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**INTERNATIONAL AID IN THE HEALTH SECTOR:  
PROGRAM, PROJECT AND RESEARCH INVESTMENTS**

**Part I: Aid Instruments and Their Comparative Advantage**

by

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**INTERNATIONAL AID IN THE HEALTH SECTOR:  
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**PART II: AID INSTRUMENTS AND THEIR COMPARATIVE ADVANTAGE**

This paper concerns the instruments through which agencies providing development assistance in the health sector can channel their aid. Part I of the paper begins by categorizing these instruments into three broad classes -- project aid, program aid, and research aid. It next reviews the (rather limited) evidence currently available concerning the efficacy of alternative aid instruments; much of this evidence comes from other sectors, but, nonetheless, relevant lessons do appear to emerge for the health sector. The paper then turns to a review of the characteristics of available aid instruments -- in terms, for examples, of their requirements for volume of financial resources, technical assistance, length of time horizon, etc. -- and, in light of these characteristics, it discusses the comparative advantage of different instruments. The comparative advantage of different instruments will, of course, vary by type of donor -- multilateral, bilateral, or foundation -- and by the nature of the problem to be addressed by aid. The final section of Part I of the paper recommends several directions for the future. The broad thrust of these recommendations is that relatively greater reliance on program aid and research aid is desirable in the short-to-medium term. Project aid will, however, remain important during this period; in the longer-term, hopefully, as national policy and institutional capacity become stronger, project aid should again predominate.

Part II of the paper, by Dr. Nancy Moss, provides more extensive discussion of the difficult issues around evaluation of the effectiveness, from the perspective of donors and recipients, of alternative forms of aid.

Most examples in Parts I and II of the paper deal principally with the experience of multilateral and bilateral aid agencies. Foundations also play a key role in several domains, and an Annex to the paper, by Dr. Scott Halstead, discusses the experience of The Rockefeller Foundation with several aid instruments.

### 1. The Instruments of Aid

This section describes the main instruments of international aid in the health sector with brief descriptions that illustrate the categories.

Project aid emphasizes the delivery of services -- preventive or curative, public or individual. Many of the most successful experiences with aid (mission hospitals, smallpox eradication) are with project aid. Program aid emphasizes strengthening and supporting national (or subnational) capacity to deliver services; it typically aims to assist in developing institutions or in improving the policy environment in which decisions affecting health and health service delivery are made. Finally, research aid aims to lengthen the menu from which choice is possible (by leading to development of new clinical and public health products) and to improve the quality of choice from whatever menu is available (by generating information on the efficacy, safety, cost and acceptability of alternatives).

Each of the above types of aid -- project, program and research -- can be provided by individual donors, by formalized consortia of donors, or by donors working in informed (but informal) partnership (aid coordination). It is beyond the scope of this paper to address the issue of aid coordination at any length. It must suffice, instead, to note briefly that donor coordination imposes costs of coordination that are particularly high when

coordination is formalized<sup>1</sup>; these costs relate both to the direct time and money costs of coordination and to the loss of donor identity that may result from internationalization of a program. Benefits of coordination can be substantial as well: reduced duplication, policy consistency, reduced administrative burdens on recipient countries, and potentially improved mechanisms for inter-country and inter-donor sharing of lessons of experience.

Our sense is that the benefits of greater donor coordination will typically outweigh the costs, although the scope for expanded formal collaboration may be rather limited. Perhaps the most promising approach to coordination lies through creation of forums where senior officials of donor agencies and aid-receiving countries discuss technical and policy issues at one step removed from negotiation involving a particular project; recent World Bank experience in the education sector suggests the potential value of such attempts to identify and develop intellectual consensus.

#### Project Aid

Project aid, emphasizing delivery of services, has been the predominant form of international assistance in the health sector. For example, to date only one USAID non-research operation in the health sector has been designated 'program' and no World Bank health projects are 'sector' or 'sector-adjustment' investments, although these types of program lending are increasingly common in other sectors of World Bank lending. (Labeling can be misleading, however, since many 'projects' have important institutional development

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<sup>1</sup>Despite the costs of formal international cooperation in the health sector, such cooperation has been referred to as a potential model for international macroeconomic cooperation (Cooper, 1986). The main obstacle to cooperation that Cooper discusses, both for health and for macroeconomics, is lack of intellectual consensus.

components; what is reflected in the record to date is relative emphasis rather than total lack of programmatic investment.)

