. If not, the plan is unreliable.

Given perfect knowledge, it would be possible to construct a group of different plans with each involving a different program and usually implying different end results. If the expected results from one plan are judged to be inferior to the expected results from a second plan, then the first plan is obviously undesirable. Usually this is a matter of relative inferiority, but a plan could be called absolutely undesirable if it was judged inferior to a "do nothing" course of action. This judgment being one of pure preference, it is quite likely that different people in passing such a judgment will use different criteria based on different preference functions and come to different conclusions. <sup>1/</sup>

There are a large number of planning techniques which can either succeed or fail on any one of the points already discussed above. If planning can be trivially defined as the production of plans, then perhaps economic planning can be defined as the production of economic plans. A reasonable economic plan assumes (and requires) that the end

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<sup>1/</sup> Among an infinite number of potential differences, there is a basic conflict between aid-receivers and aid-givers. Also, there are usually complicated conflicts over preferences and criteria represented by different participants and actions in the power struggles which take place within all human societies. This issue is considered in more detail below.

results and initiatives be quantifiable<sup>1/</sup> and if this minimum condition is not met, both the economic plan<sup>2/</sup> and the techniques which produce it are irrelevant since it is impossible to tell whether they have succeeded or failed.

In practice planning and the construction of plans cannot be held to such rigorous definitions. Planners must always try to maintain a balance, for example, between relevance and reliability. A broad and comprehensive plan will tend to be relevant but unreliable; a narrower plan can be considerably more reliable at the cost of less broad social relevance.<sup>3/</sup>

It should be noticed that the questions of relevance and desirability are closely connected. Desirability refers to the choices made between alternative plans on the basis of specified standards. Relevance

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<sup>1/</sup> From the standpoint of the economic technician, although not necessarily from the standpoint of the society as a whole, both the initiative and the results will probably be defined in terms of the way in which they are or could be measured. It might not be possible to prove that the prescribed initiatives were either feasible or non-feasible, but it would at least be known whether or not they had in fact been carried out. Given initiatives and results in quantified terms, the economist would have considerable contribution to make in terms of judging the reliability of plans and of the planning technique used. The question of the desirability of plans is essentially a political matter outside of the professional competence of the economist per se. He is professionally concerned, however, because the relevance of his work depends on the assumption that choices made between alternative results on the basis of their quantifiable aspects, will adequately reflect choices which would be made on the basis of full and comprehensive knowledge.

<sup>2/</sup> For further discussion of definitional questions pertaining to economics and economic planning compared to non-economic planning, see below p. 25.

<sup>3/</sup> This, of course, makes economic planning quite powerful in cases where a narrowly defined partial goal is the primary consideration.

refers to the extent the specified standards are inclusive enough to define and cover all the basic objectives.

#### B. Planning Framework

Planning has been defined as a set of techniques which are more or less useful in accomplishing a vague but broadly accepted goal of national development. As a set of techniques planning may or may not be unified in a single organization structure, and it may or may not lead to a single product or plan. Before considering single co-ordinated plans, some attention should be given to the possibility and characteristics of unit plans, a unit being any social organization smaller than the entire nation.

Frequently it is assumed, or seems to be assumed, that economic planning is more or less synonymous with governmental planning. This is not a tenable position here, because economics will be defined in terms of techniques to be used while government is construed as an institution which is part of the national social structure. Since all societies have non-governmental institutions it is apparent that economic planning can also be carried out by the "private" sector. Moreover, few, if any, governments are really single monolithic structures. There is always a certain amount of intra-governmental jostling for position, and it is quite feasible for a variety of economic planning to be used by the separate ministries in preparing for the bureaucratic wars.

In many cases, perhaps the majority, the government will be the single, largest and most powerful organization among those which make up a nation. However, there are always residual organizations and interests within the nation outside of the government and hence the two terms are not synonyms. The fact that the nation is made up of a large number of components both within and outside of government is quite

significant to the whole topic of economic planning. Each unit in the society has a role to play, and this is likely to have a strong influence on the way individuals in that unit perceive what is desirable for the nation as a whole. Wide differences in judgment as to what is a desirable plan are the rule rather than the exception, since people normally want to work in areas which they feel are important and give high priorities to the work which they are trying to do.

A second way in which the division of society into units is important here is that each unit has a certain amount of autonomy and certain limits to its autonomy. Both the nature and extent of these limits vary from one unit to another. The limits may be fixed over long periods of time or variable in relatively short runs. The limits may be exogenously determined by factors entirely outside of the society, or limits may be internally interdependent in a wide variety of ways. All of this eventually means that what is possible (in the sense of defining a possible plan) will vary from unit to unit. It is also likely that, rationally or not, the perception of what is possible by the unit leaders will also vary.

Where the degree of autonomy given to a unit is variable and is varied by the superior authorities, there will be an impact on what is called the tautness of the planning by the superior authorities. If the comprehensive plan is relatively slack, giving considerable autonomy to the lower levels, the planning procedure may become unreliable. The reliability becomes highly dependent on accurately predicting what people will do when they have very broad administrative discretion. At the other extreme, if the plan is very tight and there

are narrow limits on the autonomy of the component units, it becomes increasingly likely that the plan will become impossible in the sense that some of the component units will be given tasks which they cannot (or feel they cannot) carry out within the limits of their autonomy.

On the question of possibility of plans, situations can arise in which the individual plans by the individual units are each possible, but collectively the sum of the individual unit plans are impossible, because of aggregate limits on supplies. If the planning period is long enough to permit considerable interaction the opposite situation may also occur so that individually impossible plans become collectively possible.

The question of collective impossibility will always be resolved eventually. There are many ways this can be accomplished, involving adjustments of plans and expectations. If other attempts are unsuccessful the ultimate adjustment takes place by failure of some of the unit plans in the crucible of historical experience. In a similar fashion different evaluations of national priorities will also be resolved, again if necessary by historical forces. There is the well known characterization of history as "the systematic rationalizations of a long stream of victorious parties" to be contended with.

It is almost tautological to predict that the behavior of a unit, within the limits of its autonomy, will always be controlled by its unit plan. Each unit's plan is restricted by what the unit perceives to be its possible alternative sets of actions and the results which would follow from each set. Its choice between these sets of actions will be governed by the unit's preferences regarding the desirability of the various results.

The foregoing discussion suggests that the concept of a single viable plan for a nation or a society depends on voluntary acceptance of that plan by substantially all units within the society. The word voluntary is used in the unusual, but not unique, sense which includes a unit level evaluation of the credibility of all "threats", natural or imposed. Thus by analogy a man may "voluntarily" swim for shore when his boat has sunk or "voluntarily" hand over his wallet when a loaded pistol is held at his head.

The above distinction and use of terms are significant for our purposes. Most units in all societies are very unrealistic in assessing the actual limits on their autonomy and influence. Some units overestimate their influence and freedom of action leading to unduly optimistic expectations of tolerance and obedience by other individuals and units. At the other extreme are those who feel tightly constrained when, in fact, their freedom of choice is quite broad. It is not unusual for an organization to have such an inaccurate picture of the nature and distribution of its autonomy and influence that it is guilty of overestimation and underestimation in different directions at the same time. The net result of these unrealistic perceptions is frequently a set of impossible and unreliable unit plans.

In many nations, in addition to the various units in the private sector and the various conventional governmental departments and bureaus there is a unit which can be called the plan organization. The plan organization whatever its formal title usually is established by the national government and is formally given the responsibility for making and publishing "Official" (Government) National Plans. The plan

organization all too frequently fails to recognize the extent to which it is only one of the units in the society which in fact plans. It is particularly subject to misjudging the extent of its autonomy and influence. It may also forget that its perceptions of the possibility and desirability of various plans are those of the plan organization, not necessarily those of the nation as a whole.

This combination of factors has led to the production of many highly unreliable plans which have proved impossible to execute. It is not uncommon for these plan failures to be blamed on the plan organizations having insufficient power. Such a judgment is primarily based on a political viewpoint, implying that the planners are blessed by taking an oath on the plan and therefore should have enhanced power in the society.

From a purely technical viewpoint it is more logical to argue that the real fault lay within the plan organization because of its failure to make realistic estimates of its own power and influence. It may have failed to cross-check its own plans with the various unit level plans, or it may have taken professed unit level plans and goals at face value instead of independently judging them. Failure of the plan organization to make an independent judgment on the extent and duration of the power and autonomy of the various units within the society may have been at the root of the problem. To some extent judgments about why plans fail depend on the role which the plan organization can or should play within the nation as a whole. This question is in turn highly influenced by the subjective biases of the person doing the judging.

### C. Development, Economic and National

After focusing on the planning aspects of Development Planning, it is now time to look briefly at the concept of development. In current usage 'development' is most frequently modified by the adjective "economic". The term "economic development" assumes that economics is defined in terms of subject matter covered and that, at least by implication, whatever economic activity is, it is desirable and more of it is preferred to less. At its broadest and most sophisticated, this usually resolves into a program of trying to get the statistics on the gross domestic product to increase as fast as possible without condoning statistical frauds. Most responsible programs actually involve a major effort to make these statistics as accurate as possible both in the long and short run.

