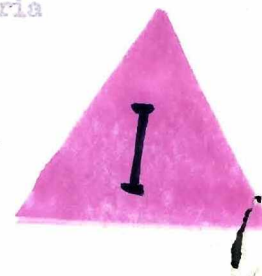


THE PROPOSED SOLUTION: A RESPONSE TO
CURRENT REALITIES



Purposes and Objectives

1. The Framework of Principles

- (1) In order to adequately lay down the foundations of a constructive response to current realities in the expanding area of population information, it is useful to start with some broad but explicit statements concerning the general orientation of that response. These statements should constitute a framework of principles that define the nature of the proposed solution as an international co-operative effort. Far from being a set of formal propositions or "a priori" value judgements, this framework of principles is an expression of the overall philosophy or "style" of the proposed solution. For the same reasons, it is a straightforward definition of permanent practical purposes.
- (2) Having this in mind, these principles can be briefly stated as follows:
- a) to serve the population community;
 - b) to increase the availability of information on population matters;
 - c) to ensure an equitable distribution, transfer and flows of information, and
 - d) to promote the generation of new information.
- (3) a) A major purpose of the international co-operative effort that is proposed in this study is to serve the population community. The notion of service to a wide spectrum of potential users has been taken into account as a basic element in developing the major features of the proposed information system. In practice this statement has a double implication.

- (4) On the one hand, it refers to a wide, heterogeneous array of users of information in the population field, a group which is here subsumed under the term "population community". On the other hand it implies a diversity of specific services that should be provided according to the particular situations and conditions of different regions and countries. These two aspects are intimately connected because both refer to the provision of information that is useful for a collective task, according to the division of labour existing within the population community.
- (5) No attempt has been made in this study to give a closed or fixed definition of the term "population community". However, a reference to what has been mentioned before as a "wide spectrum of users" could suffice to indicate the flexible operational meaning attached to this notion. Broadly speaking, a great number of individuals (and organizations) should be included in the spectrum of potential users, such as public officials (national and international, both at the policy-making and technical levels); technical personnel (planners, evaluators, population communicators, programme officers, population workers at the "grass-root level"); and individuals who are engaged in academic activities (professors, researchers, graduate and undergraduate students, teachers and trainers). The basic ideas in this operational notion of population community refer to a shared concern about population issues and problems, and at the same time to a diversified involvement in population actions.
- (6) b) Another major purpose of the proposed response to current realities is to increase the availability of information on population matters. This statement emphasizes the character of the information system to be created as a problem-solving instrument in the various phases of the information process (collecting, processing, tailoring and disseminating information). Availability is certainly not the only problem in the population information field, but it appears as one of the major problems that should deserve high priority in the design of the system.

- (7) Some of the difficulties that the system here proposed attempts to overcome refer to its quantitative coverage. In this sense the system should be designed with the purpose of covering as much of the volume as possible of information that is being produced in the field. There is a growing, ample consensus among members of the broad population community that population phenomena can no longer be considered as separated from the process of socio-economic development. The scope of population matters is rapidly widening as a result of this predominant view which stresses the links and mutual relationships between population and other components of development. A direct implication of this approach on the information side of the population field is the need to incorporate into the system that kind of materials that examine population as a component of development processes and strategies.
- (8) In the same line of thought, careful consideration should be given to the need of providing the system with the capability of handling considerable increases of information (and demands for it) that are reasonably expected as a consequence of recent developments in the field, such as the World Population Plan of Action. These expansions refer to both the total volume of literature and the policy-research and action areas within the field.
- (9) In addition, the system should be able to significantly reduce the loss of information in relation to certain materials that are difficult to obtain either because they were originally restricted to selected audiences (e.g. government reports), or because they are not published in traditional mass-formats (e.g. theses), or are simply not published at all (e.g. working papers). One of the major targets of the system is precisely this body of literature which is not easily accessible. The quality of these materials is probably uneven. Some of them may have a high value in general terms, others may have a particularly high value for certain users. The only way to increase the availability of this information is to try to cover as much of these materials as possible from the start of the system. Obviously, this should be understood taking into account the phasing of the system in its implementation.