We categorize project aid into subcategories, which differ substantially one from another. These are:

Quantitative expansion. This involves replication of existing capacity for unserved areas or populations -- geographical expansion of EPI, a new wing on a hospital, increased numbers of urban health posts.

Qualitative improvement. This involves efforts to improve the efficacy, safety and acceptability of services currently offered. It may involve in-service training of service-providers, introduction of improved equipment or supplies, or upgrading of facilities.

Rehabilitation, operations and maintenance (ROM). Aid in this domain involves helping to supply (or develop mechanisms for supplying) minimally adequate levels of service. In this sense it is an aspect of quality improvement and involves provision of much of the same sorts of things. The distinction lies in the starting point: Many nominal service entities simply lack the drugs, staff or facilities that would permit them to deal with, in any acceptable way, conditions they were originally intended to deal with. ROM investments are designed to make such previous investments function; quality-enhancing investments are designed to upgrade the output of already-functioning facilities or services.

New service. Aid to allow creation of new services can either mark a natural step in upgrading a system (e.g. systematic introduction of capacity in secondary-level facilities to deal with difficult deliveries, or introduction of a Vitamin A supplementation program) or it can mark an emergency response to a newly emergent problem (e.g. screening of hospital

blood supplies for indication of HIV infection). In either case, an important component of international assistance should be to help in development of cost-effective procedures and training of staff in their use. Concomitant investment in facilities, equipment and supplies will usually be important.

What characterizes all of the above, as project investments, is the direct concern for delivery of service. They differ substantially from one another, however, along a number of dimensions -- in the type and volume of resources they use, in their attractiveness to donors, and in their viability in more-or-less unsatisfactory policy environment (ROM and quality enhancing investments are probably less sensitive for their success to the adequacy of overall policy). There is a long history of health project aid, and, as will be discussed in Section 2, evidence suggests that, from many perspectives, much of it has been effective.

#### Program Aid

The capacity for a country's institutions to utilize project aid well (or, indeed, to deliver services however financed) will depend critically on its institutional capacity, on its policy environment, and on the adequacy of its resources. Institutional capacity is dominantly affected by the education and training of staff, their incentive structure, and organizational capacity to delegate and decentralize appropriate financial, technical and personnel decisions. The policy environment involves the mandated division of labor between the public, private and nonprofit NGO sectors; financial policy; referral policy; pharmaceuticals policy; policy toward prevention; and policy regarding distribution of access to services. Obviously some policy environments will be conducive to waste, inefficiency and inequity;

others will be less so. Even with functioning institutions and reasonable policy, resource inadequacy may limit a country's capacity to meet basic health needs. Program aid is designed to strengthen national capacity to deliver service by addressing institutional, policy and resource problems.

Institutional development. Much program aid is for institutional development. Often this involves direct assistance to an institution -- a ministry headquarters, a hospital, etc. -- designed to improve its overall functioning. This may include staff training, reorganizational advice, or support for development of information systems. Often of particular importance is investment in education and training facilities for health professionals, including nursing, medical, and public health faculties. To be effective such investment may require a long time horizon; but the payoffs can be very substantial indeed. The Rockefeller Foundation's 30+ year involvement with the Peking Union Medical College (described by Scott Halstead in the Annex), for example, has had an influence on health policy in China that extends from the 1920s to the present day. Aid for institutional development bears similarity to project aid in its focus on well-defined investments in specific locales; it differs in not being (immediately) concerned with service delivery.

Policy improvement. This domain of program aid has been the subject of much attention and debate in the past 5 to 10 years. Policy-oriented aid inevitably has the flavor of exchange of policy reform for financial assistance. The extent to which such exchange is productive depends greatly on the strength of those factions in the country who are intellectually (or otherwise) committed to the reform; on the substance and style of the discussions leading to agreement; and on the inherent viability of the

measures adopted. Most policy-based aid to date has been concerned with improving macroeconomic policy; \_\_\_% of World Bank lending in FY87, for example, was for 'Structural Adjustment Loans' (or SALs) involving fast disbursing resource transfer and macroeconomic conditionality. Increasingly the Bank is utilizing Sector Adjustment Lending instruments; incremental, highly flexible resources are made available to a sector in tranches released on certification of specified progress in policy improvement. While no such loans have been made in the health sector by the World Bank, initial experience in two countries (Ghana and Morocco) in the education sector has been favorable.