However, faced with the necessity for day-to-day decision-making, this broader definition and concept frequently has been considerably narrowed in practice. One common simplification is to identify economic development with industrial development. Usually this expanded to include other forms of material wealth, although the latter may be assumed to be independent of the industrial sector and therefore ignorable as far as policy decisions are concerned.

A second over-simplification tends, in practice, to construe economic development in terms of the ability of the society to command international liquidity. In this resurgent mercantilist doctrine, development involves expanding exports or providing import substitutes. Either of these tends to improve the balance of trade, and to enhance the nation's position in international financial circles. This tendency usually arises

from grasping at the concrete certainty of the values of goods and services traded in foreign commerce, compared to the vagueness and the necessity for some arbitrariness in valuing domestic production, particularly that used for subsistence or local barter. Despite lip service to the contrary, much observable behavior is consistent with the hypothesis that international liquidity is assumed to be the source of intrinsic value and the main measure of development.

Other variations on the concept of development take their clue from welfare economics. It is possible to define development in terms of consumption levels of the population, although this introduces severe index number problems, particularly when inter-country comparisons are desired. Also included in this general approach are the contributions of various social services - education, medicine, government, for example. Since the latter frequently have no market value they tend to be valued at cost, creating a situation in which the nation can neither benefit nor lose (in the bookkeeping sense) from expansion of the social services.

All of the preceding components tend to make a positive contribution to what is a common sense definition of development. However, none of them uniquely qualifies as peculiarly economic, and other factors not discussed here may also be important components of a meaningful development concept.

In the considerable literature which has grown up in the last decade or so, the term development has sometimes tended to be used as almost synonymous with growth. The two in turn refer primarily to the expansion of material wealth and the resulting contribution to human

welfare, a recurring theme associating the word economic with material wealth. Yet, the term development, vague though it be, has tended to be a broader, more inclusive, more dynamic concept than economic growth.

Given the broad range of meanings <sup>1/</sup> some arbitrariness is essential for clarity. Here the preference is to define development as encompassing a broad comprehensive program of expansion of human welfare. This is not in and of itself an operational concept. However, it seems preferable to do the restricting by means of modifying adjectives rather than in the definition of the noun itself.

Perhaps social development could have been used as a substitute for economic development. The intended concept refers to the society as a whole and all of its component parts. Unfortunately it is becoming fashionable to use the term "social development", or at least "social plan", to refer to those components of national progress which are not controlled by impersonal market forces in the Western laissez-faire sense. <sup>2/</sup> Social plans typically include a variety of investments in human capital mixed in with a component of pure consumption and including education, medicine and housing.

This tendency to treat social and economic as complements seems to leave national as the best available modifier for the term development. To some extent the word national may be unnecessary or implied.

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<sup>1/</sup> The previous components do have in common an assumption that the social value of the items in each area can to some extent be quantified. See the discussion of the meaning of economics beginning on page 25.

<sup>2/</sup> Compare the use of the term in the U. N. Research Institute for Social Development in Geneva.

Why then should not the title be simply "Economic planning of development"?

The real reason is that the word development seems to need a modifier. The casual reader is likely to assume that the subject refers to development of the "nation's economy", probably in one of the narrower meanings of that term. To keep economic from sneaking in another term is needed.

The use of the term national does have several drawbacks. There is the previously mentioned possibility of identifying it with nation, and it may seem to exclude consideration of international development or regional development within the country concerned. This distinction is not intentional nor does it seem to be particularly harmful. Most of the same principles apply at the international, national and regional level. It is also true that most programs are publicly "justified" in terms of the contribution which they make to the welfare of a particular nation.

#### ④ Planning Techniques in Practice

At the beginning of this section, reference was made to the tendency for the meaningful distinctions between the social sciences to be based on analytical techniques used rather than on the subject matter covered. This point was touched on again in the discussion of "economic" development and it now reappears in the phrase "economic" planning. Before proceeding to the full phrase some consideration of the meaning of the word economic may be useful, since somewhat fine distinctions serve as crucial fulcrums in the discussion which follows.

One common practice is to define Economics as the study of money and things connected with money. <sup>1/</sup> This perhaps led to the widely accepted idea that economics is concerned with the study of markets and exchange of goods and services between individuals and groups of individuals. This definition, if it can be called that, does not serve too badly in the societies of Western Europe and North America.

It does seem to have two major flaws. First of all it excludes the questions of Robinson Crusoe economics, and a good deal of activity concerning the internal operation of firms and other organizations which strikes most people as having an economic nature.

A second objection is at the other end of the spectrum. Should the study of economics be restricted to the relationships existing within markets or should it be broad enough to also include the various factors which affect and perhaps control markets as a whole? In other words, what is the relationship of questions of monopoly, competition, and welfare economics to the field of economics proper? Should these topics be considered inside, on the border, or just barely outside the discipline? Although it is possible to gloss over these questions with

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<sup>1/</sup> Starting with an idea of household management, (which is a literal translation of the two Greek roots of the word "economics") the term was expanded to include man's relationship to material wealth. This created difficulty, particularly as standards of living rose above day-to-day subsistence. Gradually the substitution relationship between material goods and services became clear, and the common definition of economics in terms of goods and services arose.

This chain of thought also went through an historical expansion starting with gold and silver, expanding into currency, then to checking accounts, and finally to the field of credit in general.

pragmatic ad hoc decisions when dealing within the Western societies, the questions become more bothersome and more intractable in applying economic principles in the newly emerging nations.

The alternative to defining economics as a subject matter field is to define it in terms of the techniques used in analyzing and prescribing for society. These techniques, in turn, are dominated, or at least strongly influenced, by the assumptions made in their application. It is proposed here that economics be defined as the study of society or certain aspects insofar as social values can be quantified. Notice the use of the words can be, not has been. When the social values have been quantified there is a tendency for the analysis and exposition to become mathematical. A great deal of the most significant economic literature is carried on in verbal terms and translating it into mathematics from English tends primarily to reduce the size of the comprehending audience. However, for those who wish to do so this is usually possible, at least in part.

The term "quantified" merits a slight elaboration. This is usually thought of as measurement in the sense of assigning cardinal numbers to the phenomenon being measured. It is more suitable to expand it to include the idea of ordinal relationships, thus salvaging the indifference analysis and other parts of modern welfare economics.

This definition of economics would include most of the topics covered in the more conventional and narrower definitions based on monetary value and the activities of the marketplace. The monetary price for which a particular item historically is bought or sold at a particular point in time surely has some relationship to the value of that

item to the society. However our definition avoids identifying historical market prices with social value and permits the economist to establish, within the discipline, other norms by which he judges whether the market prices are correct or not. It opens up the area of fair prices whether these are defined in terms of agricultural parities or the degree of freedom from monopolistic restraints. It includes the field of welfare economics, pushing the definitional boundaries into individual and group psychology and the study of power structures to the extent, and only to the extent, that they help in quantifying a component of social value.

The use of the term "economic planning" (to describe a technique) instead of the term "economic development" (as a subject matter field) has far reaching implications. It restricts the operational scope of the field to those aspects of development which can be given quantified social values. This completely avoids the question of materialism per se. In the West the broadening beyond materialism has led to consideration of service sectors, theories of credit, cost-benefit calculations and government expenditures. We also unconsciously use the terms waste products to refer to negative material wealth. Only a moment's reflection is required to recognize that in the ultimate sense all valuations are arbitrary, whether made by formal governments, individuals within a decentralized society, or hermits almost completely isolated from human companionship. There is no particular reason that the basic values must be defined in terms of the preference patterns existing in the industrialized countries.

Thus the definition of development can be left extremely vague. To the extent that non-material aspects of development can be given suitable, quantified values, they can be entered into an index of development and are relevant to economic planning. To the extent that material (or non-material) aspects cannot be given suitable quantified values they cannot enter into an index of development, and hence they are not relevant to economic planning. In this way the concept of economic planning of national development will remain constant and the contribution which it can make operationally is a question left to the judgment of historical experience. This is preferable to defining the field as including everything which any one ever finds useful in promoting progress - an undifferentiated hodgepodge of unknown commendable nostrums.

This definition of economics as being based on assumptions of quantifiable social value tends to exclude or squeeze out certain borderline areas. It is probably inevitable in any definitional scheme that some people will find their primary interests straddling several fields. To these people the definitions will seem less useful and perhaps less desirable. In this case economic institutionalists become bracketed with sociologists, political scientists, historians, and other "non-economists" doing "non-economic planning".

The movement away from the institutionalist brings the economic planner closer to the engineer. Both the engineer and the economist tend to want to work in conditions where the other one has already done his job completely. The economist likes to assume that the "engineering" or physical production functions are known. In a

practical situation this amounts to having a large number of more or less fully specified production alternatives based on engineering possibilities.

On the other hand, the engineer frequently would like to extend the scope and completeness of his analysis by assuming that relative social values or social costs are known. Recognizing that these values and costs are not determined by physical characteristics alone, he is likely to turn to the historical marketplace or to a cost accountant or on occasion to an economic consultant. From these, the engineer desires, a concrete set of information relating to the relative cost of alternative inputs or the relative values of alternative outputs.

In many situations it will be discovered that the relative value of alternative inputs is strictly proportional to some physical characteristics.<sup>1/</sup> When the alternative inputs and outputs have values which are not stably related to physical characteristics but are influenced by sociological or psychological factors, however, they tend

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<sup>1/</sup> This might be a simple characteristic like weight or volume or a more complicated one involving highly skilled but conventional measurement procedures well known to those trained in the physical sciences. The relationship does not even have to be strict proportionality; almost any stable, known functional relationship will do.