(10) c) Another general principle which is highly relevant for the purposes of the system that is proposed in this study is to ensure an equitable distribution, transfer and flows of information on population matters at the various levels of international co-operation. This principle is clearly related to the overall pattern of inter-relations between developed and developing regions and countries in the world system at large. In this regard, the information system should carefully consider the structures of information demand and the patterns of information processes in the population field with a dynamic approach.

(11) The system to be created should not and does not attempt to reproduce at the information level the prevailing patterns that seem to characterize the flows and transfers of know-how at the international level and the regional levels as well. A neutral, equitable system does not necessarily mean exact reproduction of the distribution pattern of world development in the population information field. Quite the contrary. It means a permanent effort to: i) channel information transfers and flows as a two-way process between developed and developing regions or countries; ii) strengthen regional systems and networks that already exist in such a way that information may circulate within the regions; iii) get as close to the national level as possible where the country's capability to produce and use information is low or nonexistent. To be equitable means, therefore, that the system is not a "laissez-faire" arrangement, but rather a highly active system that ensures an even distribution of information opportunities to all members of the population community (global, regional and national levels).

(12) d) Finally, another major principle and purpose of the solution that is proposed in this report, is to promote the generation of new information relevant to the changing needs, concerns and involvements of the population community. This principle should emphasize the idea that the system is a dynamic entity which is not only active in building up its own structure and methods of operation, but also in the development of population as a field of knowledge and action. New and original approaches to population phenomena are necessary conditions for this development. The system should be hospitable to these approaches in order to allow a constant interaction between "old" and "new" knowledge; between previous experiences and new problems.

- (13) The translation of this principle into practice will require an effort to understand the system not as a purely formal carrier of conventionally codified information, but rather as a converter that could eventually point to unexplored areas in the population field.
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- (14) In order to translate these four principles into a coherent body of operational norms it should be noticed that the whole framework of principles that has been stated above, actually rests upon two general and underlying assumptions: a) the information system should be active, and b) it should be neutral.
- (15) An "active" system is opposed to a "passive" system. A passive system operates only on request and therefore tends to become fossilized if there are insufficient requests; unbalanced and biased since it will serve only those countries which are best organized to use it and develop in their areas of concern. The risk in such a case is that the system will only cater to the needs of the strongest countries and neglect those of the others. However, it should be stated that a passive system has some advantages; it is "cheaper" and "easier" to operate.
- (16) An active system on the other hand, by definition does not only wait for requests; it seeks to survey the needs, expand its services, assist countries in setting up the infrastructure necessary to benefit from it, and so.
- (17) The "neutrality" of the system implies that the system does not take position as to the content of information (e.g.: it should provide information on how to reduce fertility to countries which request it and also information on how to combat sterility for countries wanting to increase their fertility). The system also should ensure that all countries, irrespective of their size, development, ideology, etc., receive fair treatment.

- (18) These two assumptions of "activity" and "neutrality" are complementary and not contradictory. The common denominator behind them is that they should throw light on the other principles in such a way as to ensure that the system is designed and operated so that the countries are in a position to make the most use of it. For example, in the case of the "population community" this means that if two groups of users engaged in a debate in a country request information, each group for its cause, the information requested should be supplied to each group and not only one of them. It also means that if some types of users in the national population community do not have the necessary training to have access to the system it will assist them in this respect.

2. Objectives of the Proposed Solution

- (19) Based upon the general principles that have been set out in the previous section, the proposed solution consists in the design and implementation of an information system that is global, decentralized, mission-oriented and broad in its subject scope.
- (20) a) Global.
- A major objective of the system is to have a truly international character, in such a way as to be capable of serving users in all regions and countries and involving all members of the worldwide population community.
- (21) To be global means an explicit and conscious attempt to translate the principle of equitable flows of information into a workable, unbiased scheme of operations.
- (22) Population phenomena and actions undertaken to affect them vary according to different realities or to different perceptions of those realities. A system that is global in intention and practice could and should be responsive to this diversity. Globality implies a certain likelihood to ensure adequate merging of information from all regions and countries. It also allows for a neutral, open access to the interchange of knowledge and practical experiences among countries and regions. It implies comprehensiveness in the sense that its subject matter should encompass the different problem areas and subjects that exist at a global level. A global system would not deal exclusively with particular segments of information in the population field.