Resource transfer. In countries where institutions and policies function reasonably well a case can often be made for aid that is primarily a resource transfer. Such aid is not tied to specific investments, nor to specific policy changes; rather it helps to finance a time slice or a geographical slice of a country's sectoral investment program. Often sector lending (as this form of investment is called in the World Bank) involves providing resources to a national intermediary which is, then, itself responsible for developing and supervising individual projects.

Program lending varies a great deal, depending on which of the preceding three objectives is being served; this variation is substantially greater than variation across types of project lending, and suggests important areas of comparative advantage for different types of donors.

#### Research Aid

Research results tend to be portable; lessons from Senegal and The Gambia about field efficacy of oral and injectable polio vaccine, for example, are probably almost as relevant in South Asia as they are in West

Africa. The portability of research does vary, of course; little of use to Zaire in controlling AIDS is likely to emerge from study of sexual practices in San Francisco. That said, it is clear that much in the way of research output is transportable, leading to (in economists' jargon) important informational externalities. Existence of these externalities creates conditions where any individual country is unlikely to invest fully in (non-patentable) research because that country reaps only a fraction of a research projects' benefits, yet it must pay the full cost. The existence of these informational externalities, combined with substantial research capacity in donor countries, makes research a particularly viable domain for aid.

Substantial amounts of aid to the health sector are channeled to research or to development of research capacity in recipient countries. Several major programs provide excellent examples of the potential:

- (i) The Tropical Disease Research Program (TDR) supports biological and operational research on 5 major parasitic diseases and one bacterial disease; it is currently expending about \$30 million per year.
- (ii) The Human Reproduction Program (HRP) deals with biological and social aspects of fertility and its regulation; it currently operates at a budget of about \$23 million per year.
- (iii) The Great Neglected Diseases Program and the Clinical Epidemiology Program represent major efforts of a foundation (Rockefeller) in two quite different domains.

Other important programs are well established -- many of them, like TDR and HRP, managed by WHO and funded by a multiplicity of donors. Currently

deliberating on appropriate future directions for research in this domain is an 'Independent International Commission on Health Research for Development'. This Commission, which will report its findings in 1990, will provide a valuable forum for discussion of the future of research aid. For the purpose of this paper it suffices to note that research aid is substantial in the health sector and that it is an area for finance in which external aid has a particular comparative advantage because of the externalities involved.

## 2. The Effectiveness of Aid

Part II of this paper discusses the complexity of assessing the effectiveness of alternative aid instruments and points out the necessity for consideration of aid effectiveness from multiple perspectives. In Section 2 of Part I of the paper there will be a very brief and pragmatic discussion of what the available literature does conclude about the effectiveness of alternative instruments. Cassen's monumental review Does Aid Work? is an important source; by and large his conclusion is positive, although the evidence is perhaps stronger for project than for program aid. Recent evaluations have been commissioned for donors of major research aid activities in the health sector and, while the results remain to be published, early indications are encouraging.

What evidence there is tends to suggest then, that all of the aid instruments can work, if thoughtfully utilized. The questions then become ones of which instruments are best suited to different donors, different recipients, and different health problems.

### 3. Characteristics and Comparative Advantage of Aid Instruments

This section will describe, the volume and type of resources required for the different aid instruments. The entries in Table 1 provide personal and impressionistic assessments of these requirements; an important question is that of whether this particular pattern of entries would, at least in general terms, receive general agreement from informed observers. To the extent that it does, it will provide important clues to where different donors should/have focussed their efforts.

The World Bank, for example, has the capacity for providing a very high volume of resources and has particular experience with capital (facilities and equipment) investments. Its capacity to deal in the long-term is only moderate and, currently, its capacity to finance non-salary recurrent costs is quite limited. This suggests comparative advantage for the Bank in such areas as expansion projects, resource transfer programs and, possibly, in sector policy based operations.<sup>2</sup> Bilateral donors will often have a major capacity for providing technical assistance and advanced training; this makes them well suited to investing in research or institutional development. Many foundations have the capacity to make long-term commitments to key areas they deem of priority; this may give them an exceptional comparative advantage in institutional development. Investment in rehabilitation, operations and maintenance (ROM) tends to be viewed by many donors (and recipients) as unglamorous; yet, for many sectors, World Bank analyses find ROM investments to have by far the highest returns. Donors that have the

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<sup>2</sup>The extent to which policy based lending requires substantial technical expert time of Bank staff is a major source of current uncertainty about the Bank's ability to provide high quality policy based lending. Staff time is decreasingly available.