When strict proportionality is the case the alternative inputs constitute a single commodity from the viewpoint of the economist, and the choice between them may properly be left to the engineer who is frequently trained to make the decision more accurately and more quickly and hence more cheaply in terms of real cost. A similar situation occurs when the value of alternative outputs is proportional to, or a known stable function of measurable physical characteristic. Then the engineer will choose that which uses the fewest inputs.

not to respond well to the engineering approach. In this case, the skills, training, and general background knowledge of the economist probably give him a comparative advantage over the engineer in determining these values. It is a characteristic of the technocrat (in the derogatory sense of the term) that he takes the simplest techniques of the engineer and applies them to a variety of social problems where they are technically not appropriate since they tend to ignore major important relationships which have crucial significance.

As indicated above, defining economics in these terms has a tendency to squeeze out certain groups of people and types of social science research. This is not done with malice but rather in an attempt to precisely define the field. Since words mean what we decide to have them mean, all definitions are arbitrary. The choice made here has been influenced by the conviction that economists as quantifiers of value have a major contribution to make in the general field of development planning.

This relatively restricted definition of economic planning has two main implications. On the one hand, it enables the society to use the economist in those roles for which he has the maximum comparative advantage. It also permits and encourages the economic planners to sharpen their tools. On the other hand, it forces recognition that governments can and do create plans using essentially non-economic techniques. Such plans and the plan organizations which produce them may then be properly dominated by people whose primary skills are in other

fields: the military, landed elites, or apprentice witch doctors. Even these practitioners could use economic planning; they would just be likely to adopt different methodology.

Furthermore, there are many areas in the social sciences in which economic planning and economic methodology simply are not productive, at least at the present state of knowledge. I infer from casual reading that social workers and people in the related disciplines have a principle that large amounts of LCA (loving care and affection) are effective in reducing delinquency and producing well adjusted people. It is likely that most people are against delinquency and for adjustment, and such an attitude can be properly incorporated in our broad social goals. The difficulty is that we do not know how to quantify either LCA or "adjustment" so as to fit them into economic plans. If and when such quantification becomes possible, the social adjustment factors are likely to be included within the scope of economic planning techniques. To the extent that important elements are not quantifiable, it follows that the economic planning techniques are less relevant for whatever task is at hand.

Thus the exclusion of the "institutionalists" in the definition of economics is neither vindictive nor disparaging; it is merely a by-product of an attempt to identify who is best qualified to do what. There is also the consolation that at the present stage of economics, the institutionalists and other social scientists are left with much to do.

#### IV. WHAT TO PLAN: VARIETIES OF LDC'S

Compared to the difficulties in distinguishing between different overall viewpoints and different professional orientations in the planning field, orderly classification of the less-developed countries, the object of development planning, seems simple. The relative concreteness of the material makes a more rigorous classification scheme possible. There also are empirical data which can affect, if they do not mechanistically control, the choices which must be made. When the large major problems are quickly resolved, more attention can be given to distinctions at the next level.

##### A. Disaggregating the World

In classifying the less-developed countries it is useful to know exactly what group of countries is meant. The approach used here is to disaggregate the world by identifying and removing from the set both the developed countries and countries in the Communist bloc. The remainder constitute the LDC's (less-developed countries).

At the end of 1963 there were 113 countries in the United Nations. This group will be used as a basic reference point and the important additions noted. In borderline cases the necessarily arbitrary decisions will be noted, but not justified.

There are about twenty non-Communist countries which can be called developed. Six of these - the U.S.A., Canada, Japan, Australia, New Zealand and South Africa, are outside Western Europe. The convention adopted here is to classify Spain, Portugal and Greece as less-developed, but to eliminate the rest of Western Europe, namely France, Italy, three Benelux countries,

four in Scandinavia, Great Britain, Ireland, Iceland and Austria. Since Switzerland and West Germany are not members of the United Nations this accounts for nineteen UN seats. Of the remaining 94 seats, eleven are Communist, three in the Soviet Union (USSR, Byelorussia, Ukraine), seven in Western Europe, and one (Mongolia) is in Asia. In addition, Communist countries outside the UN, East Germany, North Korea, North Viet-Nam and Mainland China,<sup>1/</sup> would also be eliminated from the total group.

These Communist countries can be eliminated from the total group under consideration, not necessarily because they are developed, but because many statistical measures for these countries are not available on a comparable basis, and it is desirable to hold the group of less-developed countries quite constant when comparing different questions. Furthermore, on questions of both causation and the appropriateness of policy, these countries are likely to deserve special consideration.

In addition to the 83 remaining UN members, there are several non-Communist LDC's which are not UN members. This is true of South Korea and S. Viet-Nam. It is also true of Mozambique, Angola, Northern Rhodesia (Zambia), Southern Rhodesia (Zimbabwe) and Nyasaland (Malawi) - none of which were independent as of December 1963. Adding these seven to the original eighty would produce a group of ninety countries, but this raises the question as to whether other colonial areas should not also be included as at least potential nations. Likely candidates would be Hong Kong, New Guinea and Aden, each with populations in excess of a million people. The United Nations

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<sup>1/</sup> See below, page 37, for discussion of China.

Committee on Colonial Countries and Peoples lists seven others with populations between a half million and one million each. Adding these ten would raise the total of the countries to 100. If the minimum were further reduced to two hundred thousand population, six additional areas would be added, raising it to 106.<sup>1/</sup>

The basic set of LDC's thus includes at least 83 countries. If it were assumed that the importance of each country were proportionate to its voting power in the UN each of 83 countries would have a "weight" of 1.2% and the other LDC's would be considered ignorable. As this rule of thumb were modified to be more inclusive, two aspects of an "equal importance" weighting pattern would stand out. First, it is not as uniquely clear cut, precise and stable as we might expect, and secondly regardless of where the boundary lines are drawn arbitrarily, under almost any reasonable interpretation each country will have an influence of 1% or likely a little more.

## B. Classifying Countries by Size

### 1. Methodology

It is obvious that, for most purposes, treating all LDC's as equals is not appropriate. Some of them are more important than others. The major difficulty is to settle on a measure of importance when the desired classification scheme is intended to be generally applicable. In this context the

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1/ Report of the Special Committee on the Situation with regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries Peoples, (mimeo), United Nations General Assembly, document number A/5446, New York, October 30, 1963.

word "importance" is used to denote the influence or weight given to each country's experience in defining general principles relating to less-developed countries. It is not necessary to imply a normative moral or political judgement.

Even without solving the problem of how importance should be measured considerable progress can be made as follows. Each attribute which may partially measure the relative importance of a country is standardized by expressing the country's "score" on that attribute as a percentage of the total "score" for all of the LDC's. Since practical economics, rather than theoretical considerations, limit the number and nature of the measured attributes, the importance of a country can be defined as a weighted average of the country's scores. Then a change in criteria corresponds to a change in the weights assigned to each attribute. Without deciding precisely how to measure importance, it is possible to say a good deal about the nature of reasonable weighting patterns and the limits on the results which follow from such patterns.

The work here has been based on population, area, gross domestic production, exports and imports. A sixth attribute measured is country-specific U.S. economic assistance authorizations for the three years 1960-1962.<sup>1/</sup>

The first step is to loosely define a "big country" and a "small country". A big country is one which receives its minimum influence in a one country one vote weighting pattern. As shown above, "equal" weighting gives each country approximately a 1% influence. It would therefore follow that a big

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<sup>1/</sup> For a discussion of how these attributes were measured and some detailed data see Appendix.

country accounts for more than 1% of the population, more than 1% of the area, more than 1% of the production, etc. The opposite of the big country is the small country which receives its maximum influence on a one country one vote basis. It accounts for less than 1% of the population, less than 1% of the area, less than 1% of the production, etc.

In addition to these two sets of countries there will be a group of medium-sized or "marginal" countries which would account for less than 1% of some measures and for more than 1% of others. As the nature of the combined weighting pattern becomes more and more restricted, fewer countries remain in a marginal classification as more countries are identified as essentially small or essentially large in nature.

## 2. Giants

Once the assumption that all countries are equally important has been rejected, one popular measure of relative importance would be population. The primary justification for population weights is probably a moral one based on the equality of men. However, a case can also be made, particularly if the measure is modified or adjusted, for using it as an index of manpower resources viewed as a form of economic wealth and power.

One of the major difficulties in using population weights is that it raises a specter of Mainland China. So far this question has been glossed over because Mainland China is not a recognized member of the UN, and the Communist bloc countries were eliminated by definition. Adding one more country, or even several of the European Communist bloc countries, would not substantially change the 1% weight assigned in the one country one vote case discussed in the preceding section. However, China, with a population of near seven hundred million, has about half as much population as all the

other less-developed countries combined (which have a population of fourteen hundred million). If the set of less-developed countries were expanded and measured solely by population, Mainland China would have approximately a 33% influence in defining a typical less-developed country, and China and India together would account for over 50%. Recognition of the inherent unacceptability of the resulting policy implications has doubtless discouraged the use of population weights. The problem has been bypassed here by defining China out of the set of non-communist less-developed countries.