(23) A global system is also likely to be an adequate cumulative solution in relation to information systems or networks that are already operating in several regions and countries, or are beginning to do so. Although these initiatives are significant efforts that should be taken into account, and in fact are considered as indispensable components of the proposed solution, they are responsive to their own structure of demands, reflect regional or national priorities and perceptions and have their own legitimate autonomy. There is much to be gained if the system that is proposed develops itself as a co-operative effort that allows for constructive convergence of existing population information experiences. A global, worldwide system would provide an adequate point of convergence by means of a single set of basic rules and formal constraints in the global core of the system, with complementary subsets of flexible, adaptive norms developed by the existing systems or networks.

(24) Besides, a system that is global, comprehensive, neutral and equitable, in intention and practice, is a positive contribution to those regions and countries that have not yet developed information systems or networks of their own. In general, the population communities of these areas are highly dependent upon systems that are not necessarily suited to their information needs. A global system could and should provide a mechanism to stimulate and help these communities in their own development as producers and users of population information.

(25) b) Decentralized.

A major objective of the proposed system is also to start as early as possible as an arrangement that is carried out only through active participation in all phases of the information process. A decentralized system appears to be the best alternative to achieve this objective at the earliest possible moment and to ensure that active participation is maintained at the highest possible level throughout the development of the system.

(26) In this context of ideas decentralization means in the first place that policy-making and policy decisions in the system are carried out by participants in the system through some representational arrangement. In this sense decentralization implies a self-correcting formula that is built into the system at the top of overall management.

(27) An essential requisite of any organizational system is the carrying out of common tasks that are entrusted to a central component having some degree of valid command over all participants in the system. Decentralization is not incompatible with the existence of such a central component. But more than other organizational alternatives it requires a careful approach to the role of the centre and its relationships with the rest of the component units. From this point of view the information system that is proposed is decentralized. In effect, it allows local autonomy in decisions about information that is entered into and retrieved from the system. This means that there is not one input centre in the system but rather a number of them according to various regional and national patterns of information production and demand. To the extent that these patterns correspond to different degrees of development in the information field this kind of decentralized structure must allow for a certain necessary degree of "unevenness" in the quantity and quality of inputs. This is a cost of decentralization. It is a relative cost, though, and it appears to be a minor one when contrasted with the costs and problems of the centralized alternative.

(28) From a slightly different point of view, a decentralized system with a plurality of input centres (regional and national) has the advantage that reporting of new information to the central data base, and dissemination to users is speedier than in a centralized arrangement. From a structural standpoint this is so because decentralized input centres are in a better position to screen new information and respond to users' demands in its own "territorial" unit (countries or regions), than the central component of the system. In a centralized system there would be a strong structural tendency to expand the central component (both in size and functions) in order to cope with the increasing load of inputs and outputs in all levels of the system.

(29) Decentralization achieved by means of a plurality of input centres or stations is not only a way of lowering costs or saving time. It is also a means to ensure a higher degree of intra-regional and even intra-national development of information flows within the territorial boundaries of the input centres. Active input centres with a certain degree of local autonomy

would have to promote dissemination of information in their territorial units, to facilitate their own links with the central unit. In doing this the centres will probably develop a kind of multiplier effect on the flows of information among producers and users within the countries and regions.

(30) Still another advantage of a decentralized arrangement is its suitability to reach at that kind of information which is normally referred to as "non-conventional" (AGRIS) or "invisible" (DEVSIIS). The reason for this is that a decentralized system, as compared with a centralized one, ensures that the input centres are closer to the sources of production of information and thus can more effectively deal with the reporting of these materials to the system.

(31) Having all this in mind, the role of the central component of the system (the central data base or central unit) is mainly related to the development and maintenance of the formal constraints that any participant should accept as the core of minimal rules to be applied by the input centres. It is particularly a coordinating role. In other words, the central component should be understood as the operational formula for achieving and increasing compatibility of procedures and products of the input centres.

(32) c) Mission-oriented.

The information system that is proposed in this report as a response to current realities is "mission-oriented".