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Table 1: Characteristics of Aid Instruments

<u>Aid Instrument</u>	<u>Aid Characteristic</u>					
	<u>Total Resource Intensity</u>	<u>Capital Intensity</u>	<u>Technical Expert Intensity</u>	<u>Fellow-ship &amp; Training Intensity</u>	<u>Non-salary Recurrent Cost Intensity</u>	<u>Long-term Commitment Intensity</u>
1. Project Aid						
1.1 Expansion	**	Med.-High	**	**	Low-Med.	Low
1.2 Quality Improvement	Low-Med.	Low	**	Med.-High	Med.-High	Low-Med.
1.3 ROM	Low-Med.	Low	Low	Medium	High	Low
1.4 New Service	**	Med.-High	Medium	Med.-High	Low-Med.	Low-Med.
2. Program Aid						
2.1 Institutional Development	Low	Low	Medium	High	Medium	High
2.2 Policy-based aid	High	**	High	**	**	High
2.3 Resource transfers	High	**	**	**	**	Low
3. Research Aid	Low	Low	High	High	Medium	High

Note: A '\*\*' denotes that a particular aid instrument may be either high or low in its intensity of use of the particular resources indicated.

political independence and modesty to devote resources to ROM should be given every encouragement<sup>3</sup>; and other donors should follow their example.

These points will be fleshed out in the revised version of this paper. What is clear, however, is that donors differ substantially in the type of inputs they are best suited to financing and that this has strong implications for their choice among aid instruments.

Different country and project needs, too, will suggest different aid instruments. Some countries have reasonable policies and sufficient institutional capacity effectively to absorb substantial additional resources; sector lending to transfer resources will, likely, be the appropriate instrument. Others may have specific investment or operational needs, again dictating instrument. These matters, too, will be fleshed out in the revision.

#### 4. Recommendations

It should be clear, from the preceding section, that no general recommendation of the sort that 'project aid is preferable to program aid' can emerge from this analysis. Many different types of health problems exist in developing countries; donors have differing interests and capacities; multiple aid instruments exist; and the task is that of finding the instrument(s) most suitable to the country's needs and the donor's capacities. Beyond such trite and obvious points, however, more specific observations are possible. These tend to be grounded in the analyst's perception of where the important problems lie, and in the recommendations below these assumptions are only implicit; differences in these assumptions could, however, lead to important differences in recommendations.

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<sup>3</sup>UNICEF and Scandinavian donors were found, in a recent review of education aid to Africa, to be the only donors willing to commit substantial fractions of their resources to ROM.

Recommendation 1. Project aid should, over the next 5 years, tend to emphasize quality-enhancing and ROM investments. These investments tend to be demanding of fellowships and training as well as of non-salary recurrent costs. Donors capable of meeting these needs should focus their efforts into doing so, and into improving the impact of these investments (by, for example, developing carefully planned, long-term fellowship programs).

Recommendation 2. Within categories of program aid, institutional development has particularly high priority. It will often complement policy-based aid and lay the groundwork for expanded project aid. Foundations and bilaterals should draw on their comparative advantage in this domain (particularly foundations' capacity for long-term commitment) to work with interested countries and multilaterals in developing coordinated, long-term aid packages in which multilaterals would emphasize the resource transfer dimension.

Recommendation 3. Lack of donor staff capacity will sharply limit opportunities for policy-based aid. The tool is potentially powerful, though, and multilateral (or other large) donors should consider using it when, but only when, they can commit themselves to long-term involvement of their best staff with a series of operations in a country.

Recommendation 4. The AIDS epidemic has underlined the key role of research in the health sector. Long-term hopes for dealing with AIDS are pinned on basic biomedical research; short-term plans for containing the epidemic draw on a very limited stock of operational research concerning behavior and its cost-effective modification. Donor countries as a group have vast resources for conducting research, and substantial capacity for training and assisting cadres of researchers from developing countries.

Research, too, has the characteristic that the benefits tend to be international, with the concomitant importance attached to international finance and to mechanisms for the international sharing of results. These considerations lead to the recommendation that donors, usually acting collectively, should increase substantially the volume of research aid and should design mechanisms for long-term involvement of their top scholars in the endeavor. Recipient countries interested in long-term development of their own research capacity should have networks of intellectual and financial resources to turn to for assistance. Perhaps the most important initiative to take in this area, prior to publication of the IIC's findings, would be establishment of a major operational research program concerning AIDS in developing countries.