Even when China is eliminated the situation is surprisingly similar. On the basis of population India would have a 32% weight, while Pakistan, Indonesia and Brazil, the three next largest countries, would together have 19%. Thus, these four countries together account for over 50% of the people in the 83 or 90 or 100 less-developed countries with which we are concerned.

Among the big countries which have been included, the outstanding one is obviously India. It accounts for 31.5% of the population, 16.5% of the production, 5.0% of the exports, 6.6% of the imports and 4.9% of the area. Thus except for the one country one vote case, any combination of these attributes would give India an influence of between 4.7% and 31.5%.<sup>1/</sup> The other outstanding big country is Brazil. It has the largest area, accounting for 12.7% of the total, and it ranks second to India in production, with 9.9%. Both exports and imports are 4.2% of their totals. In population, Brazil ranks fourth with 5.4%. The importance of India and Brazil combined, compared to all LDC's will range from 1/10 on the basis of exports or imports, to 1/6 of the area, 1/4 of the total production and over 1/3 of the population. Together they received almost 1/4 of U.S. Aid.

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<sup>1/</sup> The data for each country are given in the Appendix, Table A-1.

India and Brazil are the only two countries which have been classed as giants. Each is sufficiently important to warrant individual consideration in its own right. While it is possible that problems and solutions evolving from Indian and Brazilian experience will have more general relevance, smaller countries should not expect that to follow as a matter of course. One of the advantages of placing the giants in a special class is to get them out of the way. Thus the characteristics of the large non-giants become more discernible.

### 3. A Dozen Large Non-Giants

Following India and Brazil, nine countries qualify as big on all five attributes and three more qualify on all counts except area. These twelve countries can be grouped in several ways, depending on the desired emphasis. Each of them seems to have sufficient size to make a well balanced economy with a large degree of self-sufficiency possible, although autarky would not necessarily be desirable.

In Latin America, Mexico and Argentina easily qualify as big once the Brazilian shadow is removed. Colombia also qualifies, although its population is only 1.05% of the total.

In Asia, Indonesia and Pakistan are included. Each more populous than Brazil, they may eventually be considered giants. However, at this time, except for population, they seem more at home in the present group. Thailand and the Philippines though much smaller, also qualify except for area. Korea, a special case, is excluded and discussed below. <sup>1/</sup> Further west, Iran, Turkey

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1/ See below, page 50.

and the United Arab Republic are also included in this group. In South-Western Europe, Spain is included, though some might consider it developed, and whose area is too small to fully qualify. Finally, Nigeria falls in this group as necessarily as the rest of tropical Africa is excluded.

These twelve large non-giants constitute a remarkable group. In most cases the effect of removing any one of them causes about a 1/12 reduction in the group totals. In spite of obvious individual differences, the assumption of within-group equality of importance is a reasonable first approximation. The group itself forms a very important component of the total of all LDCs, accounting for over a third of the population and production, over 1/4 of the foreign trade (and of U.S. aid), and over 1/5th of the area.

Considering all 14 big countries, both the giants and the large non-giants, it is safe to say that about half of the less-developed world is accounted for. They include about 2/3 of the people and production, over 1/3 of the area and foreign trade, and absorbed just over 1/2 of U.S. economic assistance.

One of the interesting aspects of this type of analysis is to look at the residuals which are left after the big countries have been removed from the total. For example, the mirror image of these 14 countries is the group of well over seventy countries which are left. This mirror image group would contain slightly under 1/3 of the population, just 1/3 of the production, over 1/2 of the total area, and it would be responsible for 2/3 of the exports originating in the less-developed countries. This group, therefore, would appear to be relatively well off in non-human resources. In general, much less population pressure would be expected than in the big countries.

The differences between the big 14 and its mirror image group is so great that a real question might be raised as to the extent to which the same principles should be applied to both groups. Since the mirror image group is too large and too important to be ignored it is considered next.

#### 4. Half a Hundred Small Countries

The seventy plus countries in the mirror image group include both the small countries and the middle sized or marginal countries as defined above.<sup>1/</sup> Since a small country is one which fails to be "important" (account for over 1% of the total) on any of the attributes used, the small country group is essentially residual. It also follows that the exact composition of the group will change with changing decisions about what is relevant for classification.

In spite of the vagueness of its composition, the group as a whole possesses surprising stability. The analysis is carried on here in terms of the five specific attributes, but it seems reasonable to expect similar results if the number and type of attributes were changed. Because each of the countries is so small, what appears to be a major issue in classifying the margin cases actually may have an almost imperceptible effect on the group total.

The group of small countries collectively are quite important. They account for 1/6 of the area and foreign trade, and 1/8 of the total production. They tend to be less densely populated with about 1/10 of the population. As a group they received 1/7 of U.S. economic assistance. Thus as a group they surpass any single country on all criteria except one. The exception is India whose population exceeds that of all small countries combined.

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<sup>1/</sup> See page 37.

This raises the dilemma faced by all small countries. Viewed objectively each derives its significance solely from its membership in a group since alone it is negligible. If on some attribute it becomes really significant, this fact alone is likely to remove it from the "small country" class. Still, most of the group will "remain behind" and the group totals will be relatively little affected. It is this peculiar characteristic which makes it unnecessary to define exactly the limits to the less-developed world.<sup>1/</sup>

Once account has been taken of the major colonial areas, inclusion or exclusion of the smaller units has no significant effect on the total figures computed for the world or for major groups. The small ex-colony is significant primarily to those immediately involved.<sup>2/</sup> On the basis of the five attributes used here, there are 45 small countries plus up to 25 colonies. Tropical Africa is the largest source, followed closely by Central America and the Caribbean. The Mediterranean-Near East provides 8 small countries and the rest are scattered.

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1/ On the West Coast of Africa the British colony of Gambia provides an illustration. It could remain a colony, become an independent British Dominion, opt for complete independence, merge with Senegal or vanish into thin air. The choice between these alternatives may generate hours of diplomatic discussions and have vast symbolic significance on the world scene. The last alternative would at least be newsworthy. But none of these would appreciably affect the aggregate totals. Even judged entirely by its forte, peanut production, Gambia is a small country providing less than 1% of total production in the LDCs. cf: OEEC Oilseeds; October 1957, Paris, p.137.

2/ The small countries can be expected to resent this loss of individuality just as human beings do. This can create problems both in development policy as well as in official international relations. One approach to the smaller countries might involve pairing each of them with a small developed country or one of the 50 United States. From: Bruce Edwards: American Policy and Smaller Less Developed Countries. Mimeo paper in process. Other possibilities include the applications of varieties of individual and group psychology. In any case it is suggested that the lessons learned in India and Brazil may be almost completely irrelevant.

## 5. The Non-homogeneous Middle

The group of small countries was defined as a residual after the giants, large non-giants, and medium-sized or marginal countries had been removed. From a logical viewpoint the middle group has been skipped over. This is because its diversity suggests treating it last. Before getting into the details in the next section it might be useful to look at the group as a whole. It consists of 29 countries and 7 colonies each of which accounts for at least one percent of the LDC total on at least one but not all of the attributes. This selection procedure itself would bias the group towards a lack of uniformity. As we might expect, each country (or sub-group of countries) displays weaknesses and strengths.

The group as a whole includes 1/5 of the population and gross production and just under 1/2 of the area and foreign trade. It absorbs over 1/4 of U.S. economic assistance. Its component sub-groups are considered in the next section on classification by attributes.

### C. Classification of Countries by Attributes

The implicit assumption to this point has been that well over half of the less-developed world can be classified on a size basis, without quibbling over exactly how size is measured. At this point it is necessary to recognize that in classifying a substantial minority of these countries, some a priori judgement on the relevance of various attributes is essential. In this section the various attributes will be considered in turn. In each case brief consideration will be given initially to the use of that attribute in classifying the entire less-developed world. Then the focus will be narrowed and concentrated on the three dozen countries in the non-homogenous middle.

## 1. Regional Groupings

One of the most obvious ways of grouping countries is by taking those in close geographic proximity and combining them into regions. This practice is so widespread as to be almost automatic and some readers may have noticed that it has been largely avoided here. This de-emphasis of the regional classification has two explanations. The first is the feeling that a great deal of what can be learned by regional classification has already been discovered, has become common knowledge, and automatically enters our thinking at a relatively elementary stage. Thus, the de-emphasis is a tribute to all the work which has preceded over the years.

The second explanation stems from the belief that perhaps regional considerations have been over-emphasized. It may be not only relatively useless but also positively harmful to imply, perhaps unintentionally, that in comparing British Guiana with Brazil the first thing to be noted is that they are neighbors on the same land mass. The appropriate a priori assumption here may be that the other differences are so great that this particular similarity should not have to be ignored because there is no reason to note it in the first place.

Yet, for purposes of grouping the large number of small countries into more manageable bundles, regional bases are at least convenient and likely will prove to have stronger justification. Even in discussing the dozen large non-giants a sort of regional pattern was followed and it will prove to be helpful in dealing with the non-homogeneous middle. For convenience, the less-developed world will be divided into four regions. The first of these and the only one which is easy to define without borderline cases, is Latin America. This is simply all of the Western Hemisphere (including the

various islands) which is south of the border between Mexico and the United States.