(33) In quite a number of recent initiatives that have been carried out in the field of information systems (IHIS, AGRIS, DEVSIIS) this notion has been used to distinguish systems that are structured around problem-areas and objectives of global implications, from those that deal with an area of human subject knowledge. These latter systems are known as "discipline-oriented". Mission-oriented systems are, by definition, interdisciplinary.

(34) In general terms the importance of disciplines is not disregarded in a mission-oriented system, but rather reassessed in view of their contribution to problem-solving action.

39) In building up an information system with a mission-oriented approach, disciplines are treated as instruments for the furtherance of a set of goals (the mission). Disciplinary information which is solely "academic" in the narrow sense of the term, or purely "ephemeral", has a low priority in a mission-oriented system. The key question that should be raised constantly is assessing the "value" of a piece of information for such a system is related to the purpose of that information (for what? and, for whom?).

(36) Clearly enough, there are no precise clear-cut criteria or thumb-rules to draw a line between purposeful and non-purposeful information. This is a rather typical problem facing any information system that attempts to define itself as a "mission-oriented" one. This is particularly so in those problem-areas or human objectives that are more deeply embedded in the conceptual and terminological realm of the social sciences.

(37) Population issues and "problems" belong to that kind of mission in which the contribution of the social sciences is indisputable. The mission of the information system that is proposed in this study is the mission of the population community and, obviously, it cannot be narrowly defined. It can be shaped though, in its broadest sense if population is understood as a complex phenomenon which is a necessary component of socio-economic development. In this regard the mission of the population community is to improve its knowledge and instruments to act on the population component of the development process.

(38) Any attempt to narrow down this general formulation of the "mission-oriented" notion would be risky, and in a way, self-defeating insofar as there are different perceptions of development and the role population "variables" play in it, perceptions which have, in principle, equal claims to validity. A "mission-oriented" information system cannot and should not impose a unilateral view of its own mission.

(39) The major implications of the "mission-oriented" objective in the design and implementation of the information system relates to the way in which the system delineates its own subject-matter scope, and to the kind of services the system is able to provide.

(40) a) Broad subject

From the foregoing discussion it is quite apparent that the system would not be an adequate response to current realities if it does not have from the start a broad subject scope.

(41) The scope of the system is a basic element in defining the boundaries of the system. As such, it is one of the major criteria to decide what goes into the system and what does not. Because the subject scope is in itself a basic rule of selectivity of information (inclusion-exclusion), decisions concerning the breadth of this scope not only have important substantive implications but also impinge directly on the economic feasibility of the system. For these reasons a fully developed, disaggregated and, most important, agreed-upon list of categories, sub-categories and items should be the result of a consensus-building process in the population community, a process that must be taken into account in the phasing of the system.

(42) The development of a thesaurus should be an important contribution to help in this search for the boundaries of the subject scope. It should be pointed out that a scope definition in the framework of the proposed system is in itself a "substantive" decision, whereas the thesaurus is mainly an operational organization of a semantic field. Since both aspects are closely interrelated an effort should be made to carry out as a joint activity the tasks associated with thesaurus construction and scope definition.

(43) In devising the first version of a tentative scope definition (Annex), the following criteria have been taken into account:

the scope definition needs to be made in a way that will clearly express and reinforce the mission-oriented objective of the system. As pointed out in the previous section, this means that disciplinary elements have been de-emphasized, with due regard, however, to the role that demography as a discipline, plays in the field of population. In addition, the "mission-oriented" objective has been taken into account by assigning an important segment of the scope definition to subjects directly related to actions and programmes in the population field. Finally, an attempt has been made to emphasize the perspective from which subjects are approached in relation to the knowledge-action process.

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- the scope definition should be neutral as possible in the balancing of topics that are considered relevant by different perceptions of population issues and problems. Careful consideration has been given to this aspect, because any definition of scope in terms of "subjects" would implicitly impose a pre-conception of population matters, particularly in its relationships with the process of socio-economic development. An attempt has been made not to give undue weight to conventional ways of categorizing subjects, with the aim of opening the scope definition to alternative ways of conceiving the articulating subjects in the field of population.