The second region can be labeled Asia. It includes Iran, and everything east of Iran through the Islands in the Pacific. This region is a vast catchall and is useful only because regional factors seem to be less important here than in other regions. It is a viable concept primarily because Australia and Japan have been eliminated as developed countries, and because China, Siberia, and Mongolia were eliminated as Communist.

The third region can be called the Mediterranean - Near East. This is admittedly an awkward concept, and one without strong precedent. However, it has reasonable roots. In dividing Europe into the developed and underdeveloped countries, Portugal, Spain and Greece were left in the less-developed category. Greece in Europe and the United Arab Republic in Africa are frequently included in the Near East, although in some writings Greece as well as Turkey are considered European. In spite of the attempts to manufacture a Pan-African identity, the predominately Moslem countries on the Southern Shore of the Mediterranean Sea have strong historical connections both to Southern Europe and to the Near East. Finally, the whole concept of the Middle East or Near East has never fully crystallized as a clearly delineated acceptation. The Arabian Peninsula is clearly in the region, while Iran, which has been placed in the Asian group here, is clearly the bridge between Asia and the Mediterranean-Near East. The most difficult marginal countries are the Sudan, Ethiopia, and Somalia on the horn of Africa. With considerable reservation these have all been placed

in the last group discussed below.<sup>1/</sup>

The fourth and final region can be labeled Tropical Africa. It includes the entire continent of Africa and its immediately neighboring islands with the exception of the North African countries on the Mediterranean shore and the Union of South Africa.

It is of some interest to note the relative importance of these four regions when they are compared on a gross basis using the attributes measured here. Perhaps Latin America shows the most consistent pattern. It accounts for approximately 1/3 of the area, of the gross production, and of the exports; over 1/4 of the imports, and about 1/6 of the population. It absorbs about 1/6 of U.S. economic assistance. In contrast, Tropical Africa which also has about 1/3 of the area, accounts for about 1/6 of the exports and imports; but only 1/10 of the production and population. It absorbs about 1/10 of U.S. economic assistance. The countries in the Mediterranean - Near East Region, which embrace Near Eastern oil, account for about 1/4 of the exports and imports. The production figures (which may not fully reflect oil production) account for about 1/5 of the LDC total. These countries - with 1/6 of the area - have only 1/10 of the population. They receive about 1/6 of U.S. economic assistance. Finally, in Asia,

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<sup>1/</sup> On the problem of geographical regions of the Mediterranean area see G. Edsal Percy, Geographer of the Department of State, The Middle East an Undefinable Region, Department of State Publications, 7684, U.S. Government Printing Office, June, 1964.

The UN 1963 yearbook of National Account Statistics places Turkey in Asia (e.g. see Table 3B, page 329).

The 1964-65 Supplement to International Financial Statistics published by the IMF places Turkey in Other Western Europe. (See "Trade", page xiv).

sixty percent of the population of the LDC's live on  $1/6$  of the land. Asian LDC's produce over  $1/3$  of the production, and they account for over  $1/3$  of the exports and imports. They absorb about  $1/2$  of U.S. economic assistance.

Except for the apparent population pressure in Asia, these figures do not exhibit particularly strong or interesting patterns. What patterns there are seem to arise as accidents of the regional classification. Any region which includes India will seem to have population pressures and any region with wealthy oil Sheikdoms will appear to have important foreign trade. However, it is very unlikely that the other countries also grouped into these regional classifications will automatically have the same attributes possessed by the countries which dominated the regional figures. It is for this reason that the regional dimension has been subordinated to a function of sub-classifying group of countries which have other attributes in common, rather than being given a fundamental place in the overall classification scheme. It will develop that the countries in the non-homogeneous middle which have common attributes tend to fall in certain regions rather than the other way around.

## 2. Foreign Trade

The importance of a country in foreign trade can be measured here in two different but somewhat intradependent ways. The exports of a country tend to show the contribution to total world output made by the country. In the case of the LDC's this is very likely to be as a supplier of raw materials. Export figures and gross domestic production figures can be expected to show somewhat similar patterns, although in a very large country a larger

proportion of gross domestic product (GDP) might be domestically absorbed.

The import figures, on the other hand, say something about the country as a market for world output. These will be partially influenced by the level of domestic income within the country. However, they can also be strongly influenced by such factors as the willingness of foreigners to invest, or massive inflows of military aid. It is the last factor which resulted in excluding Korea from the large non-giants and placing it in the middle sized group. The import figures have the advantage nevertheless that they are not influenced by the availability of large quantities of mineral resources which can be extracted from a piece of territory with relatively little impact on the people living in the surrounding vicinity. It is this undesirable feature of raw export figures which makes their use tricky when comparisons of levels of economic development are being made.

Casual inspection of the three dozen middle sized countries showed a strong tendency for the figures on gross domestic production, exports, and imports, to move more or less together. All countries which account for over one percent of production are also over one percent on either exports or imports and usually on both. In many cases, however, a country tends to be important in terms of foreign trade (i.e. it accounts for over 1% of exports and/or imports) but has less than 1% of the GDP. It seemed most logical, therefore, to form a class based on importance in some aspects of foreign trade, and then to sub-divide the class regionally. This would give regional groups of countries which had become in some sense financially important, with either a small population or a small area as a base. These regional sub-groupings include about half of the countries in the medium-sized group.

In Latin America both Venezuela and Chile would qualify as large non-giants, on all scores except for their low population. Peru's GDP is only .9% and Cuba's small area is a drawback and, in addition, they both have small populations. The Netherlands Antilles is essentially an economic outpost of the Venezuelan oilfields. This is also true to a lesser extent of Trinidad and Tobago, which combines oil processing with an entrepot business to become important in foreign trade, being otherwise almost negligible.

In the Mediterranean - Near East Region a similar pattern is to some extent evident. Portugal, Greece, Algeria and Morocco show relatively well balanced middle-sized economies based on relatively small population. Saudi Arabia, Kuwait and Iraq, based on oil, and Israel, based on guts, money and history, have become important in foreign trade, although otherwise small. The large desert areas controlled by Algeria and Saudi Arabia show up in the statistics but are otherwise largely irrelevant.

In addition to the six countries in Latin America and the eight in the Mediterranean and the Near East there are four other important foreign trade countries. Those are all located in Asia, namely, Malaysia, Hong Kong, Ceylon, and Taiwan.

These 18 countries account for 44% of the exports originating in the lesser developed countries, 37% of the imports going into the less-developed countries, 1/6 of the production, 1/8 of the area (most of it rather useless), and less than 1/10 of the population. Together they absorb about one sixth of U.S. economic assistance. For any foreign trade problem the 14 big countries should also be included, although their role based on this attribute will be considerably different than if the problem is essentially based on considerations of production, population or area.

### 3. Population

In any common sense definition of size the idea of measuring importance by the number of people involved keeps recurring either explicitly or as a side effect implicit in some other suggestion. In identifying the 14 big countries, a larger percentage of the population was accounted for than was true of any of the other attributes. The existence of the foreign trade type medium-sized countries is a rediscovery of the fact that sometimes something besides people has importance. Complementing these there is a group of 5 countries within the non-homogeneous middle whose main characteristic is the relatively small contribution made to production, exports and imports by a relatively large number of people. These five countries are not closely grouped in any single region. Central Africa includes the oldest of these, Ethiopia and the youngest, the Congo (Leopoldville). In addition to 15 to 20 million people, both encompass sizeable expanses of area. Similar statements apply to Burma in Asia. The fourth and fifth countries in this sub-class are South Vietnam which barely escapes being labeled small, and South Korea which almost qualifies as a large non-giant. Both of the last two are quite small in area, however.

South Korea is an interesting country, and probably for this reason, difficult to classify. Like South Vietnam and several other countries, it has considerable strategic military importance. It is difficult to guess how this may have warped the economy and the resulting statistics without engaging in a detailed case study. In population it ranks 11th or 12th, like the UAR having about 26 million people. South Korea's area is quite small and its production of exports is also disappointing. It accounts for 1.45% of the total LDC production and 1.56% of total LDC imports, but only

.26% of the exports. Between 1960 and 1962 it absorbed 6.1% of U.S. country-specific economic aid. We hypothesize that the high level of aid has been a major cause of the strong showing in imports, and that this in turn had pulled up the production figure. Rather than ignoring the very poor showing in area and exports and classifying the country among the large non-giants, it seemed wiser to assume that it belonged to the non-homogeneous medium-size countries - too small to be considered major but too large to be ignored. Within this group, its major claim to importance is large population.

It is somewhat difficult to keep a proper perspective with regard to the five populous medium-size countries. As a group they account for about 1/15 of the population and area in the LDC - a (barely) significant minor fraction. On the other variables (production, exports, and imports) they total less than a 4% influence. They account for about 1/12 of the U.S. economic assistance, although this seems to be closely connected to the military-strategic importance of South Vietnam and South Korea.

#### 4. Area

Each of the remaining 13 countries in the medium-size group would fall into the small country classification except for the fact that it controls within its boundaries (about 275,000 sq.miles) over one percent of the total area in the LDC's. Of these 13 countries Bolivia is in the middle of South America. The other 12 are on the African continent although rigorous adherence to the regional classification would put Libya in the Mediterranean-Near East region. Six of the 12 (Libya, Sudan, Chad, Niger, Mali, and Mauritania) include wide expanses of the Sahara. The other six are in Africa south of the Equator. Southwest Africa and Bechuanaland also include large

expanses of desert and are still in colonial status. Tanganyika and Zambia (formerly Northern Rhodesia) are newly independent. The status of Angola and Mozambique, currently under Portuguese administration, is likely to remain somewhat fluid for the foreseeable future.

These 13 countries account for about 23.5% of the area in the LDC's, but for the most part they are otherwise rather insignificant. One is tempted to ignore area altogether and to group these thirteen with the other small countries. Unfortunately, this might do considerable damage to the concept of the small country as a useful classification. Thus the idea of an area class almost amounts to a place to put this type of country so as to get them out of the way. A classification based solely on area would include 5 of the 18 foreign trade countries, 3 of the 5 in the population sub-class. With the area sub-class used in the present study, this would be 21 of the 36 in the medium-size class. Only 11 of the 14 big countries would qualify for an over-all total of 32. It might be noted that the gross area to be explored is not completely unimportant when an aggregative approach is taken to the question of finding mineral resources.

In reviewing the non-homogeneous middle sub-classes it is apparent that they almost, but not quite, follow regional lines. The Area sub-class is almost completely African. In the interest of simplifying the classifications Libya can be moved off of the Mediterranean shore into Tropical Africa. The major problem, Bolivia, can be solved in either of two ways. "Geography" can be violated by moving it also into Tropical Africa, or the major classification scheme can be violated by considering it a small Latin American country. The second alternative is probably comparable to the first in stretching geography but less obviously so. The typical small Latin American country is north of the equator - also a considerable distance from Bolivia on the globe.

Thus the area classification becomes African and nicely complements the Latin American, Asian, and Near East-Mediterranean foreign trade sub-classes. It seems useful to allow the population sub-class to continue to straddle both the African and Asian continents since to divide it in half would create groups each too small to warrant a separate existence.

#### D. Review and Summary of Country Classification

The task undertaken was dividing the less-developed countries in the non-Communist part of the world into a set of major classes and minor sub-classes which will have general relevance in attacking the problem of planning economic development. Since there is little agreement on the nature of the most important development planning problems, this is a difficult and, to some extent, poorly defined task. With any single precisely defined concept of the major problem, it should be possible to construct a unique classification which is superior for solving the particular problem under consideration. The difficulty that would arise is that the slightest redefinition of the problem would lead to different classifications. Research results formulated in different conceptual frameworks would become increasingly difficult to compare and integrate. The hope is that a general classification scheme can give a "good fit" in the sense of being useable for a wide range of types of research, without being necessarily ideal from the standpoint of any one. Such a common framework will yield returns in the long run in the integration of different research efforts rather than by making a major contribution to any single research project. As a side effect the attempt at classification might turn up insights which happen to prove immediately useful.

The primary classification was based on a vague concept of size, loosely defined in a variety of ways. A secondary sub-classification was then made largely on the basis of strongest attributes and regional locations. It is readily apparent that the same sub-classes, with relatively minor modifications, could be re-organized so that the major classification was regional and the size and other attributes were used for sub-classification within the regions. The choice between these two alternatives is in the last analysis a matter of preference or subjective judgment as to the relative reasonableness and usefulness of the two procedures.<sup>1/</sup>

Primary classification on the basis of regions would have two major drawbacks, one at each end of a scale. On the one hand, distributing the small countries among a number of regions makes it easier to ignore their collective importance, in terms of the percentage of the various measured attributes which they are responsible for. On the other hand, if all countries were treated as equals (essentially an unweighted approach) the various small countries would tend to dominate the regional results.

At the other end of the scale when generalizations are attempted with respect to entire regions, countries in the important large non-giant and medium-size classifications may be completely swamped by one of the giants.

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<sup>1/</sup> To aid in making this type of comparison tables A2 through A8 in the appendix have been constructed on a cross classified basis. Each table is based on a single attribute which has been previously discussed. The row totals and sub-totals classify the countries into the major groups based on size and the column totals classify the countries into the regional groups. Both groupings follow the definitions used in this paper.

Intricate weighting schemes which might be theoretically desirable are very unlikely to be adopted in practice, and regionally oriented research plans are likely to be based on gross regional totals or on implicit one-country-one-vote weighting schemes. It may be that after extensive research has been completed differentiation by size will prove to have been neither necessary nor even very useful. It seems wiser, therefore, to treat the present concept as an untested hypothesis rather than as an axiom to be uncritically accepted on a priori grounds.

## APPENDIX

### The Measured Attributes

As is so often the case in the social sciences, the main argument depends on a combination of empirical data, logical consistency requirements, and intuitive reasonableness. Although a structure has been built on some available statistical data, the major position, offered without proof, is the assertion that most other structures of the same general type will either produce nearly identical conclusions or will be judged to be less responsible by informed observers using "non-quantified" intuitive standards. This appendix gives the concrete details of how the particular example used in the text was created.

As indicated, six sets of data were constructed, one each for population, area, gross domestic production, exports, imports, and aid. Each set included an entry for as many of the LDC's as possible (all the major countries and most of the minor ones) and a figure assumed to represent an aggregate value for all of the non-Communist bloc less-developed world. In theory, with perfect information these aggregates would be found by summing the component country figures. To suggest this actually happened in practice would assume and imply a degree of precision which was neither relevant to policy nor related to reality.

Each series was standardized by expressing each entry in it as a percentage of the assumed aggregate figure. These percentage figures are given in table A-1 at the end of the appendix. Since the raw aggregates for each attribute are also given any of the original entries can be re-constructed. This, plus the desire to reduce the accumulation of roundoff errors account for the number of digits carried. Apologies are offered for the insinuated exactness.

### Population

The basic series used was the 1961 mid-year population estimates from the United Nations. These were supplemented from a variety of sources, always with an aim to getting a mid-1961 estimate rather than the most recent estimate. A group of 90 countries was constructed by adding South Korea, South Vietnam, Angola, Mozambique, Northern Rhodesia, Southern Rhodesia and Nyasaland to the 83 LDC's which were in the UN in December 1963. The mid-1961 population estimates for these 90 countries total 1,401,502,000 and this figure was used as a population aggregate for deriving the percentages. There have doubtless been further revisions in the estimates, more recent figures are available for most countries, and the total has changed as "colonial" areas were included or excluded. Such up-dating was deemed to be rather unimportant as relative percentage figures would probably change little.

### Area

One seeming advantage of an attribute like area is that it should remain stable over time. Even so, the distinctions made by geographers make precise simple answers difficult to arrive at. The basic source used was Hammonds Ambassador World Atlas, 1962 edition pp. 6-8. Where this seemed vague or inconsistent other sources were referred to. A two prong attack was made by adding together the areas of the less-developed world and by subtracting the polar regions, communist countries and developed countries from the global total of 57,500,000 square miles. The figure finally used for the aggregate area of the less-developed world was 25,751,000 square miles.

### Gross Domestic Production

The basic Gross Domestic Production figures were for 1958 as given in the 1962 Yearbook of National Income Statistics, pp. 314-317. The shortcomings in using U.S. dollar measures of Gross Domestic Product for inter-country comparisons are notorious. Nevertheless, they give some indication of currently available economic resources. A more serious matter is that failure to have a high GDP is strong evidence of under-developed status. There is something anomalous about measuring the importance of less-developed countries by their achievement of development.

As was the case with population, the aggregate figure was based on a 90 country total. It amounted to U.S.\$167,784 million.

### Exports and Imports

The two series for Exports and Imports were based on the 1963 figures for World Trade Value in Millions of U.S. dollars as given in International Financial Statistics Volume XVII No. 7 for July 1964. The figures for Greece, Portugal, Spain, and Turkey were added to the IMF "Less Developed Countries" class to make the trade figures compatible with the others used in this paper. This gave aggregate LDC figures of US\$33,211 million for Exports and US\$35,902 million for Imports. Revision as later figures became available was not deemed worthwhile.

### Aid

The U.S. Aid figures were based on data in U.S. Foreign Assistance and Assistance from International Organizations: Obligation and Loan Authorizations July 1, 1945 - June 30, 1962, Revised by the Agency for International Development Statistics and Reports Division, April 24, 1963.

The series used can be called 1960-1962 Country-specific U.S. Economic Aid. For this series the aid to each LDC was the sum of Total Economic Aid for 1960, 1961, and 1962 as given on pages 9-130. When these figures for 90 LDC's were added together the total was US\$10,968.5 million which was used as the aggregate (= 100.00%).

The total economic aid for the three years computed from page 1 was U.S.\$12,371.2. When this figure is adjusted for aid given on a regional or non-regional basis and aid to countries here labeled as developed or communist, the figure is reduced to U.S.\$11,082.5 million (101.04% of the base). The difference of 1.04% presumably would be explained by taking full account of aid to smaller countries, etc. (e.g. Surinam on page 53).

#### Cross Classified Tables

Tables A-2 through A-8 have been constructed on a cross classified basis, one table for each attribute. The definitions of the concepts follow those developed in this paper. In each case the row headings follow the major classification scheme based on size and the column headings represent the four regions as defined. In some cases the basic sub-classifications included more than one region. For this reason the sub-class sub-total has been added, and the sub-total then has been disaggregated across the relevant regions with the figures placed in parenthesis. This format also made it possible to generate an intermediate sub-total for the three foreign trade sub-classifications within the medium sized major class. This figure has been entered in parenthesis in the sub-class sub-total column in the foreign trade row. In order to make the entries in the table sum properly the redundancy must be removed either by ignoring all entries in the sub-class sub-total column or by ignoring all entries in parenthesis. The figures in the final line in Tables A-6 and A-7 were computed by modifying the over-all regional estimates given in the original source.

Table A-1

BASIC DATA EXPRESSED AS A PERCENTAGE OF LDC TOTALS

(See text for explanations of concepts)

Class & Sub-Class (1)	Country (2)	Attributes					
		Population (3)	Area (4)	Gross Domestic Product (5)	Exports (6)	Imports (7)	U.S. AID (8)
<b>1. <u>Giants</u></b>							
A. Latin America	BRAZIL	5.38	12.74	9.89	4.23	4.14	4.80
B. Asia	INDIA	31.55	4.89	16.45	4.96	6.56	20.07
<b>Total</b>		<u>36.93</u>	<u>17.63</u>	<u>26.34</u>	<u>9.19</u>	<u>10.70</u>	<u>24.87</u>
<b>2. <u>Large Non-Giants</u></b>							
A. Latin America	MEXICO	2.65	2.95	5.01	2.92	3.45	2.01
	ARGENTINA	1.50	4.21	5.48	4.11	2.73	1.35
	COLOMBIA	<u>1.05</u>	<u>1.71</u>	<u>2.43</u>	<u>1.34</u>	<u>1.30</u>	<u>1.73</u>
<b>Sub-Total</b>		(5.20)	(8.87)	(12.92)	(8.37)	(7.48)	(5.09)
B. East Asia	INDONESIA	6.82	2.85	3.67	2.10	1.43	1.68
	PAKISTAN	6.88	1.42	2.84	1.26	2.48	8.00
	IRAN	1.47	2.43	1.98	2.64	1.49	2.00
	THAILAND	2.00	.77	1.12	1.41	1.66	.89
	PHILIPPINES	<u>2.12</u>	<u>.44</u>	<u>2.99</u>	<u>2.19</u>	<u>2.03</u>	<u>1.45</u>
<b>Sub-Total</b>		(19.29)	(7.91)	(12.60)	(9.60)	(9.09)	(14.02)

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
<b>2. Large Non-Giants (continued)</b>							
<b>C. Mediterranean, Near East and Africa</b>	TURKEY	2.10	1.17	3.14	1.11	1.92	4.87
	UAR (EGYPT)	1.90	1.78	1.71	1.57	2.53	3.86
	SPAIN	2.19	.75	5.73	2.22	5.45	2.75
	NIGERIA	<u>2.60</u>	<u>1.39</u>	<u>1.63</u>	<u>1.53</u>	<u>1.61</u>	<u>.37</u>
<b>Sub-Total</b>		<b>(8.79)</b>	<b>(5.09)</b>	<b>(12.21)</b>	<b>(6.43)</b>	<b>(11.51)</b>	<b>(11.85)</b>
<b>Total</b>		<b>33.28</b>	<b>21.87</b>	<b>37.73</b>	<b>24.40</b>	<b>28.08</b>	<b>30.96</b>
<b>3. Non Homogeneous Medium-Size</b>							
<b>A. Latin America (Foreign Trade)</b>	CUBA	.50	.17	1.47	1.64	2.41	.01
	CHILE	.57	1.11	1.53	1.63	1.77	3.59
	PERU	.74	2.00	.90	1.63	1.55	1.46
	VENEZUELA	.56	1.37	2.93	7.92	2.68	1.83
	NETH.ANTILLES	.01	+	+	1.98	2.34	.02
	TRINIDAD & TOBAGO	<u>.06</u>	<u>.01</u>	<u>.24</u>	<u>1.12</u>	<u>1.04</u>	<u>.18</u>
<b>Sub-Total</b>		<b>(2.44)</b>	<b>(4.66)</b>	<b>(7.07)</b>	<b>(15.92)</b>	<b>(11.79)</b>	<b>(7.09)</b>
<b>B. Asia (Foreign Trade)</b>	TAIWAN	.81	.05	.67	.99	1.00	2.83
	HONG KONG	.29	+	.44	2.63	3.61	.12
	MALAYSIA	.71	.49	1.37	6.72	6.28	.02
	CEYLON	<u>.72</u>	<u>.10</u>	<u>.68</u>	<u>1.09</u>	<u>.88</u>	<u>.22</u>
<b>Sub-Total</b>		<b>(2.53)</b>	<b>(.64)</b>	<b>(3.16)</b>	<b>(10.53)</b>	<b>(11.77)</b>	<b>(3.19)</b>

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
3. <u>Non Homogeneous</u> <u>Medium-Size (contd.)</u>							
C. Mediterranean- Near East (Foreign Trade)	PORTUGAL	.66	.14	1.13	1.26	1.82	.76
	MOROCCO	.85	.66	1.04	1.16	1.23	2.17
	ALGERIA	.79	3.56	1.36	2.71	3.36	.12
	GREECE	.60	.20	1.49	.87	2.23	1.45
	ISRAEL	.16	.03	.69	1.05	1.88	2.03
	IRAQ	.52	.67	.75	2.35	.89	.03
	S. ARABIA	.32	2.33	.62	3.46	.90	—
	KUWAIT	.02	.03	+	3.58	.90	—
		<u>.02</u>	<u>.03</u>	<u>+</u>	<u>3.58</u>	<u>.90</u>	<u>—</u>
Sub-Total		(3.92)	(7.92)	(7.08)	(16.44)	(13.21)	(6.56)
D. Area: (L.A.) (Africa)	BOLIVIA	.25	1.65	.21	.18	.29	.74
	CHAD	.19	1.77	.11	—	—	+
	MALI	.29	2.27	.26	—	—	.05
	LIBYA	.09	2.64	.09	1.14	.67	.62
	MAURITANIA	.05	1.63	.04	—	—	+
	NIGER	.20	1.95	.10	—	—	.03
	SUDAN	.88	3.76	.55	.68	.78	.30
	TANGANYIKA	.68	1.41	.28	.54	.31	.16
	ANGOLA	.33	1.87	.24	.50	.41	—
	BECHUANALAND	.02	1.07	—	—	—	—
	MOZAMBIQUE	.46	1.16	.25	.30	.40	—
	N. RHODESIA	.18	1.11	.30	—	—	.01
	S.W. AFRICA	.04	1.23	.15	—	—	—
		<u>.04</u>	<u>1.23</u>	<u>.15</u>	<u>—</u>	<u>—</u>	<u>—</u>
Sub-Total		(3.66)	(23.52)	(2.53)	(3.34)	(2.86)	(1.92)

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
<b>3. Non Homogeneous Medium-Size (contd.)</b>							
<b>E. Population:</b>							
- Africa:	CONGO	1.06	3.50	.70	.90	.50	1.45
	ETHIOPIA	1.54	1.77	.48	.28	.31	.62
- Far East:	BURMA	1.59	1.02	.61	.81	.65	.00
	KOREA	1.86	.14	1.45	.26	1.56	6.10
	VIETNAM	<u>1.04</u>	<u>.25</u>	<u>.68</u>	<u>.23</u>	<u>.80</u>	<u>4.27</u>
<b>Sub-Total</b>		<b>(7.09)</b>	<b>(6.68)</b>	<b>(3.92)</b>	<b>(2.48)</b>	<b>(3.82)</b>	<b>(12.44)</b>
<b>Total</b>		<b>19.64</b>	<b>43.42</b>	<b>23.79</b>	<b>49.61</b>	<b>43.45</b>	<b>31.20</b>
<b>4. Small Countries</b>							
<b>A. Latin America</b>							
	COSTA RICA	.09	.07	.22	.28	.35	.28
	DOMINICAN REP.	.23	.07	.36	.52	.48	.34
	ECUADOR	.33	.45	.43	.50	—	.53
	EL SALVADOR	.18	.03	.28	.46	.42	.28
	GUATEMALA	.28	.18	.37	.46	.46	.49
	HAITI	.31	.04	.20	.12	.10	.29
	HONDURAS	.14	.17	.21	.25	.26	.11
	JAMAICA	.12	.02	.41	.61	.63	.04
	NICARAGUA	.11	.22	.18	.30	.31	.34
	PANAMA	.08	.11	.24	.17	.48	.39
	PARAGUAY	.13	.58	.13	.12	.11	.21
	URUGUAY	.20	.28	.74	.50	.49	.30
	BARBADOS	.02	.03	—	.12	.16	—
	BR. GULANA	.04	.35	.07	—	—	.02

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
4. <u>Small Countries</u> (contd.)							
A. Latin America	BR. HONDURAS	.01	.03	—	—	—	.01
	FR. GULANA	+	.14	—	—	—	—
	GRENADA	+	.03	—	—	—	—
	GUADELOUPE	.02	.03	—	.11	.19	—
	MARTINIQUE	.02	.03	—	.11	.21	—
	SURINAM	.02	.21	.05	—	.16	—
Sub-Total		(2.33)	(3.07)	(3.89)	(4.63)	(4.81)	(3.64)
B. Asia	AFGHANISTAN	.92	.97	.42	—	—	.82
	BRUNEI	.01	.01	—	—	—	—
	CAMBODIA	.41	.27	.24	.27	.30	.70
	FIJI ISLAND	.03	.03	—	—	—	—
	FR. POLYNESIA	—	—	—	—	—	—
	LAOS	.13	.35	.08	—	—	—
	NEPAL	.67	.21	.27	—	—	.91
	NEW CALEDONIA	+	.03	—	—	—	.25
	NEW GUINEA	.10	.36	.04	—	—	—
	RYUKYU ISLAND	.06	+	.09	—	—	—
	PORT. TIMOR	.03	.03	—	—	—	—
	PAPUA	.03	.35	.01	—	—	—
	TONGA	+	+	—	—	—	—
	WESTERN SAMOA	.01	+	—	—	—	—
Sub-Total		(2.40)	(2.61)	(1.15)	(.27)	(.30)	(2.68)

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
4. <u>Small Countries</u> (contd.)							
C. Mediterranean- Near East	CYPRUS	.04	.01	.14	.19	.37	.15
	JORDAN	.12	.14	.12	.05	.40	1.50
	LEBANON	.12	.01	.26	—	—	.07
	SYRIA	.35	.28	.38	.57	.64	.85
	TUNISIA	.30	.19	.35	.38	.62	1.98
	YEMEN	.24	.29	—	—	—	.16
	ADEN	.08	.43	.04	—	—	—
	BAHRAIN	.01	+	—	—	—	—
	GIBRALTAR	+	+	—	—	—	—
	MALTA & GOZO	.02	+	—	—	—	—
	QATAR	+	.02	—	—	—	—
Sub-Total		(1.28)	(1.37)	(1.29)	(1.19)	(2.03)	(4.69)
D. Africa	BURUNDI	.16	.04	.07	—	—	.05
	CAMEROON	.29	.69	.27	.36	.30	.14
	CENTRAL AFR. REP.	.09	.93	.08	—	—	+
	CONGO (BRAZZAVILLE)	.06	.68	.09	—	—	.01
	DAHOMEY	.15	.17	.07	—	—	.05
	GABON	.03	.35	.05	—	—	+
	GHANA	.50	.36	.77	.82	1.02	1.40
	GUINEA	.21	.38	.19	—	—	.11
	IVORY COAST	.24	.71	.37	.69	.47	.04
	KENYA	.52	.85	.41	.43	.57	.12
	LIBERIA	.09	.17	.09	—	—	.60
	MADAGASCAR	.40	.94	.36	.25	.36	—
	RWANDA	.19	.04	.08	—	—	.01

Table A-1 (continued)

Class & Sub-Class (1)	Country (2)	Population (3)	Area (4)	GDP (5)	Exports (6)	Imports (7)	U.S. AID (8)
4. <u>Small Countries</u> (contd.)							
D. Africa	SENEGAL	.21	.30	.25	.33	.43	.06
	SIERRA LEONE	.15	.11	.09	.24	.23	.03
	SOMALIA	.14	1.02	.06	—	—	.20
	TOGO	.11	.08	.07	—	—	.05
	UGANDA	.49	.31	.25	.46	.24	.04
	UPPER VOLTA	.31	.41	.10	—	—	.03
	ZANZIBAR & PEMBA	.02	+	.02	—	—	—
	NYASALAND	.21	.14	.07	—	—	+
	BASUTOLAND	.05	.05	—	—	—	—
	FR. SOMALILAND	+	.03	—	—	—	—
	GAMBIA	.02	.02	—	—	—	—
	MAURITIUS	.05	+	.08	.25	.19	—
	PORT. GUINEA	.04	.05	.02	—	—	—
	REUNION	.03	+	—	.11	.19	—
	S. RHODESIA	.22	.08	.39	—	—	.02
	SWAZILAND	.02	.03	—	—	—	—
Sub-Total		(5.00)	(8.94)	(4.30)	(3.94)	(4.00)	(2.96)
Total		11.01	15.99	10.63	10.03	11.14	13.97
Grand Total		100.86	98.91	98.49	93.23	93.37	101.00
Difference caused by use of approximate aggregates and non-availability of data		-.86	+1.09	+1.51	+6.77	+6.63	-1.00

Table A-2

## Number of Countries in Selected LDC Classes

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	1	1	-	-	-	2
2	Large Non Giants	3	5	(3)	(1)	4	12
3	Medium Size (Foreign Trade)	6	4	8	-	(18)	36
	3d (Area) { UN Members	(1)	-	-	(7)	8	
	{ Others	-	-	-	(5)	5	
	3e (Population) (*)	-	(3)	-	(2)	5	
4	Small Countries { UN Members	12	4	6	20	(42)	72
	{ Others	6	10	5	9	(30)	
Regional Totals		33	25	19	43	-	122

\*) UN membership as of January 1, 1964. Since then, Tanganyika and Zanzibar have merged, Malawi and Zambia have gained independence.

\*\*\*) 4a and 4b include 4 countries not among the 83 UN Members.

Table A-3 POPULATION

## Distribution of Population by Percentage of LDC Total

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	5.38	31.55	-	-	-	36.93
2	Large Non Giants	5.20	19.29	(6.19)	(2.60)	8.79	33.28
3	Medium Size (Foreign Trade)	2.44	2.53	3.92	-	(8.89)	19.66
	3d (Area)	(.25)	-	-	(3.41)	3.66	
	3e (Population)	-	(4.49)	-	(2.60)	7.09	
4	Small Countries	2.50	2.52	1.26	3.99	-	10.27
Regional Totals		15.77	60.38	11.37	12.48	-	100.00

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Table A-4: AREA

Distribution of Area by Percentage of LDC Total

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	12.74	4.89	-	-	-	17.63
2	Large Non Giants	8.87	7.91	(3.70)	(1.39)	5.09	21.87
3	Medium Size (Foreign Trade)	4.66	.64	7.92	-	(13.22)	43.41
	3d (Area)	(1.65)	-	-	(21.86)	23.51	
	3e (Population)	-	(1.41)	-	(5.27)	6.68	
4	Small Countries	2.90	2.60	1.37	10.22	-	17.09
Regional Totals		30.82	17.45	12.99	38.74	-	100.00

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Table A-5: GDP

## Distribution of Gross Domestic Product by Percentage of LDC Total

	Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
	A	B	C	D		
1 Giants	9.89	16.45	-	-	-	26.34
2 Large Non Giants	12.92	12.60	(10.58)	(1.63)	12.21	37.73
3 Medium Size (Foreign Trade)	7.07	3.16	7.08	-	(17.31)	22.67
3d (Area)	(.21)	-	-	(1.23)	1.44	
3e (Population)	-	(2.74)	-	(1.18)	3.92	
4 Small Countries	4.82	1.02	1.29	6.13	-	13.26
Regional Totals	34.91	35.97	18.95	10.17	-	100.00

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Table A-6: EXPORTS

Distribution of Exports by Percentage of LDC Total

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	4.23	4.96	-	-	-	9.19
2	Large Non Giants	8.37	9.60	(4.90)	(1.53)	6.43	24.40
3	Medium Size (Foreign Trade)	15.92	11.43	16.44	-	(43.79)	49.61 * A-16
	3d (Area)	.18	-	-	3.16 *	3.34 *	
	3e (Population)	-	(1.30)	-	(1.18)	2.48	
4	Small Countries	4.63	.27*	1.19*	3.94*	-	10.03*
Regional Totals		33.33	27.56	22.53	9.81	-	93.23 *
Regional Estimates from Underlying Data		32.46	27.81	26.14	13.59	-	100.00

\* Underestimates because of non-availability of basic country-specific data.

Table A-7: IMPORTS

## Distribution of Imports by Percentage of LDC Total

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	4.14	6.56	-	-	-	10.70
2	Large Non Giants	7.48	9.09	(9.90)	(1.61)	11.51	28.08
3	Medium Size (Foreign Trade)	11.79	11.77	13.21	-	(36.77)	43.45* A-17
	3d (Area)	(.29)	-	-	(2.57)*	2.86*	
	3e (Population)	-	(3.01)	-	(.81)	3.82	
4	Small Countries	4.81	.30*	2.03*	4.00*	-	11.14*
Regional Totals		28.51	30.73	25.14	8.99	-	93.37*
Regional Estimates from Underlying Data		27.58	33.24	27.05	12.12	-	99.99

\* Underestimates because of non-availability of basic country-specific data.

Table A-8: AID

## Distribution of Country-Specific AID by Percentage of LDC Totals

		Latin America	Asia	Mediterranean - Near East	Tropical Africa	Sub-Class Sub-Totals	Class Totals
		A	B	C	D		
1	Giants	4.80	20.07	-	-	-	24.87
2	Large Non Giants	5.09	14.02	(11.48)	(.37)	11.85	30.96
3	Medium Size (Foreign Trade)	7.09	3.19	6.56	-	(16.84)	31.20
	3d (Area)	(.74)	-	-	(1.18)	1.92	
	3e (Population)	-	(10.37)	-	(2.07)	12.44	
4	Small Countries	3.64	2.69	4.69	2.97	-	13.99
Regional Totals		21.36	50.34	22.73	5.57	-	101.02

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